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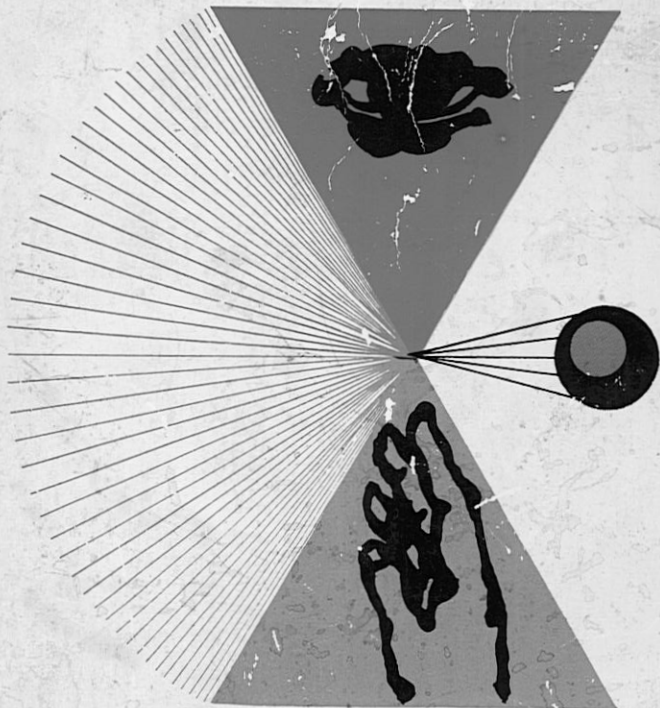


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# the creative process

Edited by BREWSTER GHISELIN


Explained in their own words by thirty-eight brilliant men and women including:  
Albert Einstein • Vincent Van Gogh • Yasuo Kuniyoshi • Friedrich Nietzsche  
Carl Gustav Jung • Mary Wigman • A. E. Housman • W. B. Yeats • Henry James  
Henry Moore • Thomas Wolfe • D. H. Lawrence • and others



## INTRODUCTION

**I**NTEREST 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 sub-

jective 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 that 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 tentwise, 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 larger 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 off-stage 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 Kahn,' '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 dissolution 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 inex-

plicable 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 trance-like 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 external 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's 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 interesting to see how often it is repudiated as a primary instrument in much of the creative

process by all kinds of artists and thinkers, from Picasso to John Dewey, a group so large and representative as to leave no doubt that agreement is general. Will belongs to the conscious life only. It is effective in attaining objects in view, but it cannot enable us to move in directions that have not yet been discovered. Will rather tends to arrest the undetermined development, by laying the emphasis of a heightened tension upon whatever is already in mind. When what is required is work to be done on something already defined, such an emphasis is useful. And will is helpful therefore in many matters assisting the creative process. It may help the worker to stick to his discipline. It may sustain his effort to stay at his desk—or to leave it, for the relief of too concentrated attention or for the pursuit of incitements to further spontaneous developments. Or it may make firm his purpose to dismiss the man "from Porlock."

But even in such apparently conscious matters as organizing a novel or choosing a subject for research or for a poem, the will may do vital damage. In the introduction to her novel *Mrs. Dalloway*, Virginia Woolf describes how she was forced to abandon her attempts at a plan for the book and to go forward without method or theory. Her difficulty arose from the fact that the form or plan of the novel as she knew it, was unsuitable for the expression of her impulse, which therefore was bound to be suppressed by the imposition upon its movements of the known, conventional order, the only one that could be produced by willful labor. This is not to be taken as evidence that planning is detrimental, but only that plan must not be enforced by will. Plan must come as a part of the organic development of a project, either before the details are determined, which is more convenient, or in the midst of their production, which is sometimes confusing.

It is organic need, too, rather than will, that must determine the choice of a subject. Often in this matter will and need do not come into conflict. When they do there should be no question about submitting to the vital necessity. To select a subject against inclination and force the mind to elaborate it is damaging and diminishing. The crux of the problem particularly as it exists in the arts is indicated by T. S. Eliot in his introduction to the *Selected Poems* of Marianne Moore: "For a mind of such agility, and for a sensibility so reticent, the minor subject, such as a pleasant little sand-coloured skipping animal, may be the best release for the major emotions. Only the pedantic literalist could consider the subject-matter to be trivial; the triviality is in himself. We all have to choose whatever subject-matter allows us the most powerful and most secret release; and that is a personal affair."

But by no means all the creative process is primarily a



spontaneous development. Two important stages in it are predominantly conscious and critical, and in these the will properly functions. It is of use in that preliminary labor, or sometimes less burdensome preparation, without which there can be no significant creative activity, and in the work of verification, correction, or revision that ordinarily follows the more radical inventive activity and completes or refines its product.

A great deal of the work necessary to equip and activate the mind for the spontaneous part of invention must be done consciously and with an effort of will. Mastering accumulated knowledge, gathering new facts, observing, exploring, experimenting, developing technique and skill, sensibility, and discrimination, are all more or less conscious and voluntary activities. The sheer labor of preparing technically for creative work, consciously acquiring the requisite knowledge of a medium and skill in its use, is extensive and arduous enough to repel many from achievement.

Creative workers reporting their processes of production often inadvertently conceal the amount of conscious and voluntary work by their failure to stress it or to consider it in much detail, probably because so much of it belongs primarily or even entirely to the special disciplines of the worker's field and is thought of as wholly a matter of craft or technique. It is true that some technical operations are nothing more than that, since they are determined purely by the intrinsic nature of the medium. An example is the rejection of the words "orange" or "month" as rime words in a strictly conventional sonnet because there are no exact rimes for them in English. But if, on the other hand, these words were rejected because as approximate or slant rimes, paired, say, with "forage" and "thump," they would form dissonances destructive of some creative end in view, the process would not be merely technical, though technique would be largely involved. Management of the medium becomes more complex, and the technical processes merge indissolubly with the creative process, as soon as the use of substances and forms begins to be guided by a sense of their sufficiency or insufficiency in formulating insights and attitudes. Though the technical component of such work remains ponderable in itself, it is not completely understandable except as a part of the creative process. And all of it that is not spontaneous, ordinarily a great deal, is part of the conscious and voluntary labor of the creative process.

In a different way, we are led to underestimate the labor of invention by the appearance of the finished product. Freed of every irrelevance, especially the sweat and litter of the workroom, the work of thought or art or ritual stands as the simple formula of a subjective action. The impression it gives of unlabored force is not to be trusted. There are no certain grounds

for disbelieving in the difficulty of any process of invention. Every genuinely creative worker must attain in one way or another such full understanding of his medium and such skill, ingenuity, and flexibility in handling it that he can make fresh use of it to construct a device which, when used skillfully by others, will organize their experience in the way that his own experience was organized in the moment of expanded insight. Among the users of his device may be the inventor himself, who may recover the configurations of his insight in this way, though not the full activity out of which they were crystallized. His device may even fail to remind him of his labor. All finished productions have the simplicity of order, which reveals itself rather than its origins.

Even the most energetic and original mind, in order to reorganize or extend human insight in any valuable way, must have attained more than ordinary mastery of the field in which it is to act, a strong sense of what needs to be done, and skill in the appropriate means of expression. It seems certain that no significant expansion of insight can be produced otherwise, whether the activity is thought of as work or not. Often an untutored beauty appears in the drawings of children, and we rightly prize the best of them because they have wholeness of motive, but they have scarcely the power to open the future for us. For that, the artist must labor to the limit of human development and then take a step beyond. The same is true for every sort of creative worker.

That step beyond is stimulated by labor upon the limits of attainment. The secret developments that we call unconscious because they complete themselves without our knowledge and the other spontaneous activities that go forward without foresight yet in full consciousness are induced and focused by intense conscious effort spent upon the material to be developed or in the area to be illuminated. Though the tension of conscious striving tends to overdetermine psychic activity, to narrow and fix it, such tension gives stimulation and direction to the unconscious activity which goes on after the tension is released. The desired developments are usually delayed for some time, during which presumably something like incubation is going on and attention may be profitably turned to something else. Then without warning the solution or the germinal insight may appear. This was the usual experience of Henri Poincaré and of many others. But though "inspiration" may be produced by such conscious labors, by what Katherine Mansfield called "terrific hard gardening," the procedure is not always successful; problems may remain unsolved, insights undeveloped, no matter how much effort is given to them. Nor is there always even when the procedure is successful a notable amount of unconscious development. Long periods of alter-



nating conscious and unconscious activity may be required. When the process is an agonizing, fumbling search, as it was for Thomas Wolfe, some morbid condition may be suspected, such as the hypermnesia which seems to have afflicted him with an assaulting torrent of recalled detail.

The unsearchable insight which we call inspiration is sometimes given wholly at one stroke. Poincaré indicates that for him it was. Henry James reports a somewhat similar experience in writing *The Ambassadors*. Others, like Stephen Spender, begin in considerable uncertainty and find successive clarifications in a sort of continuing inspiration as they go on with their conscious work. This happens with many workers in the arts. Van Gogh and Kuniyoshi tell of making many paintings of the same object in order to develop and refine the insight expressed in representing it. D. H. Lawrence is reported to have written *Lady Chatterley's Lover* three times. This process of reworking is very close to revision, but since it involves repeating virtually the whole process of production it appears more likely to preserve the spontaneous character of the initial attempt. Revision need not lack spontaneity, however, and there would be little in it if it did. It is hard to say whether when Allen Tate added his "wind-leaves refrain" to his "Ode to the Confederate Dead" nearly five years after the first draft of the poem was made, he was continuing the composition of the poem or revising it. Under such circumstances the distinction becomes unreal; the two processes merge.

Although the work that tests, refines, and consolidates what is attained in moments of inspiration is not likely to be, in the arts at least, all conscious calculation, it is largely so. Its object, both in art and in intellectual invention, is to make sure that the product is really serviceable. A work may seem valuable to its creator because of his sense of stirring life and fresh significance while he was producing it. After that excitement is dissipated, its intrinsic value is its only relevant one even to himself. He must find out if it will serve to organize experience in a fresh and full and useful way. To that end he tests it critically. If he finds it is not sound and complete, he may be able to make it so, either by conscious craft or consciously directed research or by a fresh exercise of his whole power to which he has been urged by a critical consciousness of his need. Or he may have to reject the work because he finds it fundamentally wrong or hopelessly vapid, or simply because he is unable to bring to it the necessary spontaneous work to complete it. Shelley, who found his inspiration declining as soon as he began to compose, and who considered the products of revision lifeless stopgaps, left many fragments.

There is much lore about the creative process that I have not discussed. Some of it is useful, some not. Whether found

gathered into books, as much of it is, or as scattered items, this material should not be approached as a body of fragments to be tested experimentally for their value in practical guidance and accepted or rejected as they are found useful or not. The caution holds even for the more highly organized material of the following essays, letters, and poems. Some of this material is conflicting. Part of it may have been shaped by individual limitations of the writers. Its authority cannot be regarded as absolute. It is more manageable and meaningful when understood in terms of the general principles by which it should also be tested, and which in turn it should test and illustrate.

Practical guidance can often be deduced from the general principles alone. Most writers find it easier to work in the morning—as one should expect, since then the mind has not been so much incited from without, focused, and fixed. John Peale Bishop recommended going as soon as possible from sleep to the writing desk. On the other hand, A. E. Housman wrote his poems mostly in the afternoon. Others have preferred to do their work at night. How shall we turn such information to guidance unless we understand that the time for work should be that time when the excited mind moves most free of the encumbrance of its consciously supported order? If we cannot because of circumstances choose the best time, we may be able to help ourselves through reducing the schematic fixation that interferes with production. Similar considerations govern our treatment of the problem of inciting unconscious work, or any other problem.

I have emphasized the value of understanding, discipline, and hard work in the creative process. High and sustained achievement demands even more, the concentration of a life. And even that is not all. In the absence of fresh insight, devotion is powerless, and the best technique is meaningless, since it can only repeat mechanically. Invention may be precluded by a distrust of deviation. Every new and good thing is liable to seem eccentric and perhaps dangerous at first glimpse, perhaps more than what is really eccentric, really irrelevant to life. And therefore we must always listen to the voice of eccentricity, within ourselves and in the world. The alien, the dangerous, like the negligible near thing, may seem irrelevant to purpose and yet the call to our own fruitful development. This does not mean that we should surrender to whatever novelty is brought to attention. It does mean that we must practice to some extent an imaginative surrender to every novelty that has even the most tenuous credentials. Because life is larger than any of its expressions, it must sometimes do violence to the forms it has created. We must expect to live the orderly ways we have invented continually conscious of the immence of change.