# Edmond Radar

# ON CREATIVE EDUCATION

Ce monde en lambeaux...
quels nouveaux hommes assez durs seront
assez patients pour le refaire vraiment?

Maurice Merleau-Ponty

There is only one bondage: that forbidding a person from seizing his creatives opportunities. On the contrary, when the person does put them to work he can recognise a primitive part and a destiny in the energies being used. Once in possession of his opportunities to create, he can master any servitude more surely than by an enfranchisement from his relevant social class. Furthermore, the classless society of the future will require possibly more compulsive and certainly more insidious conditions than those that have issued from capitalism, and these must be anticipated. And we are in any case committed to develop the infinite resources in the possession of the human being. Should this evidence not be apparent, it is enough to envisage the provocations of planetary civilisation to summon up a formation that is open to all possibilities: the contemporary world is calling for conti-

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nuous creation; in a minor form this can be seen in the innovations under way, and in the daily adaptations that these entail.

Seen in this light, specialization becomes accidental and never has more than a momentary character. In the context of an industrial civilisation, such a conception may seem rather theoretical to technical functions. How is one to overcome this contradiction? Lived, as it is, day to day by adult people who are thrown into specialized jobs, this contradiction is in fact accepted more or less happily, depending on the individual. Bright personalities show an internal plasticity which is the synthesis of a certain education and a certain experience. Success—and we apply the word successful only to those careers where there is an affirmation of character, personal style, and an activity that makes for human enrichment for others—success, in these cases, is not the fruit of a modest adaptation to environment, but the expression of a special inventiveness. If one wants to assure a person's autonomy and achievement, it is therefore important that his education establishes the intelligence of his inventive tasks and the will behind them.

The object of education is the apprenticeship of man's life; the object of creative education is the apprenticeship of creative man's life. There is no doubt that creative qualities are always practised, but it is important that they are done so consciously. In fact, the more conscious the creative exigence, the more certain one can be that the end will have a quality of humanity. The child at play, the adult at work, the woman with child, the artist sketching, the living being, all are creating ingeniously: when conscious the child's game becomes self-mastery; childbearing, education; work, knowledge; art, communion; and what is living becomes the fullness of existence.

The creative adventure, lived consciously, thus makes manifest the meaning of being of the world; this is its complete end. The aim of creative education is precisely the same.

## ON INTEGRATED EDUCATION

The educative systems and programs of instruction current today, which are governed by positive ends, mislead the creative aim;

these systems and programs recognise in creative initiative an opportunity to be seized, but they are not ready to make an exclusive end of this, and, on the way, confiscate it for the benefit of the adaptation required by the contemporary condition.

The major preoccupation is, in fact, to establish what we shall call an *integrated education*. In an exemplary present-day program one can read this significant definition: "The humanities are the time of adolescence when, before being specialised in a trade, a human being acquires the ideas, feelings and attitudes which will allow him to be *integrated* (our italics) in the world he will live in."

The object of this aim of integration is to establish a "closer interdependence" between the individual and the society of our time.<sup>2</sup> This is generally acknowledged; it is rarely indicted.<sup>3</sup>

Integrated education is proposed as a concept which will put an end to any approximation. In short, this concept takes up, once again, that of Spencer, which settled the choice of subjects by their utility; it is the expression of a highly respectful appreciation of the super-individual faculties and ends of the social community, according to what sociology—and the critical method of sociology has to be developed—gives us to presume. Lastly, it refers to the idea of normal behavior, which is comparatively recent in psychology.

Psychology today exercises a general authority over moral and philosophical speculation, by reason of the discoveries it has marked up in the last half-century. So important are these discoveries that it has subsequently been necessary to review most of the existing systems of values. And the discoveries and the revisions follow one upon the other. The result is that everything, in philosophy as in morals, seems to depend on psychology. The excess of which, or psychologism, has been denounced by Sartre. Now,

<sup>&#</sup>x27; Henri Van Lier, Les Humanités du XXe siècle, Casterman, Tournai-Paris, 1965.

<sup>&</sup>lt;sup>2</sup> Lalande, Vocabulaire technique et critique de la philosophie, P.U.F. Paris.

<sup>&</sup>lt;sup>3</sup> We have, however, found the decisive formulation of this indictment in the article by M.J. Berque, professor at the Collège de France, for the review *Esprit*, May-June 1964, p. 766.

<sup>&</sup>lt;sup>4</sup> Georges Gurvitch, La vocation actuelle de la sociologie, P.U.F. Paris, 1963.

for pedagogy, one of the most tempting loans to be made from psychology is precisely its definition of normal behavior. A loan of this kind cannot be justified. In fact the idea of normal behavior in no way derives from any psychological discovery, but from a working hypothesis used in the treatment of pathological cases. Faced with the abnormal, the clinical physician opposes the most current statistical type. Thus the schools of the psychology of behavior and social psychology, which have sprung up in the United States, have generalized the "robot-portrait" of a normal behavior, a function of the "behavioral modalities" which statistically characterize the adult.

The transference of the type of normal behavior from psychology to pedagogy has recently been treated by Paul Osterrieth in a work meant for the pedagogues: Faire des Adultes.<sup>5</sup> The author derives his definition of the objects of education from the description given by genetic psychology of adult behavior: "It is perhaps possible, he writes, to hazard an outline of the main adult characteristics, such as they have been described by the psychologists, which, in the same breath, might delimit the essential objectives of education (the italics are ours). It goes without saying that in this attempt one must not have in mind the living portrait of some ideal adult, who in any case does not exist, but simply an attempt to group the most specific adult traits." There is again no doubt that the author recognizes that this is a reference "relative to a given historical, social and cultural situation," but he does not see any others.

Following these lines, pedagogy errs on two accounts. Firstly, it makes of psychology—a science of observation—a science that is capable of defining moral ends, which is one way of returning to the scientific confusion of the 19th century; secondly, it bases itself, in so doing, on the description of a type of behavior obtained by "grouping," and this is fatal for the creative course, this latter being a deviation from the mass. "Maître, someone said to Le Corbusier during a television interview, you are forty years ahead of your time.—Yes, yes, you know what that means, saying forty years ahead? It means forty years of kicks behind!"

<sup>&</sup>lt;sup>5</sup> Paul Osterrieth, Faire des Adultes, coll. "Psychologies et sciences humaines"; Dessart, Brussels, 1964.

There are other grounds of a political, economic and sociological order which inspire integrated education. They are all the more powerful for their immediacy of action; in some way they are connatural to us. Let us examine them. The duty of the modern State is no longer simply to vigil the civic integration of the individual—which it has always done—but still more to provide for the needs of the industrial power on which, today, all other needs are dependent. The competition among the great modern nations is sometimes expressed by the numbers of technicians and engineers, whose formation they can respectively ensure. Let us underline in passing that such needs are expressed simply and almost immediately, to the detriment of other less profound needs, which are consequently less discernible though just as urgent.

The organisations of the Common Market, the activities of which accentuate the industrial growth of Europe, accelerate the establishment of a semi-planned economy and, on the level of economic behavior, impose an integration of the individual in jobs whose definition and ends are progressively removed from him. In fact, the objectives of industrial growth are established by economic calculation dependent principally on statistical data. Moreover, the complete formation quickly shows itself to be not very positive, recruitment being by examination, and these examinations, being held in definite subjects. By its very conception, this formation is not made to give immediate and closely circumscribed results. But as it is results that are required, little importance is attached to the whole formation. The incentives of a sociological order for an integrated education are all equally as active; they originate from the development of the tertiary sector. The accelerated growth of activities of service in industrial society has in effect given birth to a new class, the middle class. The incessantly growing importance of this class is linked to the rise in the standard of living and consequently to the expansion of economic power; as far as one can see, it will, tomorrow, concern 80 percent of the population. This middle class is not a substitute of the capitalistic burgeoisie; it is a condition determined by a new type of socio-economic conditioning.

<sup>&</sup>lt;sup>6</sup> Jean Fourastié, La grande métamorphose du XX<sup>e</sup> siècle, Paris, P.U.F., 1962.

In an essay on the collective psychology of social classes, Henri Lefèbvre has distinguished the constants: "The middle classes show fairly varied forms of individualism. One psychic trait seems common to these forms: the precisely formal character of the individuality which affirms itself as it can, and often outside any terms, be it at work or in the quality or the quantity of pleasure. The need for affirmation becomes an abstract need, the moral and spiritual counterpart of the need for money, which has the same formal generality." It is thus a condition which is particularly sensitive to the outward indices of the standard of living: financial reward, the looks and prestige of fashion. It takes its passive support of a continuum of collective communications for activity, but each individual undergoes the same audiovisual programs, feeds on the same publicity, buys the same products, and fortifies himself with the same vague progressivism.

The intellectual nutriment of this class, under a smattering of cultural references, is novelty, the shock of which "diverts" from the feeling of its vacuity. Everything, beginning with the caricature of the past, serves to reach the new; the reader is flattered by the cultural reference with which he is paid hommage, and reassured by the superiority that, he is told, the present affords him over this same past. The most characteristic feature of this pseudo-intellectualism is to lay claim to everything: when its information is second-hand—in the form of interviews, hasty reports, "digests," mechanical reproductions—it uses all these things to justify its commitments. As it does not have access to any source, it eludes methodical criticism; as the mass is for it, it can pass final verdicts; as it has a bad conscience, it is a tyrant. Lacking integrity, it has only one worry: that of self-justification. The cultural environment conspires with the same lures.

The utilitarian, technical or specialized instruction received by the average individual leaves him in complete ignorance of the total vocation of a person; professional habits, exclusive to creative behavior, insertion in a process of intensive productivity which prohibits maturation, childish affectivity, nourished by any old form of entertainment, conditioned leisure hours—crowded roads

<sup>&</sup>lt;sup>7</sup> Henri Lefèbvre, *Traité de Sociologie*, published under the direction of Georges Gurvitch, P.U.F., 1960, "Psychologie des classes sociales," p. 364.

camping sites, obligatory transitor sets and mileages, cameras slung across backs, beaches polluted by tar, artistic spots spoilt by noisy carpaks—all these have managed the sterilize homunculus, who, in any case, cannot conceive that he is missing the essential: is he not gorged?

Language itself is prey to a feeble, interchangeable vocabulary which is inexpressive at the personal level. In another study, Henri Lefèbvre evaluates the degradation: "Trivial, banal speech remains in everyday life: chit-chat, nonsense. We find it near to the world of things, that is, the world of merchandise and money. The only 'commonplace' it needs is this proximity. The written and printed word, and images play an important part, but the subject demands only the reading of "the world of merchandise" given as a series of signs: shops, small and large, and purchases, and the advertising that stirs up needs and desires... Clichés and stereotypes follow and link up whit one another more or less appropriately. It is hard to know where to find serious words any more... Speech becomes a social norm. It rules actions and situations like objects. It becomes a fetish; instead of referring itself to something—content, praxis, tangible data—speech becomes referential for groups which have no ground other than chit-chat, because nothing links them up with productive or creative activity. Speech, the commonplace of these informal groups, levels out women and young pleople and the old. Through it, the child becomes precociously adult, and the adult childish. Women become more masculine and men more feminine. Everything heads for the neuter. Meanings abound, and this is the absurd, because the sense has gone."8

Ionesco's theatre satirizes all this.

The individual is thus progressively brought to the point where he no longer invents his behavior; he finds it marked out for him in the socio economic conditioning of the environment he lives in. Provided he submits to it, there will be no risk involved. Not only the risk of poverty, but the moral risk as well, which includes personal choice, voluntary solitude and isolated effort.

Schools are public institutions and private instruction is by consent of the State. Education will thus aim at guaranteeing

<sup>&</sup>lt;sup>8</sup> Henri Lefèbvre, Le Langage et la société, coll. "Idées," N.R.F., Paris, 1966.

the social integration of new generations. Such an aim makes for a clear conscience—who would presume to attack it?—but in reality it pursues strictly utilitarian goals. Education, then, finds itself reduced to one or two opportune apprenticeships, because only the pressing needs of a world that is prey to accelerated industrial evolution are considered. At the same time, and for the same reasons, the programs are continually being readjusted. Now, these readjustments are extremely damaging, they expose scholastic populations to pedagogic and unproven methods, with well-known consequences: education has always suffered from improvisation. The general formation, brought progressively to a state of wretched vulgarisation, and itself subject to the obstructions of the moment, can no longer help to give a structure to cultural information. While programs change, those who question them advantageously illude themselves into thinking that they are inventing something; in fact one could call what they are doing a neurosis of adaptation: like many neuroses, this one is based on fear, the fear of missing some utility that has come into being.

As for the child or adolescent formed in these conditions, we know what the average result is: no structurisation of knowledge; a puerile vocabulary; a legitimate suspicion of the instruction they receive; desire to earn money as early as possible: a ridiculous concern for comfort; a strictly limited preparation of their examination subjects; a remoteness from disinterested speculation; a childish mimicry of the proposals of fashion; an absence of individualized behavior; gregarious habits; group outings; collectively spent leisure hours; and an emotional life that is often marked by regressive behavior. Generations formed in this way will produce a human type who will react docilely to the conditioning of a semi-planned society. Provided these generations are assured of high salaries, they will avidly satisfy all the desires that advertising gives them; it will suffice to make them afraid of poverty to make them work, afraid of loneliness to involve them in collective leisure, afraid to live, and they will accept to be numbers and "figure in statistics."

Seductive as it is in its ambitions—for is it not apparently carried along by the impetus of a society on the move?—integra-

ted education reveals itself to be dangerous when analyzed. Its principles are nonetheless admitted by the mass and impose themselves in every quarter. In fact these principles are confused with those of the "vague progressivism" that we evoked earlier; principles which, because of their conformity, are foreign to the spirit of authentic creation.

On the contrary, personal life admits a tension which increases as it creates its own behavior—as, if one prefers, it becomes more inward: a tension of the ego, distended between the positive and the imaginary, the rational and the irrational. However restrictive the positive may be, the unforseeable must be included in it if some inventive activity is to show itself.

The West, however, survives itself; it does not owe this to the perfection of its techniques, but to its persistent and unformulated faith in the unlimited possibilities of a person. There are always people who feel sufficiently strong to shape their destiny instead of submitting to it, always environments in which the appeal to the best persists, and there are always vocations founded on the unreasoned demand made by quality.

#### ON THE OPPORTUNITIES OF CREATIVE EDUCATION

The opportunities of creative education are thus preserved. They are still held tight in a climate of accusation: the champions of integrated education suspect a flight from actuality in this "radically other" which preludes creative deflagration. Now, this criticism finds strength in the ignorance proper to any kind of opportunism, namely that the present is what is bound to pass on as quickly as possible. Not to yield to the present is to reserve the future, and accumulate, antithetically, the energies necessary for the development of the state of higher synthesis. Let creative education then cease to manifest itself anarchically, and cease to manifest its self-doubt, but be conscious of its sound reasons and establish whatever method will give it possession of its forces. Independently of the refusal of the degradation that integrated education entails per se, the first motive to be taken up comes from the necessity to control the technical civilisation. Other incentives appear in the possibilities that

political, social and cultural doings offer the creative impulse today.

Technical civilisation will not produce humanism; it simply sets up new categories, with which creative activity should be

in gear.

Technics are only a means; they have neither origin nor end; the thought which produced them and the community which integrates them in its projects are the origins and ends of technics which alone can justify their deployment. Technics can dominate but never be the foundation of the landscape; with regard to nature they are a second beginning. At the outset of technical behavior there is a freedom that invents new powers, a type of thought that moves about among possibles, an attention oriented by the intuition of the origins and ends which means a respect for life, creating the infinite. The power, developed by technics, does not set up any end itself, and to believe the contrary is mythology. Here, Karl Marx has justly protested in favor of the liberating rôle of technics and against the confiscation of them by capital. It is here that Marxism concerns humanism.

The task of the 20th century is to challenge the alienations of an exclusively technical civilisation, to recognise not only that the ends of a civilisation do not reside in possession—which religious thinkers already knew—but in the liberation of

the thinking, active man.

Accelerated industrial growth announces a style of Faustian civilisation in which approximations and alienations could be surpassed in the future. If it is true, however, that our time is dominated—as Spengler thought—by the figure of Faust, it remains for us to discover in what way Faust has symbolically restored the balance compromised in the excess. It was by fixing his sights on nature and his attention on the awakening of life, by listening to the inner daimon, by accepting the inspirations of Eros, the originator, and by directing himself along the major rhythms of the universal order. But most of these words—nature, life, daimon, Eros, universal order—are deprived of meaning, because our naive experience has been taken from us.

What reality is defined by the idea of nature? Heidegger recalls it in a commentary of the original word, the *physis* of the Greeks: nature is constant eclosion. All existence finds its

origin in it; all human creation is a product of it; and it is present, in advance, in any undertaking. It is the mark of a fecund kind of thought, of a universal art, of a correct feeling of basing things on what is constantly bursting forth in it. The experience of nature introduces into the mystery of an indefatigable genesis.

In certain branches of science, furthemore, one finds speculations which expressly introduce concepts of order, form and rhythm; this is notably the case of the principle of the "good form" in the *Gestalttheorie*, which refers to identical ideas in physics and physiology. In addition, observations on the rhythms which order biological development find aestethic applications. The mystery of the intelligibility of the world fell, for Einstein, within the scope of scientific research; he admitted it was the motive behind his efforts, as it had been, in his opinion, for Kepler and Newton. In

The conception of a *Logos* embracing and ordering the real is thus not arbitrary. It would be justified, if necessary, by virtue of a simple working hypothesis, since, by relying on that, thought naturally takes on its most constant vigor. But contemporary man is still largely deprived of a reasoned intuition of something universally intelligible. At the same time the experience of a *pneuma* generating his being is foreign to him: apart from one or two far-reaching innovators in the sciences, one or two artists working in isolation, the purest poets, and religious minds filled with humility, he is not attached to the presence of life as a mystery discovered by a secret passion that is constantly at work. A creative education would begin at this point.

On the other hand the possibilities that political, economic, social and cultural action offers the creative impulse are multiplied. Politically speaking, the growth of the executive compared to the legislative, as seen in modern states, calls on characters who are sufficiently steeped in it to make decisions and moves. They have to be formed. If the passage from the economy of profit to an economy of service, of which there is promise today, comes

<sup>&</sup>lt;sup>9</sup> Wolgang Koehler, Die physischen Gestalten in Ruhe und im stationaren Zustand, Braunschweig, 1920.

<sup>10</sup> Mathila Ghyka, Esthétique des proportions, N.R.F. Paris, 1927.

<sup>11</sup> Albert Einstein, Comment je vois le monde, Crès, Paris.

into being, it would reinstall people in the cycles of production and distribution. The activities of public relations could be the practical expression of this, but they must not be used to give a clear conscience—in the form of pseudo-social behavior—to neo-capitalist exploitation of man by man.

The evolution of countries on the path of development presents a growing number of problems: one can only approach them with a sufficiently new kind of thought, a sufficiently inde-

pendent character and by sufficiently prompt action.<sup>12</sup>

The advent of a classless society in which the élite no longer has a preponderant rôle to play—which is a bourgeois idea—but rather must assume within the structures of dialogue liberative functions, requires that education be based on the systematic development of individual qualities. As higher education in the industrial and socialized societies of Europe becomes more general, so the privileges of wealth in the control of key positions should become less exclusive; the need for effective initiators in every field more precise; and, by means of the techniques of social communication, the chances of useful information more numerous. Anyone who shows superiority in a field should still be born with the will of the creator, enter the order of a major constellation which, completely detached and ahead, will draw the new society along, and establish the ascendant of the Pleiads in the sky of contemporary history.

But one must not illude oneself. The advent of this élite is curbed in the West by material comfort, which benumbs curiosity, gives people a disgust for invention, sterilizes energies, and extinguishes the tragic sense of destiny, which is the origin of all heroism; it is curbed by the various feelings of belonging to the social group, which, whatever it may be, releases a whole mechanism of prejudices and reflexes concealing a new, intellectual comfort; it is curbed by those adroitly opportunist minds, faithful neither to themselves nor to their ideas, who abusively govern public opinion by the press, radio, television and magazines and flatter the dominant class of the moment—be it political or moneyed—with half-truths. These combine, by instinct, against the advent of an élite which would earn respect by its own

<sup>&</sup>lt;sup>12</sup> Indra Deva, "The Course of Social Change: A Hypothesis", *Diogenes*, No. 56, Winter 1966.

thought. In order to overthrow the relation of force thus established, one must believe in the superiority of character and of straightforward reason, scorn common authority, be persuaded that the mass expects to be disabused, put one's trust in opportunity, in *kairon*, as the Greeks called it, which will not fail to crop up sooner a later. One must believe in all this, and create it with the intuition of its very profound and universal necessity.

Careers which affect the techniques of social communication -photography, cinema, advertising, television, press, industrial aesthetics—practise invention at an epidermic but generalised level; there are no longer uninformed sectors of social life. By prefactory experience, an environment of spontaneous and superficial creativity can excite stylistic demands. These same techniques have further relieved the major arts—painting, poetry and theater—of their function of entertainment. Photography has helped to reduce painting to what it is essentially; by contrast the verbal flood of broadcasting techniques qualifies poetic ventures: mingling with inspiration, life and being; the device of the televised picture brings an awareness of the unique character and the original quality of the human presence in the tragic theatre, the mime and the dance, three arts which this age and the public at large are paradoxically discovering.<sup>13</sup> So true is it that our times are waking up to the demands of pure creation.

The cultural traditions of the West, the growth of the executive in the contemporary political order and the position that exceptional individuality is once again taking up in it, the opportunities—as well as the perils—offered by countries where development is under way, a Promethean economy which is prey to the demon of power, the universal need for a new humanism, all these call for a creative education, just as parched ground calls for rain; they do not, however, imply it. Let this creative education be lacking, and an easily forseeable determinism will come into play, humanist culture will give way to a pseudoculture, the free practice of faculties of consciousness, yielding to mechanical satiation; the political executive will fall into the hands of technocrats, who will have as their end a universal

<sup>&</sup>lt;sup>13</sup> Jean Vilar, De la tradition théâtrale, L'Arche, Paris, 1955.

conditioning of collective life. Developing countries will be more knowingly exploited; by admitting the illusion of civilisation, independent men will be consciously isolated and disregarded. And so the gorged and disciplined *homunculus* will triumph, held fast in a state of golden slavery, thanks to infinite and imperceptible everyday restrictions, and alienated for another hundred years from his finest possibilities.

#### ON CREATIVE BEHAVIOR

The only remedy is to establish a freedom of the mind by the value and number of its creations. But what is creating consciously and by one's will? To create in this way is to extract comprehension and new forces from the encounter between intelligence and the manifestations of universal life.

The difficulty lies in the fact that intelligence is normally determined by the effective behavior and mechanisms with which it is familiar and the utility of which it tries to exploit; by engaging in repetitive activities which ensure the necessary production of goods, it postpones its questioning of the means of action. This is why creative effort is normally provoked by competition, sometimes by being checked and lastly by the brutal irruption of a living and abusively oppressed force; the revision of hitherto approved methods demands inventions; progress of the mind is dialectically linked to the resistances of nature or the reality which it tries to dominate. In any event, this fruitful encounter between the creative mind and universal life will not come about if the mind is not in a state of concentration, and if it is not exercised to that state of attentive vigilance which creators—leaders of men, scholars, men of action, philosophers and artists—give evidence of.

Claude Bernard's theory of experimental reasoning talks of the rôle of attention in the invention of scientific laws: "the mind of the experimentalist has to be active, that is, it must question nature in every sense and follow the divers hypotheses suggested, (for) experience is basically no more than a provoked observation." And what is a provoked observation if not the

<sup>&</sup>lt;sup>14</sup> Claude Bernard, Introduction à l'étude de la médecine expérimentale, P.U.F., Paris, 1947.

exercise of attention turned towards what is intuitively felt to be new? And so it is attention that puts experimental reasoning into gear, and, further, surpasses it, when the law is established, by putting it face to face with the totality of the others, through which nature proposes itself to its reflection. What distinguishes the routine mind from the seeking mind in the sciences is that the former is only concerned with the exploitation of the results reached, in whatever is subject to its experience; the latter suspects the new horizons thrown up by these same results, which are considered to be the limits of an already explored field. And this is why Fourastié has written in his analysis of the Conditions de l'esprit scientifique: "The essential faculty in the making of a good inquiring mind is astonishment... (this) is above all the factor in the discovery of new realities which, far more so than the game of explanations, is the very substance of scientific knowledge."15

The confrontation of intelligence and universal life is still at the source of technical innovation, in which, in the words of Gilbert Simondon, "invention is a taking charge of actuality by the system of virtualities;" because the laws which govern invention can also be applied to all our ways of behavior, and "the relation of thought to life is analogous with the relation between the structured object and the natural environment." So in technical invention, as in the discovery of new scientific laws, the behavior of creation is organised with, as a starting-point, the peculiar relation which is established between the object in question and the infinite field that is opened up.

But where will this presentiment of the new, which amazes and guides the attention, issue from? The intuition of a possible solution is connected to the pure and simple feeling of universal life, to the primitive and almost inexpressible emotion of its inexhaustible wealth: "it is something felt more than uttered;" it cannot be acquired, but it can be lost; it falls into the sharing

<sup>&</sup>lt;sup>15</sup> Jean Fourastié, Les conditions de l'esprit scientifique, coll. "Idées," N.R.F. 1966, p. 250.

<sup>&</sup>lt;sup>16</sup> Gilbert Simondon, *Du mode d'existence des objets techniques*, chapter II, article II, "L'invention technique: fond et forme chez le vivant et dans la pensée inventive," Aubier, Paris, 1958, pp. 56-61.

of all intelligence, but it still has to be consciously developed. Let us study this point.

It falls into the sharing of any intelligence, and first of all infantine intelligence. Piaget's famous studies<sup>17</sup> on child psychology confirm Baudelaire's ingenious insight<sup>18</sup> and the unerring presentiments of Montaigne, Pascal, Rousseau, Goethe and Breton: 19 the attention paid to the indefinite resources of life, which will later nourish the roots of the scholar's, philosopher's or poet's intuitions, is surprised in its natural state in the child's wonder. The naive photograph of an atom, found in a school physics text-book, sparked off Heisenberg's research.20 This original wonder mysteriously determines many a vocation and perhaps no maturity is complete enough to be the true realization of it; by returning to childhood experiences, is psychoanalysis not an attempt to tie up with the betrayed forces of childhood? and would the better part of its therapy not be in a regained constancy, far more so than in an analysis aimed at the rationalisation of traumatism?<sup>21</sup> In childhood there is a declaration of that fundamental intuition which, in Bergson's opinion, the philosopher's thought strives to illuminate throughout his work;<sup>22</sup> and it is his nostalgia that draws the artist ever more movingly closer to creative Reality.23

The adult can rarely sustain his attention before the unprecise forms of amazement; attention involves states which are always new and as such cannot be grasped: it is pregnant with all the possibilities that offer themselves to the mind in its encounter with the real. The very object of creative education is to try to gather the energies that flow in the mind into the vague experience of amazement.

Plato, Vinci, Goethe and Valéry—new minds who courted

<sup>&</sup>lt;sup>17</sup> J. Piaget, La naissance de l'intelligence chez l'enfant, Delachaux et Niestlé.

<sup>&</sup>lt;sup>18</sup> Charles Baudelaire, Curiosités esthétiques, La Pléiade, N.R.F., Paris.

<sup>&</sup>lt;sup>19</sup> André Breton, Manifeste du Surréalisme, 1924.

<sup>&</sup>lt;sup>20</sup> Werner Heisenberg, La nature dans la physique contemporaine, coll. "Idées" N.R.F., 1962.

<sup>&</sup>lt;sup>21</sup> Mircea Eliade, Le mythe de l'éternel retour, N.R.F., 1949.

<sup>&</sup>lt;sup>22</sup> Henri Bergson, L'intuition philosophique, Ed. du Centenaire, P.U.F., p. 1345.

<sup>&</sup>lt;sup>23</sup> Jean-Paul Weber, Psychologie de l'art, P.U.F., 1965.

any possibility—tried to account for creative behaviors; only one condition is declared to be primordial: attention. This exigence can be found in all the known forms of education, but, far from being creative, most educational systems are so "sclerotic" that they induced Kafka to write: "one has to consider education as a plot fomented by the adults." Of course, there is no *premeditated* plot among the adults, but there is a feeling of frustration in the new generations. This feeling comes from the insufficiences of the orientation of attention. Let us then examine what there is to be found, *in principio*, in the orientation of attention.

The orientation of attention concerns conscious activity, but this latter develops from intuitive data of a scarcely credited richness. In the course of his studies on the Structures de la parenté, Lévi-Strauss states that the child, at birth, is in possession, in their virtual state, of almost infinite possibilities, that will be specified by the cultural environment which will elect a reduced number of them. He writes: "the psychology of the infant constitutes a universal essence that is infinitely richer (the italics are ours) than that which each individual society makes use of. Every child at birth brings with it, in the form of roughcast mental structures, the integrality of the means which mankind uses for all eternity to define its relationship with the world."25 Anthropology thus verifies the basic principle of the most famous pedagogies, from Pythagoras to Goethe, from Jean-Jacques Rousseau to the partisans of active methods, namely that the child possesses an infinitely rich essence and the first fault of our methods is that they are limited by adult prejudices, which are themselves determined by the norms of the society we live in. It is thus further established that the essence of universal development, and the whole future of man, lie in man himself and go infinitely beyond a clear mind; and in the end all positive acquisition—however advantageous it may be—is a

<sup>&</sup>lt;sup>24</sup> Franz Kafka, *Journal*, trans. Robert, Grasset, 1954, p. 474. This formula collects the radicalism of the student contestation in France and in the world. Let it suffice as a quotation since this text was written before the events in Paris in April and May.

<sup>&</sup>lt;sup>25</sup> Claude Lévi-Strauss, Structures élémentaires de la parenté, P.U.F., Paris, 1949.

mockery of what might be. This results in the imperious duty not only to keep the whole field of possibility in education, but also to open it up decisively. It would be strange, in fact, if evolution were admitted to the sciences and not to education, if life were allowed to progress in leaps and bounds and by invention and if education were made an even more tyrannical conditioning than any other .

Creative thought declares itself to be the experience of participation, the birth of consciousness in the world, the perception of scattered possibles, the bait of duration; the "immediate data" of creative behavior can only be approached; one has constantly to go to the limits of the impulse that is received from them. This is also the reason why, in its beginnings, any creative behavior implies poetics.

It is, however, quite common to feel sensations and have ideas; the extraordinary begins when the mind, which is aware of this expansion, makes sensations and ideas work to their mutual advantage, when it organizes and unites them, and in the end constructs for itself a mental architecture which embraces ever vaster areas. It is then that something new comes to light, because the mind, supported by the will, has associated the hazardously juxtaposed elements of common experience. Directed in this way, the force of thought—and the force of action thus undertaken—will depend on the strength of the association. Just any sort of thought associates ideas in a feeble way, just as any kind of action scarcely modifies the course of things. Ingenious thoughts are like so many free constructions, sensitive to every bent and open to every insight—but connected in every sense. They are gathered together by a prompt and diversified logic. The second stage of creative behavior is thus entirely given over to the job of composition. This task of organization is only the first experience of attention but is spreads through all the activities of the mind: it is no longer an isolated link at work, but a whole complex in which all the closely woven threads vibrate together. This liaison of forces is the very manifestation of mastery.

The mind has run all the risks, in height, depth, dispersion, concentration, weakness and strength, and now, at one glance, it can embrace the detours of the labyrinth and overprint the shortest course: "The secret of Leonardo, Bonaparte and anyone

in possession of the highest intelligence is and can only be in the relation they found—and were forced to find—between things for which we can find no law of continuity," notes Paul Valéry in his *Introduction à la Méthode de Léonard de Vinci*. Action is all the more effective if thought confronts its projects more directly with the positive conditions of its achievement; what is possible goes side by side with necessity.

Technical behavior, for its part, associates the results of the sciences with the realism of action, the positive conditions of action being translated into operative possibilities. One thus has to cross the diversity of the real-indeed its contradictions-to set up the structure which organizes and shapes it; for creation to manifest itself, a form must be established. Cybernetics have made behavior radical: the "simulation" of the organization of what is living by the cybernetic machine is, in fact, the rigorous projection of an organically operating kind of thought. Cybernetics thus verify the pertinent coefficient of creative thought. Even today the structuralist movement is striving to determine, conceptually, the method of this organically operating thought. Starting from a hypothesis of work—but this time at the level of theoretical explanation—it is still a question of giving a structurizing form to the real. The second task of creative education, coming after the deployment of the field of possibility by preserving intuition, will be to animate a will to make an ordered construction of the real: the study of ancient Greek, mathematics and metaphysical thought is a direct initiation to the task of giving this form.

But once more an awareness of the diversity of the real is necessary; and this diversity has to be suffered right up to the continuous sensation of the intolerable, without which the construction of unity would be sterile. At the beginning of all invention there is a *feeling* that has been sharpened by the anarchy of the real, sometimes to the point of torture. But one can take case that it is the exigence of the process of giving form that has created the state of alert in the mind and mobilized the will to functions of organisation. It is a senseless demand for unity that will make the mind stand up to what denies it, penetrate the texture in which the apparently erratic event is nevertheless

caught, return to the original and initially scorned intuition, discover the secret structures of the real. and determine the law which rules them.

Then it is the turn of surprise: the relation at last discovered, the unity won, the law of continuity finally imposed on the things that previously escaped it, the feeling that the real is one, and of this mysteriously diversified unity which contemporary metaphysical speculation represents for us symbolically. "Everything is one, everything is different,": Teilhard de Chardin was fond of repeating Pascal's reflexion. For whoever has felt life as such in what he has done and speculated about, life is continually expanding, deepening and intensifying: it reveals itself by way of a risk which can give Being. The third principle that inspires creative behavior is the exigence of a full intelligibility of the real: the demand for a meaning in full. The least obstacle will thus be guestioned; and one can thus be sure that a mind that is not fixed on any utility will not recognize any end to its searching. And one must not confuse this principle with positive knowledge; the intelligence has to be guided by an orientation. "The least comprehensible thing in the world, said Einstein, is that the world should be comprehensible." And the right he gave himself to speculate in full liberty—he went as far as calling it fiercely—started expressly from this. In the end one has to devote one's mind to the single mystery of the intelligibility of the world. Everything has to be acknowledged, if the mind is to refind a movement on which it can take wing.

Once these three principles of creative behavior are accepted,—the principles of intuition, giving form and intelligibility—it remains to consider some of the modalities within the rational procedure, and what moral quality is to back this sort of behavior.

Conscious activity, developed from intuitive experiences, can be rationally defined and established in rigid theories. Of course, it surpasses itself in invention, but this invention can only be animated within established structures by a new intuitive confrontation with the real. But the mind has difficulty in reaching this because of the organized types of behavior on which it relies and to which it has become profitably accustomed. In a state of civilisation, inventive activities do not only depend on attentive watchfulness in which original intuition reassumes its

rights; in addition intelligence must not deny any acquired knowledge—indeed, on the contrary, it must gather all knowledge unto itself to confront it with whatever has no name.

This is an experience which creators can reach—scholars, artists, mystics—and it is open to those whose minds are capable of rebirth.

It is, further, an experience into which revolution can make a violent entry, at the cost of upheavals which might be damaging forever. Revolution brutally achieves the renovation that the mind has not been able to direct: removal of acquired structures, confrontation with an immediate reality which escaped the regulation of existing institutions, and liberation of what is, with neither art nor mastery.

The opportunity to approach what is is constantly open to everyone, but in brief moments of illumination, with the result that the mind renounces it. Moreover, habitual behavior, the fortified preservation of social complicities distributed in the devouring time of clocks, and obligatory behavior as well, requires easier ways.

The fecundation of thought depends on a state of receptivity capable of entertaining original imaginary activity in the very moment of rational operations of organization. The creative opportunities of the mind depend on this; today one is no longer allowed to doubt this—the approach of Gaston Bachelard to this point and Gilbert Durand's essay on the structurization of the imaginary have confirmed this—by bringing to bear the revelation of pure functions, assumed uninterruptedly by the imagination, in the deployment of conscious life.<sup>26</sup> But the creative functions of the imagination are still linked to perception,<sup>27</sup> to the elaborated data of the memory,<sup>28</sup> to the dialectic of the sensible,<sup>29</sup> to the

<sup>&</sup>lt;sup>26</sup> Gilbert Durand, Structures anthropologiques de l'imaginaire, P.U.F., Paris, 1963, pp. 466-467.

<sup>&</sup>lt;sup>27</sup> Maurice Merleau-Ponty, *Phénoménologie de la perception*, N.R.F., Paris, 1945.

<sup>&</sup>lt;sup>28</sup> Henri Bergson, Matière et mémoire, Ed. du Centenaire, P.U.F.

<sup>&</sup>lt;sup>29</sup> Louis Lavelle, La dialectique du monde sensible, P.U.F., 2nd. ed., Paris, 1954.

manifestation of sociability,<sup>30</sup> to mime,<sup>31</sup> to the transcendental specificity of the imagining consciousness:<sup>32</sup> in other words, they concern every order of contemporary research in the human sciences. In a parallel way, the approaches made by poets<sup>33</sup> and artists<sup>34</sup> take on a no less important exploratory value, as André Breton affirmed as early as 1924 in his Manifesto of Surrealism with a simplicity has lost none of its weight.

At the same time the activities in which the mind turns back towards life, "such as the gods give us," are rehabilitated: nature, game, dream, the "joy of love," inspiration, the artistic gesture, philosophical meditation, silence, prayer. Each one of these experiences comprise in fact some creative opportunity. To take it, it is enough to convert the attention to the sources of conscious life and make this conversion the object of a movement of the whole body. The creative attention is then born, which is a silence that is open to what will come to be. But this movement of the whole being supposes that the self is forgotten, which is hard. If the mind consents to this silence and nothing in the mind puts up a screen, then its regeneration is assured: it will recover its clearly defined activities with a confidence and a knowledge hitherto unknown to it.

This indefinite extension of the thought in no way implies a rejection of the rational structure in which our civilization is displayed and which technics keep working. It is, on the contrary, a matter of assuming the demands of it in such a way that their restrictiveness is overcome, and their discipline serves as an inspiration. The effort required embraces the rational and the intuitive, the pragmatic and the imaginary, inquiring activity that is avid for results and distancing necessary for contemplation, in a conscious tension. If the mind, engaged as it is in effective tactics required by social habits and intimidated by the apparatus of theories, is to face up to the release that assures a mastery of

<sup>30</sup> Georges Gurvitch, op. cit.

<sup>&</sup>lt;sup>31</sup> Edmond Radar "The Study of Mime as a Manifestation of Sociability, as Play and Artistic Expression," in *Diogenes*, No. 50, Summer 1965.

<sup>32</sup> Maurice-Jean Lefebve, L'image fascinante et le surréel, Plon, Paris, 1965.

<sup>33</sup> Martin Heidegger, Approche d'Hölderlin, N.R.F., Paris, 1962.

<sup>&</sup>lt;sup>34</sup> Maurice Merleau-Ponty, "Le doute de Cézanne," in Sens et non-sens, Nagel, Paris, 1948.

the present with a still inderminate hold over the real, absolute detachment is necessary. To accept that intelligence be fixed on objects that are not immediately utilizable, apparently fruitless and intangible, is to go towards—but without knowing where—a confrontation with other people's scepticism and sometimes own's one, in short to take a chance. "The wind bloweth where it listeth, and thou hearest the sound thereof, but canst not tell whence it cometh, and whither it goeth: so is everyone that is born of the spirit." Such a choice involves a total risk, it requires an acceptance of psychic energies that have hardly been approached, and it establishes a problematic condition with regard to certainties, the positive effectiveness of which rallies the adherence of the mass.

And so the apprenticeship of courage is indissociably linked with the primordial experience of attention. Consciousness of the risk and the brave acceptance of it distinguish those who accept the consequences of their choice. Whoever cannot discern the consequences of an action, cannot make any decision about the future, and is excluded from any undertaking which has a breadth of intelligence; the same goes for the person who can discern things, but who is afraid of the consequences and thus prevents himself from experiencing beings and things as well as himself.

Weakness of character engenders a confused judgement: one cannot see the real as it is, one hides oneself from the truth, one prides oneself, one deceives oneself. And all the more because one must take opportunities, experience resistance, and give free rein to one's will if one is to see ahead; an action undertaken with scattered ends is not an action of certainty, it involves a risk that has to be admitted. In action, risk plays the part of the hypothesis in intellectual speculation: it allows for invention, and it compels it.

Risk restores what is new to the outside world, its hazards, its contradictions and its dangers; it is self-exertion with lucidity and courage. Character steeps itself in risk to grow familiar with it; the dimension of life is only caught in a total risk, and awareness and boldness thus define the greatest geniuses. The

<sup>35</sup> *John*, ch. III, 8.

quality of calmness that Alexander, Caesar and Napoleon possessed came from their sustained and exclusive awareness of the conditions of the real; their boldness consisted in their pursuit of a well considered plan. It is never possible to be sure which is their most admirable quality: their judgement—the whole clarity with which they saw things—or their boldness. But they were sure of the way they saw things because they were resolute: decisions were straightforward because the risks were deeply considered. The improvement of the qualities of attention and the exercise of courage define a creative education for higher human types.

An ascetic training of attention and courage thus achieves individual ends. The habit of attention and a reasoned experience of people and things are the passwords to the intelligence of life. When it is recorded—sometimes intuitively, sometimes experimentaly, and sometimes by reflection—on several wafe-lengths, the real can be comprehended orchestrally: everything is associated with everything: "Wisdom, observed Heraclitus, consists in one thing, which is to know that thought governs everything by means of everything." So the mind is at the center from which all problems are illuminated, if not solved. This is how universal geniuses produce the works that guide thought for several centuries.

By staying close to risk, if only in the modest form of a consciousness of the aleatory character of everyday life, one can exercise a lucidity and a decisiveness that overcome the resistance of obstacles ordinarily encountered by individual achievement. During the confrontation, in the effort that thas been consented to, the resources of people are rallied, unified, and strengthened; once the obstacle has been overcome, the subject has won confidence for the future. It is enough to want something, however small, for the weakness of the obstacle which initially was feared to be revealed, and if one is dealing with a stronger adversary, if one is unskilful and not very gifted, it is often enough to begin things all over again to remove the adversary. By following one's own path after an unfruitful and solitary period, one comes into possession of oneself. The obstacles in the way of personal achievement are overcome by dint of lucidity and decisiveness; this can only happen at this

price, because, while measuring oneself against everything and everyone else, one is quite alone.

The road from self-mastery to the mastery of others is short. This is because a person's achievement remains the secret desire of everyone; while the majority parade borrowed types of behavior, their nostalgia for personal freedom is constant. This is the reason for the fascination of personality which can be seen in any environment. To make decisions and take on oneself the risk that any keenly taken action involves, is in fact what one expects from our betters, and the reason why, when the time comes, they can impose themselves on us.<sup>36</sup>

The creator is firstly a man who has had the courage to say no and the boldness to open up new routes. It is necessary for whatever he refuses himself to be a sufficiently restrictive obstacle to compel him to invent. The creator must pay if he fails, for this danger commits him to bring his projects to completion and to explore totally every facet of his project. In a word, the rigor of the restrictions calls for a masterly reply. This principle supports Toynbee's essay that attempts to explain the history of civilizations.<sup>37</sup>

On the contrary, environments without tradition and consequently without restrictions, produce on a huge scale, but do not create. In order to invent, initiators are not in fact forced to resort to their own essences; pure curiosity, the need for change and the lure of gain engage them in superficial research and one or two surprises in the detail. This phenomenon can be seen in environments which are prey to a decadent culturalism, where infinitely abundant traditions are abolished, and take the form of fashions which, sterile, are piled one upon the other.

<sup>36</sup> Charles de Gaulle, Le fil de l'épée, Berger-Levrault, Paris, 1944.

<sup>&</sup>lt;sup>37</sup> Arnold Toynbee, World and the West, Oxford U.P., 1953.