

INTRODUCTION

INTEREST in the creative process is not exactly a new development. A story told of the working habits of Euripides may be apocryphal; but both Plato and Aristotle had something to say of the creative process, and from time to time during the next two thousand years other writers touched upon it. Early in the nineteenth century interest in it increased. Blake, Wordsworth, Coleridge, Shelley, and Keats all had their say. Poe's "Philosophy of Composition" became an incitement to further attention. Interest in the subject is still growing.

Besides a good deal of objective discussion of the creative process, chiefly by philosophers, psychologists, and other scientists, a large amount of comment and description of individual processes and insights has accumulated, most of it fragmentary, some of it not perfectly reliable. Among these materials the most illuminating and entertaining are the more full and systematic descriptions of invention and the reflections upon it made by the men and women most in position to observe and understand, the thinkers and artists themselves. Perhaps the greatest body of such writing is the monumental work of Henry James, the prefaces to the New York edition of his work.

Some of the reasons for attention to the creative process are practical. One incentive for compiling this anthology, a selection of some of the more revealing discussions of invention, is that insight into the processes of invention can increase the efficiency of almost any developed and active intelligence. Not even the most vigorously creative minds always

find their way quickly to efficiency. Yet many creative workers have little knowledge of the pertinent materials and would not know where to look for them. Some of the richest and most useful are scattered and out-of-the-way. There is, moreover, no large collection of statements about the creative process that is much more than a compendium of fragments. It has therefore seemed worth while to bring together some of the longer and more complete source materials, exhibiting a fairly full range of methods in the various fields of activity. Having read through such a selection of writings one will not simply have observed the fundamentals, which are all but inescapable. One should have acquired a sense of the bearing of these fundamentals, a feeling for the whole process, and a lively sense of the divergencies of individual approach and procedure.

Today, when widespread, deep, and rapid changes are taking place in the very structure of our lives, whether we desire it or not, and when still other changes seem necessary to preserve us from disaster, understanding of the creative process is particularly important because it can assist in the control of these difficult developments. The creative process is the process of change, of development, of evolution, in the organization of subjective life. The inventive minds through whose activity that evolution has been initiated and in large part accomplished have usually been the only ones much concerned with it. Their efforts have rarely been sustained by society, and have sometimes even been hindered. There is little comfort in reflecting that vital change has gone on despite all opposition or indifference, that the work of Galileo was done and put to use in spite of obstruction and that Bartok composed a great deal of music while enduring the neglect that left him in sickening poverty. There is no way of estimating how much the development of humanity has been lamed by such delay and waste. Simply the self-interest of mankind calls for a more general effort to foster the invention of life. And that effort can be guided intelligently only by insight into the nature of the creative process. Understanding the activities of those who supply the needs of life, both their own and others', by defining some fresh organization of subjective processes, we may help them to get their work done. Opening our minds to their insights and putting them to what use they may have, we may assist in the creative process, which completes itself only as the products of invention transform the environment the inventor breathes.

The human mind is prepared to wrap the whole planet in a shroud, and the exercise of all our best effort and ingenuity has produced no assurance whatever that it will be deterred from that end. The prolonged failure of traditional means in dealing with this problem does not prove those means useless. It does strongly suggest their inadequacy. For, as

knowledge of the creative process drives us to conclude, although a problem which stubbornly resists solution by traditional means may perhaps be insoluble, the probability is rather that those means are themselves inadequate: the concepts, attitudes, and procedures employed are probably at fault and in need of being transcended in a fresh approach. The only reasonable step, at this point, then, is to act upon the supposition that our problems in world crisis, as at other times, may be soluble only creatively—that is, by a profound and thorough alteration of our inner life and of the outer forms in which life finds expression and support. Certainly some changes are requisite. The necessary change, if it comes at all, may have to be so quick and sharp an evolution as to seem revolutionary. If it does not come soon, if the limiting forms of our consciousness, the sometimes too-rigid patterns of current thought and feeling, are not shaped quickly to meet the needs of life, there is grave danger that they will simply continue to possess us until too late.

One might suppose it easy to detect creative talent and to recognize creative impulse and creative work. But the difficulties are considerable. Because every creative act overpasses the established order in some way and in some degree, it is likely at first to appear eccentric to most men. An inventor ordinarily must begin in isolation and draw the group to himself only as it is discovered, sometimes very slowly, that he has invented some part of what they are in need of. At the beginning of his struggle for realization his originality may achieve no more striking manifestation than an extreme dissatisfaction with established order.

Vincent van Gogh must have felt some such dissatisfaction when in 1880 he wrote to his brother Theo about his feeling that he was one of those men who are somehow mysteriously imprisoned, “prisoners in an I-don’t-know-what-for horrible, horrible, utterly horrible cage.” As we know, the trouble was not that van Gogh was incapable of action. It was rather that he had not found that expression of his impulses which would satisfy him. He writes further of “the man who is doomed to remain idle, whose heart is eaten out by an anguish for work, but who does nothing because it is impossible for him to do anything, because he is as it were imprisoned in something. Because he hasn’t got just that which he needs in order to be creative. Because the fate of circumstances has reduced him to a state of nothingness. Such a man often doesn’t know himself what he might do, but he feels instinctively: yet am I good for something, yet am I aware of some reason for existing! I know that I might be a totally different man! How then can I be useful, how can I be of service! Something is alive in me: what can it be!”

How are we to differentiate this expression of the artist’s sense of his unrealized possibilities from the petulance of incapacity dissatisfied with

its lot? There seems no immediate way to do so. The criterion is the proof of production by the artist, if he is able to find himself. But I suspect that he does not always find himself, that he may look in the end like nothing more than an ineffectual misfit.

Van Gogh's uncertainty as to what he might be is typical. The inventor, whether artist or thinker, creates the structure of his psychic life by means of his works. As C. G. Jung remarks: "The work in process becomes the poet's fate and determines his psychic development. It is not Goethe who creates *Faust*, but *Faust* which creates Goethe." Yet it is only as the work is done that the meaning of the creative effort can appear and that the development of the artist brought about by it is attained. This is why the creative urge may be at first so extremely vague as hardly to identify itself. The terms of its expression are not to be found in the world, but must be invented: the simplest terms of the new order have yet to be discovered and made explicit.

Even to the creator himself, the earliest effort may seem to involve a commerce with disorder. For the creative order, which is an extension of life, is not an elaboration of the established, but a movement beyond the established, or at the least a reorganization of it and often of elements not included in it. The first need is therefore to transcend the old order. Before any new order can be defined, the absolute power of the established, the hold upon us of what we know and are, must be broken. New life comes always from outside our world, as we commonly conceive that world. This is the reason why, in order to invent, one must yield to the indeterminate within him, or, more precisely, to certain ill-defined impulses which seem to be of the very texture of the ungoverned fullness which John Livingston Lowes calls "the surging chaos of the unexpressed."

Chaos and disorder are perhaps the wrong terms for that indeterminate fullness and activity of the inner life. For it is organic, dynamic, full of tension and tendency. What is absent from it, except in the decisive act of creation, is determination, fixity, any commitment to one resolution or another of the whole complex of its tensions. It is a working sea of indecision, like the soul of a woman making up her mind. But if it were altogether without order of some kind it would be without life.

Creation begins typically with a vague, even a confused excitement, some sort of yearning, hunch, or other preverbal intimation of approaching or potential resolution. Stephen Spender's expression is exact: "a dim cloud of an idea which I feel must be condensed into a shower of words." Alfred North Whitehead speaks of "the state of imaginative muddled suspense which precedes successful inductive generalization," and there is much other testimony to the same effect.

In some invention there is consciousness of a stage yet more primitive, a condition of complete indecision—in the words of Isadora Duncan, “a state of complete suspense”—in which nothing tends toward determination, nothing of a particular character seems to be implied, in which, therefore, all is still apparently free. It is alike for thinker and artist the offering of adventure, but adventure nameless and featureless, which shall be defined by something not even in the periphery of consciousness, but rather implicit in the whole spread of the subjective life. This state in no way involves or suggests irresolution. Paradoxically it often appears as an enhancement of certainty. It is as if the mind delivered from preoccupation with particulars were given into secure possession of its whole substance and activity. This yielding to the oceanic consciousness may be a distracting delight, which as Jacques Maritain has pointed out can divert the worker from formal achievement. In this extreme the experience verges upon the religious; but it is rarely so intense or so pure, and, when it is, it is not often so enduring a preoccupation as to constitute a real threat to performance. More often it defines itself as no more than a sense of self-surrender to an inward necessity inherent in something larger than the ego and taking precedence over the established order.

Frequently the creative worker experiences first neither this sheer readiness for the new nor that vague presentiment of some novel development felt to be specific but as yet undefined. The invention may appear spontaneously and without apparent preliminaries, sometimes in the form of a mere glimpse serving as a clue, or like a germ to be developed; sometimes a fragment of the whole, whether rudimentary and requiring to be worked into shape or already in its final form; sometimes essentially complete, though needing expansion, verification, or the like. The mathematician Jacques Hadamard records that “On being very abruptly awakened by an external noise, a solution long searched for appeared to me at once without the slightest instant of reflection on my part—the fact was remarkable enough to have struck me unforgettably—and in a quite different direction from any of those which I had previously tried to follow.” Spontaneous appearance of inventions very fully formed is not extremely rare, but it is by no means ordinary. Spontaneity is common, but what is given is usually far from complete. Commonly the new element appears simultaneously with some such vague intimation of further development as I have described.

Production by a process of purely conscious calculation seems never to occur. Though Poe laid claim to it, his singular testimony is not enough to establish it as a fact. It cannot and ought not to be rejected as impossible, but it does not fit the facts reported almost universally and in every field of creative work. Not only Shelley, Blake, Ernst, Henry

James and many other artists of great note or of little have described some considerable part of their invention as entirely spontaneous and involuntary—that is, as automatic. Invention automatic in this sense is claimed also by a variety of intellectual workers, such as Spencer, Nietzsche, Sir W. Rowan Hamilton, C. F. Gauss. More or less of such automatism is reported by nearly every worker who has much to say about his processes, and no creative process has been demonstrated to be wholly free from it.

Anton Chekhov has insisted that only a lunatic would create quite automatically: "... to deny that artistic creation involves problems and purposes would be to admit that an artist creates without premeditation, without design, under a spell. Therefore if an artist boasted to me of having written a story without a previously settled design, but by inspiration, I should call him a lunatic." But this is rather a protest against the view that completely automatic production is normal than an attempt to rule out all automatism whatever in normal invention.

Automatism appears to be fundamental in the activity which Henri Poincaré observed on the notable occasion when having drunk coffee he lay unable to sleep and became a spectator of some ordinarily hidden aspects of his own spontaneous creative activity: "Ideas rose in crowds; I felt them collide until pairs interlocked, so to speak, making a stable combination. By the next morning I had established the existence of a class of Fuchsian functions, those which come from the hypergeometric series; I had only to write out the results, which took but a few hours." Though Poincaré was conscious, he did not assume direction of his creative activity at the stage described; and as it seems to have been a sort of activity not susceptible of conscious control, apparently he could not have done so. If he is right in supposing that what he witnessed was typical of processes ordinarily subliminal, then some part of his creative process—a classical example—was automatic.

Another worker likewise of highly developed intellect, but in another field, has reported somewhat similar observations of automatic production going on under the fully wakeful eye of consciousness. In his preface to *The Ambassadors* Henry James records some conscious production so smooth and inevitable as to suggest an unconscious, wholly automatic development if consciousness had not fully operated: "... the *steps*, for my fable, placed themselves with a prompt and, as it were, functional assurance—an air quite as of readiness to have dispensed with logic had I been in fact too stupid for my clue." That much did happen quite automatically, though with the assent of his judgment, becomes apparent as he continues: "Never, positively, none the less, as the links multiplied, had I felt less stupid than for the determination of poor Strether's errand

and for the apprehension of his issue. These things continued to fall together, as by the neat action of their own weight and form, even while their commentator scratched his head about them; he easily sees now that they were always well in advance of him. As the case completed itself he had in fact, from a good way behind, to catch up with them, breathless and a little flurried, as he best could."

From this account of spontaneous and involuntary production in a state of heightened awareness, it would appear that automatic invention, far from being a sign of diminished, imperfectly functioning consciousness, is a healthy activity supplementary to conscious invention and in no way inconsistent with it. The automatic functioning in invention is, rather than an inferior or suspect substitute (or an exalted one), an extension of activity beyond the limited scope of that which is shaped by insight, the conscious activity, which is an observant adjustment of exactly appreciated means to known ends. Something beyond the fully observable conscious construction takes place, to the advantage of consciousness, or of the consciousness able to make use of it.

The notion that automatic and conscious production are somehow opposed is not altogether groundless, however. The constructive nature of the automatic functioning argues the existence of an activity analogous to consciousness though hidden from observation, and we have therefore termed it *unconscious*. The negative prefix suggests an opposition, but it is no more than verbal, not any sort of hostility or incompatibility being implied by it, but simply the absence of consciousness. Yet a real opposition between the conscious and the unconscious activity does subsist in the limitations which the former tends to impose on the latter. The established possessions of consciousness have a way of persisting, particularly when they are part of a scheme, and of determining behavior, including a large part of that which is unconscious or imperfectly conscious. If this were not so our psychic lives would of course have little stability.

But this conservative tendency hinders the introduction of anything fundamentally new. The first impulse toward new order in the psychic life is therefore, as it must be, an impulse *away* from the clearly determined, from all that is most easily attended to and that most forcefully imprints itself upon the attention. That is, it is an impulse away from the conscious activity already in motion or potential, which would simply reduce it to itself. In the sense of this aversion, it is an impulse toward unconsciousness. This is the real opposition to which I have referred, this reaction against one another of the old order which is more or less readily realizable in the focus of attention and the potential new order developing, and often competing against it, in obscurity. It is not the two

activities which are opposed, the conscious and the unconscious, but the principles acting in them.

The opposition is often dramatized in objective situations, as when van Gogh agonizes in a morbid inactivity because none of the current ways of expression can give issue to the nameless life within him for which he has not yet found a path. As long as he tries to move in the old ways, he is frustrated. For the emphasis of desire falls upon the unrealized rather than on the explicit elements in his psychic life.

Even when an artist has found his way, the opposition between the new and the old persists, for the unrealized continues to draw him. This is true also of the scientist and creative man of action, of all inventors, who may be said to be a restless group. It has been pointed out by Jacques Hadamard that the more vigorous creative minds among the scientists are often inclined to drop a project when the less inventive begin to swarm upon it, and to go on to something fresh. Artists do this too. So Ezra Pound abandoned Imagism and other movements. Pablo Picasso creates movements but does not lead them.

The nature of this restlessness is well defined by Thomas Mann near the end of the meditations which introduce his story of Joseph: "As for me, who now draw my narrative to a close, to plunge, voluntarily, into limitless adventure (the word 'plunge' being used advisedly), I will not conceal my native and comprehensive understanding of the old man's restless unease and dislike of any fixed habitation. For do I not know the feeling? To me too has not unrest been ordained, have not I too been endowed with a heart which knoweth not repose? The story-teller's star—is it not the moon, lord of the road, the wanderer, who moves in his stations, one after another, freeing himself from each? For the story-teller makes many a station, roving and relating, but pauses only tentatively, awaiting further directions, and soon feels his heart beating high, partly with desire, partly too from fear and anguish of the flesh, but in any case as a sign that he must take the road, towards fresh adventures which are to be painstakingly lived through, down to their remotest details, according to the restless spirit's will."

The restlessness of the inventor is unending because he is an adept in realization, he has an inordinate appetite for discovery and the ability to satisfy it. He is often a specialist, with less psychic inertia than the average man, and, sometimes, with less stability. But he is not inclined, as some imagine, to mere wandering, to dizzy excursions away from the determinate. He is not a tramp. He is drawn by the unrealized toward realization. His job is, as Wordsworth says, "the widening the sphere of human sensibility, . . . the introduction of a new element into the intellectual universe." He works toward clarification, toward consciousness.

That opposition between the conscious and the unconscious activities in creation which we have noticed is only superficial, or rather is only initial. The new order which creation is concerned with has an affinity for consciousness.

But because any new movement of the psychic life can find its freedom only outside consciousness, or at least in some degree of dissociation from consciousness, it has always at first the aspect of adventurous departure from the known, in so far as it has any aspects of which we can be aware, in so far as it is not altogether subliminal. This casting loose the ties of security requires courage and understanding. It requires some courage to move alone, often counter to popular prepossessions, and toward uncertainties. And to move free of the established requires the understanding that the established is not absolute, but is only the instrumentality of life, is justified only by the service it renders to life, and has no meaning apart from vital needs.

The faithful formalist has no chance of creating anything. Hence a certain amount of eccentricity, some excess, taint, or "tykeishness" is often prized by creative minds as a guarantee of ability to move apart or aside, outside. Drugs or alcohol are sometimes used to produce abnormal states to the same end of disrupting the habitual set of the mind, but they are of dubious value, apart from the dangers of addiction, since their action reduces judgment, and the activities they provoke are hallucinatory rather than illuminating. What is needed is control and direction.

For the desirable end is not the refreshment of escape into whatever novelty may chance to offer or impose itself, but the discovery of some novelty needed to augment or supplant the existing possessions of the mind. This is as true of invention in the arts and in pure science as it is of the so-called practical inventions the immediate use of which escapes no one. It is not always so obvious. A familiar example is furnished by the Romantic movement at about the beginning of the nineteenth century, which appeared to the unsympathetic to be something like an hysterical experiment in self-indulgence, the eccentricity of an ill-balanced, undisciplined, irresponsible crew. Some still incline to this view, but their perspective appears to be special. To others it seems clear that the movement was a vital corrective. It was a turn toward balance and wholeness, largely through resumption of interest in the particular, the individual elements of the inner and the outer life in all their variety and range. It admitted to the mind a flood of stimulating and nourishing experience that had been excluded, and it allowed a fresh examination of reality and fresh formulation of meaning and assignment of values.

In a very narrow sense, the charges brought against these initiators

are valid; the Romantics *were* eccentric, undisciplined, and irresponsible. Certainly they were not centered upon the established order of life. They were, however, centered upon another order which they were striving to realize. Obviously they were not disciplined to sustain the established, because they would not submit to be; but they disciplined themselves to find and elaborate an order fit to supplant it. And they were not responsible to entrenched interests; yet in working and suffering to foster emergent ones, they proved their deep responsibility to life. What they achieved has been found to have, besides the novelty incidental to all invention, the specific kind of usefulness which was the consequence of their striving successfully toward a particular end.

Likewise in pure science the end is not novelty, but use. Neither in art nor in science is the use always anticipated. Application of a scientific truth to narrowly practical purposes may even never occur, and it often follows long after the discovery. But it is evident that in both art and science the inventor is to some degree incited and guided by a sense of value in the end sought, something very much like an intimation of usefulness. Jacques Hadamard has pointed out that although when the Greeks studied the ellipse they could not find any use for its properties which they discovered, their work was the necessary preliminary for some of the most important discoveries of Kepler and Newton. And he asserts on the authority of his own analogous experience that they were guided by esthetic feeling in their selection of the ellipse rather than some less fruitful matter. Other mathematicians have insisted on the importance of esthetic emotion as a guide in mathematical invention, among them Henri Poincaré, who has stated that what serves to bring certain ones (only the most useful) of all the teeming unconscious elements into the focus of the mathematician's attention is their power to affect his esthetic sensibility. In thus emphasizing the creative worker's dependence on affective guides rather than on any explicit intellectual process, the mathematicians are in essential agreement with the artists: William Butler Yeats believed that instinct led him to choose one subject rather than another; Willa Cather has said that the deeper sympathies dictate the choice. In all this it is clear that creative minds feel drawn toward specific material with which to work: the creative impulse is no mere appetite for novelty, for it is highly selective. It is so even when governed by no explicit idea of its end. The selection is evidence of an implicit end, however, to the nature of which the emotion is for a time the only clue. It is like the disturbance at the surface of the water which betokens activity beneath.

The end to be reached, then, in any creative process, is not whatever solid or silly issue the ego or accident may decree, but some specific order

urged upon the mind by something inherent in its own vital condition of being and perception, yet nowhere in view. The creative process in its unconscious action has often been compared to the growth of a child in the womb. The comparison is a good one, as it nicely communicates the important fact that the process is an organic development, and it helps to dispel the notion that creation is simply an act of canny calculation governed by wish, will, and expediency. But as the figure suggests a complete automatism, it is inapplicable to a large part of the creative process; and even in the automatic stages, those termed by Henri Poincaré “unconscious work” and “inspiration,” the process is not so unconscious and sure.

The fact is that the mind in creation and in preparation for it nearly always requires some management. Most creative workers pick up what they know about this by trial and error, by casual observation of themselves and others, and from such comment as they may chance upon. The consequences of learning so haphazardly are hard to estimate, but obviously they are not always good. Joseph Conrad suffered from agonizing stoppages of work, Coleridge left masterpieces unfinished. Possibly these artists were hindered by personal defects of the sort that interfere with other activities besides invention, and they may even have been beyond help. Yet it is likely that if Coleridge had only shut the door in the face of the man “from Porlock” who interrupted the composition of “Kubla Khan” he would have been able to continue the writing. But avoiding such fatal interruptions is a minor difficulty, scarcely illustrative of the problems of management. Conrad was able to leave the matter entirely to his wife.

The larger objects of management are two: discovering the clue that suggests the development to be sought, that intimates the creative end to be reached, and assuring a certain and economical movement toward that end. The indispensable condition of success in either stage of production is that freedom from the established schemes of consciousness the importance of which I have already pointed out. It is essential to remember that the creative end is never in full sight at the beginning and that it is brought wholly into view only when the process of creation is completed. It is not to be found by scrutiny of the conscious scene, because it is never there. Yet the necessary step is not retirement altogether from the conscious scene, into a meaningless blackout. Much of the meaning in that scene may survive in succeeding ones, as an essential contribution to their fresh life. What is necessary is to be able to look into the wings where the action is not yet organized, and to feel the importance of what is happening off stage. It may not seem to be much. The young artist is likely to feel that it is nothing, and to go on imitating.

Yet it is only there, behind the scenes that are so largely given over to the impressive play of traditional activity, that the new can be prepared. No matter how meager, dull, disorderly, and fragmentary the offstage action, it must be attended to. For only on the fringes of consciousness and in the deeper backgrounds into which they fade away is freedom attainable.

We are not usually much aware of this less determinate part of our psychic life, for consciousness is dominated by system, to which we cling. The schematic consciousness is safe, more or less manageable—the tidy and reassuring world of our familiar psychic life. What lies outside is popularly regarded as the concern of alienists, to be noticed only as it becomes disturbing. Out of fear and misunderstanding we incline to minimize it or to disregard it altogether, when we can.

The usual response of intelligent minds confronted with it is beautifully defined in the words of Marlow, Conrad's narrator in *Lord Jim*, who is speaking of a scene of horror: "It had the power to drive me out of my conception of existence, out of that shelter each of us makes for himself to creep under in moments of danger, as a tortoise withdraws within its shell. For a moment I had a view of a world that seemed to wear a vast and dismal aspect of disorder, while, in truth, thanks to our unwearied efforts, it is as sunny an arrangement of small conveniences as the mind of man can conceive. But still—it was only a moment: I went back into my shell directly. One *must*—don't you know?—though I seemed to have lost all my words in the chaos of dark thoughts I had contemplated for a second or two beyond the pale. These came back, too, very soon, for words also belong to the sheltering conception of light and order which is our refuge."

That preverbal experience, in which one loses one's words, opens upon an enormous range and variety of activity. Hypnosis and other procedures such as automatic writing reveal to some degree the richness of what has been called the depths of the mind, in which apparently all the experience of the organism is in some way retained, even an incalculable multitude of experiences that never reach the threshold of awareness at all. This great psychic reservoir is not static like a letter file, or still like a pond. Certain changes evidently go on in it continually. Everyone knows from experience how a memory may alter, not merely fading but suffering distortion. Dreams are another evidence of unconscious developments.

All psychic life is activity, for even the maintenance of the established patterns is a reactivation, with inevitable variations of content and emphasis. But in the unconscious psyche and on the fringes of consciousness, change is easier because there the compulsive and inhibiting effect of

system sustained by will and attention is decreased or ceases altogether. Though the system does not dissolve into nothing, it decreases in importance, becomes only an element in the unconscious psychic life, which might therefore be called the nonschematic in contrast to the conscious, which is dominated by system. The term "nonschematic" is suitable, further, for the unconscious and fringe activity, because much of it is so lacking in apparent organization that it seems altogether chaotic. A great many of the configurations that do appear in the fringes of consciousness are continually shifting because no sign has been found to impose on them the fixed status of a scheme. They slide out of consciousness like the nameless configurations of the rocking ocean. No wonder the image most often chosen for the deeper psychic life is the sea at night.

The image is used among others by John Livingston Lowes in evoking for the readers of *The Road to Xanadu* his sense of the enormous activity out of which the poems of Coleridge were crystallized: "I have left two-thirds of the mass of entries in the Note Book completely untouched. But the whole could not make clearer one fact of profound significance for us. For there, in those bizarre pages, we catch glimpses of the strange and fantastic shapes which haunted the hinterland of Coleridge's brain. Most of them never escaped from their confines into the light of day. Some did, trailing clouds of glory as they came. But those which did not, like the stars of the old astrology, rained none the less their secret influence on nearly everything that Coleridge wrote in his creative prime. 'The Rime of the Ancient Mariner,' 'Christabel,' 'Kubla Khan,' 'The Wanderings of Cain,' are what they are because they are all subdued to the hues of that heaving and phosphorescent sea below the verge of consciousness from which they have emerged. No single fragment of concrete reality in the array before us is in itself of such far-reaching import as is the sense of that hovering cloud of shadowy presences. For what the teeming chaos of the Note Book gives us is the charged and electrical atmospheric background of a poet's mind."

Some of Lowes' terms are strikingly like those used by Dr. R. W. Gerard in describing the nervous system, which he depicts as a fluid whole, a continual alteration of flowing electrical patterns: "Now, with our discovery of a far more fluid nervous system, one unceasingly active and with neural and electrical messages rippling the whole into dynamic patterns, which flow from one contour to another as present influences play upon the condition left by past ones—with such a picture the arrival of new neural relationships is no great problem."

It is perhaps hard to see how there should be any fixity at all in so fluid a medium. Yet the fact is that there is a great deal of stability, so much that often it interferes with life. It may be that the threat of disso-

lution is so great that men have developed their conservatism as a necessary guard against the dispersal of the order they live by. Whatever the cause, the tendency to distrust the widest and freest ranging of the mind is so strong that the changes necessary for the development of human life could not be attained without the efforts of the more daring and ingenious of mankind.

The creative process is not only the concern of specialists, however; it is not limited to the arts and to thought, but is as wide as life. Or perhaps it would be more correct to say that invention in the arts and in thought is a part of the invention of life, and that this invention is essentially a single process. That view is made clear enough in Yeats' poem "Long-Legged Fly," which appears in this volume. The minds of the artist Michelangelo, of Caesar the man of action, and of the nameless girl whose movements are only the apparently trivial motions of life at play are seen to be all in the same condition: their minds move upon silence as the fly moves on the surface of a stream. They are brought into relation, that is to say, with the freer and more plentiful activity which transcends that of the schematic consciousness, the awareness which can be put into words or formed into other systems of signs. They are enlarged. It would not be correct to say that they have yielded to darkness or disorder so long as they remain responsive to the needs of life, to the pressures or tensions developing in the widened psychic activity in consequence of human interests and needs, including those interests and needs which are unsatisfied in the experience organized by current insight. They have yielded to a necessity inherent in their full psychic life.

This self-surrender so familiar to creative minds is nearly always hard to achieve. It calls for a purity of motive that is rarely sustained except through dedication and discipline. Subordination of everything to the whole impulse of life is easier for the innocent and ignorant because they are not so fully aware of the hazards of it or are less impressed by them, and they are not so powerfully possessed by convention. When their life is strong in them they can sometimes surrender themselves to it without effort. But shortly the girl in Yeats' poem will notice that somebody is looking, and then, unless she is very willful and full of disastrous genius, she will sink into convention.

Even when one has recognized the controlling center of life as lying outside the ego and the preoccupations of conscious life and has learned to look away from these, submitting to its guidance may be difficult. Some of the reasons why this is so need no further discussion. Much of the difficulty comes of the slightness and the often doubtful character of the means by which the guidance is asserted. The first intimations are likely to be embodied in apparently trivial things, objects or experiences

that in our everyday life would seem to have little importance or none whatever. There are two clues to their real importance: first, the disproportionate or even wholly inexplicable satisfaction or excitement which they evoke in the creative worker; and secondly, their power to open his mind inward upon the stir of its own unorganized riches.

This is not to say that all that excites the mind in this way will lead directly to creation. The desired new order implicit in the stir of indeterminate activity cannot be seized in the abstract: it must crystallize in terms of some medium in which the worker is adept. Without craft it will escape. The elements that intimate the way of vital development may or may not be included or emphasized in the crystallization. Almost certainly the New Zealand landscape that evoked a world for Katherine Mansfield found a smaller place in her expression than it would have assumed if she had been a painter. The crystallization may, moreover, be delayed even for a long time, or some accident or obstacle may preclude it.

Yet though the exciting elements may not at first lead to any clear development, their whole aspect is of promise. Henry James describes the germinal trivia from which his stories developed as typically minute and superficially bare, but extraordinarily rich in their intimations of developments to be revealed. The very slightness of such elements is a guard against their taking the focus of attention or forcing a finished pattern upon the mind. On the other hand, it has the disadvantage of making them elusive. One must learn to seize and hold them without insistence, letting them agitate the mind when and as they may and make their own development, relinquishing them as they fade or fail of effect and taking up others to be cherished without attachment in the same way, shaping the expression of the growing insight critically—that is, consciously and rationally, drawing upon all resources of craft and understanding—in so far as that may be done without arresting spontaneous developments, always preserving the stir of the excited mind out of which the development issues.

The concentration of such a state may be so extreme that the worker may seem to himself or others to be in a trance or some similar hypnotic or somnambulistic state. But actually the state of so-called trance so often mentioned as characteristic of the creative process or of stages in it differs markedly from ordinary trance or hypnosis, in its collectedness, its autonomy, its extreme watchfulness. And it seems never to be directly induced. It appears rather to be generated indirectly, to subsist as the characteristic of a consciousness partly unfocused, attention diverted from the too-assertive contours of any particular scheme and dispersed upon an object without complete schematic representation. In short, the creative

discipline when successful may generate a trancelike state, but one does not throw oneself into a trance in order to create.

Even in those stages when willed and rational effort is dominant, the creative process is essentially the delicate action of developed life. Tricks, devices, drugs, or disciplines are useful to the inventor only in so far as they support that action or empower the organism that acts. The less the worker needs to depend on eternal things or circumstances the safer he is from disturbances and disabling accidents. The man who comes to depend on alcohol, or on paper of a specific size, or on some one favored environment in order to get his work done has narrowed his freedom of action and he may be resorting to automatic controls or to magic instead of relying on his skill, ingenuity, and sensitiveness. It is best to avoid idiosyncrasy and to cultivate the central disciplines.

Among the conditions to which every inventor must submit is the necessity for patience. The development desired may have to be waited for, even though its character has been clearly intimated. After the first suggestion which allows anticipation of anything at all, a long gestation may be required. The need for such hidden organic development at some stage of the creative process appears to be universal. It may be completed before the first flash of suggestion that brings the creative development to attention, and the worker may then be able to go on without interruption to the conclusion of his work. William Blake claimed that some of his poetry came without any apparent premeditation, as if dictated to him. But often some period of gestation must follow the first flash of insight. With A. E. Housman it was usually short: a poem ordinarily completed itself by stages within a few hours or days. But long or short, the gestation has to be endured. Bertrand Russell has remarked upon the fruitless effort he used to expend in trying to push his creative work to completion by sheer force of will before he discovered the necessity of waiting for it to find its own subconscious development. The reasonable attitude toward this sometimes embarrassing necessity is illustrated by a famous passage in Henry James' preface to his novel *The American*: "I was charmed with my idea, which would take, however, much working out; and precisely because it had so much to give, I think, must I have dropped it for the time into the deep well of unconscious cerebration: not without the hope, doubtless, that it might eventually emerge from that reservoir, as one had already known the buried treasure to come to light, with a firm iridescent surface and a notable increase of weight."

Invention is easier when we learn willingly to submit to necessity, or even, like James, to find real advantage in it. One can save oneself much trouble by recognizing the limitations of the will in creation. It is inter-