CHAPTER NINE

EXPERIENCE, NATURE AND ART

Experience, with the Greeks, signified a store of practical wisdom, a fund of insights useful in conducting the affairs of life. Sensation and perception were its occasion and supplied it with pertinent materials, but did not of themselves constitute it. They generated experience when retention was added and when a common factor in the multitude of felt and perceived cases detached itself so as to become available in judgment and exertion. understood, experience is exemplified in the discrimination and skill of the good carpenter, pilot, physician, captain-at-arms; experience is equivalent to art. Modern theory has quite properly extended the application of the term to cover many things that the Greeks would hardly have called "experience," the bare having of aches and pains, or a play of colors before the eyes. But even those who hold this larger signification would admit, I suppose, that such "experiences" count only when they result in insight, or in an enjoyed perception, and that only thus do they define experience in its honorific sense.

Greek thinkers nevertheless disparaged experience in comparison with something called reason and science. The ground for depreciation was not that usually assigned in modern philosophy; it was not that experience is "subjective." On the contrary, experience was considered to be a genuine expression of cosmic forces, not an exclusive attribute or possession of animal or of human nature. It was taken to be a realization of inferior por-

tions of nature, those infected with chance and change, the less Being part of the cosmos. Thus while experience meant art, art reflected the contingencies and partialities of nature, while science—theory—exhibited its necessities and universalities. Art was born of need, lack, deprivation, incompleteness, while science—theory—manifested fullness and totality of Being. Thus the depreciatory view of experience was identical with a conception that placed practical activity below theoretical activity, finding the former dependent, impelled from outside, marked by deficiency of real being, while the latter was independent and free because complete and self-sufficing: that is perfect.

In contrast with this self-consistent position we find a curious mixture in modern thinking. The latter feels under no obligation to present a theory of natural existence that links art with nature; on the contrary, it usually holds that science or knowledge is the only authentic expression of nature, in which case art must be an arbitrary addition to nature. But modern thought also combines exaltation of science with eulogistic appreciation of art, especially of fine or creative art. At the same time it retains the substance of the classic disparagement of the practical in contrast with the theoretical, although formulating it in somewhat different language: to the effect that knowledge deals with objective reality as it is in itself, while in what is "practical," objective reality is altered and cognitively distorted by subjective factors of want, emotion and striving. And yet in its encomium of art, it fails to note the commonplace of Greek observation—that the fine arts as well as the industrial technologies are affairs of practice.

This confused plight is partly cause and partly effect of an almost universal confusion of the artistic and the esthetic. On one hand, there is action that deals with materials and energies outside the body, assembling, refining, combining, manipulating them until their new state vields a satisfaction not afforded by their crude condition—a formula that applies to fine and useful art alike. On the other hand, there is the delight that attends vision and hearing, an enhancement of the receptive appreciation and assimilation of objects irrespective of participation in the operations of production. Provided the difference of the two things is recognized, it is no matter whether the words "esthetic" and "artistic" or other terms be used to designate the distinction, for the difference is not one of words but of objects. But in some form the difference must be acknowledged.

The community in which Greek art was produced was small; numerous and complicated intermediaries between production and consumption were lacking; producers had a virtually servile status. Because of the close connection between production and enjoyable fruition, the Greeks in their perceptive uses and enjoyments were never wholly unconscious of the artisan and his work, not even when they personally were exclusively concerned with delightful contemplation. But since the artist was an artisan (the term artist having none of the eulogistic connotations of present usage), and since the artisan occupied an inferior position, the enjoyment of works of any art did not stand upon the same level as enjoyment of those objects for the realization of which manual activity was not needed. Objects of rational thought, of contemplative insight were the only things that met the specification of freedom from need, labor, and matter. They alone were self-sufficient, self-existent, and self-explanatory, and hence enjoyment of *them* was on a higher plane than enjoyment of works of art.

These conceptions were consistent with one another and with the conditions of social life at the time. Nowadays we have a messy conjunction of notions that are consistent neither with one another nor with the tenor of our actual life. Knowledge is still regarded by most thinkers as direct grasp of ultimate reality, although the practice of knowing has been assimilated to the procedure of the useful arts;—involving, that is to say, doing that manipulates and arranges natural energies. Again while science is said to lay hold of reality, yet "art" instead of being assigned a lower rank is equally esteemed and honored. And when within art a distinction is drawn between production and appreciation, the chief honor usually goes to the former on the ground that it is "creative," while taste is relatively possessive and passive, dependent for its material upon the activities of the creative artist.

If Greek philosophy was correct in thinking of knowledge as contemplation rather than as a productive art, and if modern philosophy accepts this conclusion, then the only logical course is relative disparagement of all forms of production, since they are modes of practice which is by conception inferior to contemplation. The artistic is then secondary to the esthetic: "creation," to "taste," and the scientific worker—as we significantly say—is subordinate in rank and worth to the dilettante who enjoys the results of his labors. But if modern tendencies are justified in putting art and creation first,

then the implications of this position should be avowed and carried through. It would then be seen that science is an art, that art is practice, and that the only distinction worth drawing is not between practice and theory. but between those modes of practice that are not intelligent, not inherently and immediately enjoyable, and those which are full of enjoyed meanings. When this perception dawns, it will be a commonplace that art-the mode of activity that is charged with meanings capable of immediately enjoyed possession-is the complete culmination of nature, and that "science" is properly a handmaiden that conducts natural events to this happy issue. Thus would disappear the separations that trouble present thinking: division of everything into nature and experience, of experience into practice and theory, art and science, of art into useful and fine, menial and free.

Thus the issue involved in experience as art in its pregnant sense and in art as processes and materials of nature continued by direction into achieved and enjoyed meanings, sums up in itself all the issues which have been previously considered. Thought, intelligence, science is the intentional direction of natural events to meanings capable of immediate possession and enjoyment; this direction which is operative art—is itself a natural event in which nature otherwise partial and incomplete comes fully to itself; so that objects of conscious experience when reflectively chosen, form the "end" of nature. The doings and sufferings that form experience are, in the degree in which experience is intelligent or charged with meanings, a union of the precarious, novel, irregular with the settled, assured and uniform—a union which also defines the artistic and the esthetic. For wherever there is art the contingent and ongoing no longer work at cross purposes with the formal and recurrent but commingle in harmony. And the distinguishing feature of conscious experience, of what for short is often called "consciousness," is that in it the instrumental and the final, meanings that are signs and clews and meanings that are immediately possessed, suffered and enjoyed, come together in one. And all of these things are preëminently true of art.

First, then, art is solvent union of the generic, recurrent, ordered, established phase of nature with its phase that is incomplete, going on, and hence still uncertain, contingent, novel, particular; or as certain systems of esthetic theory have truly declared, though without empirical basis and import in their words, a union of necessity and freedom, a harmony of the many and one, a reconciliation of sensuous and ideal. Of any artistic act and product it may be said both that it is inevitable in its rightness, that nothing in it can be altered without altering all, and that its occurrence is spontaneous, unexpected, fresh, unpredictable. The presence in art, whether as an act or a product. of proportion, economy, order, symmetry, composition, is such a commonplace that it does not need to be dwelt upon. But equally necessary is unexpected combination, and the consequent revelation of possibilities hitherto unrealized. "Repose in stimulation" characterizes art. Order and proportion when they are the whole story are soon exhausted; economy in itself is a tiresome and restrictive taskmaster. It is artistic when it releases.

The more extensive and repeated are the basic uniformities of nature that give form to art, the "greater" is the art, provided—and it is this proviso that distinguishes

art—they are indistinguishably fused with the wonder of the new and the grace of the gratuitous. "Creation" may be asserted vaguely and mystically; but it denotes something genuine and indispensable in art. The merely finished is not fine but ended, done with, and the merely "fresh" is that bumptious impertinence indicated by the slang use of the word. The "magic" of poetry—and pregnant experience has poetical quality—is precisely the revelation of meaning in the old effected by its presentation through the new. It radiates the light that never was on land and sea but that is henceforth an abiding illumination of objects. Music in its immediate occurrence is the most varied and etherial of the arts, but is in its conditions and structure the most mechanical. These things are commonplaces; but until they are commonly employed in their evidential significance for a theory of nature's nature, there is no cause to apologize for their citation

The limiting terms that define art are routine at one extreme and capricious impulse at the other. It is hardly worth while to oppose science and art sharply to one another, when the deficiencies and troubles of life are so evidently due to separation between art and blind routine and blind impulse. Routine exemplies the uniformities and recurrences of nature, caprice expresses its inchoate initiations and deviations. Each in isolation is unnatural as well as inartistic, for nature is an intersection of spontaneity and necessity, the regular and the novel, the finished and the beginning. It is right to object to much of current practice on the ground that it is routine, just as it is right to object to much of our current enjoyments on the ground that they are spasms of excited

escape from the thraldom of enforced work. But to transform a just objection against the quality of much of our practical life into a description and definition of practice is on the same plane as to convert legitimate objection to trivial distraction, senseless amusement, and sensual absorption, into a Puritanical aversion to happiness. The idea that work, productive activity, signifies action carried on for merely extraneous ends, and the idea that happiness signifies surrender of mind to the thrills and excitations of the body are one and the same idea. The first notion marks the separation of activity from meaning, and the second marks the separation of receptivity from meaning. Both separations are inevitable as far as experience fails to be art:—when the regular, repetitious, and the novel, contingent in nature fail to sustain and inform each other in a productive activity possessed of immanent and directly enjoyed meaning.

Thus the theme has insensibly passed over into that of the relation of means and consequence, process and product, the instrumental and consummatory. Any activity that is simultaneously both, rather than in alternation and displacement, is art. Disunion of production and consumption is a common enough occurrence. But emphasis upon this separation in order to exalt the consummatory does not define or interpret either art or experience. It obscures their meaning, resulting in a division of art into useful and fine, adjectives which, when they are prefixed to "art," corrupt and destroy its intrinsic significance. For arts that are merely useful are not arts but routines; and arts that are merely final are not arts but passive amusements and distractions, different from other indulgent dissipations only in dependence upon a certain acquired refinement or "cultivation."

The existence of activities that have no immediate enjoyed intrinsic meaning is undeniable. They include much of our labors in home, factory, laboratory and study. By no stretch of language can they be termed either artistic or esthetic. Yet they exist, and are so coercive that they require some attentive recognition. So we optimistically call them "useful" and let it go at that, thinking that by calling them useful we have somehow justified and explained their occurrence. If we were to ask useful for what? we should be obliged to examine their actual consequences, and when we once honestly and fully faced these consequences we should probably find ground for calling such activities detrimental rather than useful.

We call them useful because we arbitrarily cut short our consideration of consequences. We bring into view simply their efficacy in bringing into existence certain commodities: we do not ask for their effect upon the quality of human life and experience. They are useful to make shoes, houses, motor cars, money, and other things which may then be put to use; here inquiry and imagination stop. What they also make by way of narrowed, embittered, and crippled life, of congested, hurried, confused and extravagant life, is left in oblivion. But to be useful is to fulfill need. The characteristic human need is for possession and appreciation of the meaning of things, and this need is ignored and unsatisfied in the traditional notion of the useful. We identify utility with the external relationship that some events and acts bear to other things that are their products, and thus leave out the only thing that is essential to the idea of utility, inherent place and bearing in experience. Our classificatory use of the conception of some arts as merely instrumental so as to dispose of a large part of human activity is no solving definition; it rather conveys an immense and urgent problem.

The same statement applies to the conception of merely fine or final arts and works of art. In point of fact, the things designated by the phrase fall under three captions. There are activities and receptivities to which the name of "self-expression" is often applied as a eulogistic qualification, in which one indulges himself by giving free outward exhibition to his own states without reference to the conditions upon which intelligible communication depends—an act also sometimes known as "expression of emotion," which is then set up for definition of all fine art. It is easy to dispose of this art by calling it a product of egotism due to balked activity in other occupations. But this treatment misses a more significant point. For all art is a process of making the world a different place in which to live, and involves a phase of protest and of compensatory response. Such art as there is in these manifestations lies in this factor. It is owing to frustration in communication of meanings that the protest becomes arbitrary and the compensatory response wilfully eccentric.

In addition to this type—and frequently mingled with it—there is experimentation in new modes or craftsmanship, cases where the seemingly bizarre and over-individualistic character of the products is due to discontent with existing technique, and is associated with an attempt to find new modes of language. It is aside from the point either to greet these manifestations as if they constituted art for the first time in human history, or to condemn them as not art because of their violent departures from received

canons and methods. Some movement in this direction has always been a condition of growth of new forms, a condition of salvation from that mortal arrest and decay called academic art.

Then there is that which in quantity bulks most largely as fine art; the production of buildings in the name of the art of architecture; of pictures in the name of the art of painting; of novels, dramas, etc., in the name of literary art; a production which in reality is largely a form of commercialized industry in production of a class of commodities that find their sale among well-to-do persons desirous of maintaining a conventionally approved status. As the first two modes carry to disproportionate excess that factor of particularity, contingency and difference which is indispensable in all art, deliberately flaunting avoidance of the repetitions and order of nature; so this mode celebrates the regular and finished. It is reminiscent rather than commemorative of the meanings of experienced things. Its products remind their owner of things pleasant in memory though hard in direct-undergoing, and remind others that their owner has achieved an economic standard which makes possible cultivation and decoration of leisure

Obviously no one of these classes of activity and product or all of them put together, mark off anything that can be called distinctively fine art. They share their qualities and defects with many other acts and objects. But, fortunately, there may be mixed with any one of them, and, still more fortunately, there may occur without mixture, process and product that are characteristically excellent. This occurs when activity is productive of an object that affords continuously renewed delight.

This condition requires that the object be, with its successive consequences, indefinitely instrumental to new satisfying events. For otherwise the object is quickly exhausted and satiety sets in. Anyone, who reflects upon the commonplace that a measure of artistic products is their capacity to attract and retain observation with satisfaction under whatever conditions they are approached, while things of less quality soon lose capacity to hold attention becoming indifferent or repellent upon subsequent approach, has a sure demonstration that a genuinely esthetic object is not exclusively consummatory but is causally productive as well. A consummatory object that is not also instrumental turns in time to the dust and ashes of boredom. The "eternal" quality of great art is its renewed instrumentality for further consummatory experiences.

When this fact is noted, it is also seen that limitation of fineness of art to paintings, statues, poems, songs and symphonies is conventional, or even verbal. Any activity that is productive of objects whose perception is an immediate good, and whose operation is a continual source of enjoyable perception of other events exhibits fineness of art. There are acts of all kinds that directly refresh and enlarge the spirit and that are instrumental to the production of new objects and dispositions which are in turn productive of further refinements and replenishments. Frequently moralists make the acts they find excellent or virtuous wholly final, and treat art and affection as mere means. Estheticians reverse the performance, and see in good acts means to an ulterior external happiness, while esthetic appreciation is called a good in itself, or that strange thing an end in itself. But on

both sides it is true that in being preëminently fructifying the things designated means are immediate satisfactions. They are their own excuses for being just because they are charged with an office in quickening apprehension, enlarging the horizon of vision, refining discrimination, creating standards of appreciation which are confirmed and deepened by further experiences. It would almost seem when their non-instrumental character is insisted upon as if what was meant were an indefinitely expansive and radiating instrumental efficacy.

The source of the error lies in the habit of calling by the name of means things that are not means at all; things that are only external and accidental antecedents of the happening of something else. Similarly things are called ends that are not ends save accidentally, since they are not fulfilments, consummatory, of means, but merely last terms closing a process. Thus it is often said that a laborer's toil is the means of his livelihood, although except in the most tenuous and arbitrary way it bears no relationship to his real living. Even his wage is hardly an end or consequence of his labor. He might-and frequently does-equally well or ill-perform any one of a hundred other tasks as a condition of receiving payment. The prevailing conception of instrumentality is profoundly vitiated by the habit of applying it to cases like the above, where, instead of an operation of means, there is an enforced necessity of doing one thing as a coerced antecedent of the occurrence of another thing which is wanted.

Means are always at least causal conditions; but causal conditions are means only when they possess an added qualification; that, namely, of being freely used, because of perceived connection with chosen consequences. To

entertain, choose and accomplish anything as an end or consequence is to be committed to a like love and care for whatever events and acts are its means. Similarly, consequences, ends, are at least effects; but effects are not ends unless thought has perceived and freely chosen the conditions and processes that are their conditions. The notion that means are menial, instrumentalities servile, is more than a degradation of means to the rank of coercive and external necessities. It renders all things upon which the name of end is bestowed accompaniments of privilege, while the name of utility becomes an apologetic justification for things that are not portions of a good and reasonable life. Livelihood is at present not so much the consequence of a wage-earner's labor as it is the effect of other causes forming the economic régime, labor being merely an accidental appendage of these other causes.

Paints and skill in manipulative arrangement are means of a picture as end, because the picture is their assemblage and organization. Tones and susceptibility of the ear when properly interacting are the means of music, because they constitute, make, are, music. A disposition of virtue is a means to a certain quality of happiness because it is a constituent of that good, while such happiness is means in turn to virtue, as the sustaining of good in being. Flour, water, yeast are means of bread because they are ingredients of bread; while bread is a factor in life, not just to it. A good political constitution, honest policesystem, and competent judiciary, are means of the prosperous life of the community because they are integrated portions of that life. Science is an instrumentality of and for art because it is the intelligent factor in art. The trite saying that a hand is not a hand except as an organ

of the living body—except as a working coördinated part of a balanced system of activities—applies untritely to all things that are means. The connection of means-consequences is never one of bare succession in time, such that the element that is means is past and gone when the end is instituted. An active process is strung out temporarily, but there is a deposit at each stage and point entering cumulatively and constitutively into the outcome. A genuine instrumentality for is always an organ of an end. It confers continued efficacy upon the object in which it is embodied.

The traditional separation between some things as mere means and others as mere ends is a reflection of the insulated existence of working and leisure classes, of production that is not also consummatory, and consummation that is not productive. This division is not a merely social phenomenon. It embodies a perpetuation upon the human plane of a division between need and satisfaction belonging to brute life. And this separation expresses in turn the mechanically external relationship that exists in nature between situations of disturbed equilibrium, of stress, and strain, and achieved equilibrium. For in nature, outside of man, except when events eventuate in "development" or "evolution" (in which a cumulative carrying forward of consequences of past histories in new efficiencies occurs) antecedent events are external transitive conditions of the occurrence of an event having immediate and static qualities. To animals to whom acts have no meaning, the change in the environment required to satisfy needs has no significance on its own account; such change is a mere incident of ego-centric satisfactions. This physically external relationship

of antecedents and consequents is perpetuated; it continues to hold true of human industry wherever labor and its materials and products are externally enforced necessities for securing a living. Because Greek industry was so largely upon this plane of servile labor, all industrial activity was regarded by Greek thought as a mere means, an extraneous necessity. Hence satisfactions due to it were conceived to be the ends or goods of purely animal nature in isolation. With respect to a truly human and rational life, they were not ends or goods at all, but merely "means," that is to say, external conditions that were antecedently enforced requisites of the life conducted and enjoyed by free men, especially by those devoted to the acme of freedom, pure thinking. As Aristotle asserted, drawing a just conclusion from the assumed premises, there are classes of men who are necessary materials of society but who are not integral parts of it. And he summed up the whole theory of the external and coerced relationship of means and ends when he said in this very connection that: "When there is one thing that is means and another thing that is end, there is nothing common between them, except in so far as the one, the means, produces, and the other, the end, receives the product."

It would thus seem almost self-evident that the distinction between the instrumental and the final adopted in philosophic tradition as a solving word presents in truth a problem, a problem so deep-seated and far-reaching that it may be said to be the problem of experience. For all the intelligent activities of men, no matter whether expressed in science, fine arts, or social relationships, have for their task the conversion of causal bonds, relations of succession, into a connection of means-consequence, into

meanings. When the task is achieved the result is art: and in art everything is common between means and ends. Whenever so-called means remain external and servile, and so-called ends are enjoyed objects whose further causative status is unperceived, ignored or denied, the situation is proof positive of limitations of art. Such a situation consists of affairs in which the problem has not been solved; namely that of converting physical and brute relationships into connections of meanings characteristic of the possibilities of nature.

It goes without saying that man begins as a part of physical and animal nature. In as far as he reacts to physical things on a strictly physical level, he is pulled and pushed about, overwhelmed, broken to pieces, lifted on the crest of the wave of things, like anything else. His contacts, his sufferings and doings, are matters of direct interaction only. He is in a "state of nature." As an animal, even upon the brute level, he manages to subordinate some physical things to his needs, converting them into materials sustaining life and growth. But in so far things that serve as material of satisfaction and the acts that procure and utilize them are not objects, or thingswith-meanings. That appetite as such is blind, is notorious; it may push us into a comfortable result instead of into disaster; but we are pushed just the same. When appetite is perceived in its meanings, in the consequences it induces, and these consequences are experimented with in reflective imagination, some being seen to be consistent with one another, and hence capable of co-existence and of serially ordered achievement, others being incompatible, forbidding conjunction at one time, and getting in one another's way serially—when this estate is attained, we live on the human plane, responding to things in their meanings. A relationship of cause-effect has been transformed into one of means-consequence. Then consequences belong integrally to the conditions which may produce them, and the latter possess character and distinction. The meaning of causal conditions is carried over also into the consequence, so that the latter is no longer a mere end, a last and closing term of arrest. It is marked out in perception, distinguished by the efficacy of the conditions which have entered into it. Its value as fulfilling and consummatory is measurable by subsequent fulfillments and frustrations to which it is contributory in virtue of the causal means which compose it.

Thus to be conscious of meanings or to have an idea, marks a fruition, an enjoyed or suffered arrest of the flux of events. But there are all kinds of ways of perceiving meanings, all kinds of ideas. Meaning may be determined in terms of consequences hastily snatched at and torn loose from their connections; then is prevented the formation of wider and more enduring ideas. Or, we may be aware of meanings, may achieve ideas, that unite wide and enduring scope with richness of distinctions. The latter sort of consciousness is more than a passing and superficial consummation or end: it takes up into itself meanings covering stretches of existence wrought into consistency. It marks the conclusion of long continued endeavor; of patient and indefatigable search and test. The idea is, in short, art and a work of art. As a work of art, it directly liberates subsequent action and makes it more fruitful in a creation of more meanings and more perceptions.

It is the part of wisdom to recognize how sparse and insecure are such accomplishments in comparison with experience in which physical and animal nature largely have their way. Our liberal and rich ideas, our adequate appreciations, due to productive art are hemmed in by an unconquered domain in which we are everywhere exposed to the incidence of unknown forces and hurried fatally to unforeseen consequences. Here indeed we live servilely, menially, mechanically; and we so live as much when forces blindly lead to us ends that are liked as when we are caught in conditions and ends against which we blindly rebel. To call satisfactions which happen in this blind way "ends" in a eulogistic sense, as did classic thought, is to proclaim in effect our servile submission to accident. We may indeed enjoy the goods the gods of fortune send us, but we should recognize them for what they are, not asserting them to be good and righteous altogether. For, since they have not been achieved by any art involving deliberate selection and arrangement of forces, we do not know with what they are charged. is an old true tale that the god of fortune is capricious, and delights to destroy his darlings after having made them drunk with prosperity. The goods of art are not the less good in their goodness than the gifts of nature; while in addition they are such as to bring with themselves open-eved confidence. They are fruits of means consciously employed; fulfillments whose further consequences are secured by conscious control of the causal conditions which enter into them. Art is the sole alternative to luck; and divorce from each other of the meaning and value of instrumentalities and ends is the essence of luck. The esoteric character of culture and the supernatural quality of religion are both expressions of the divorce.

The modern mind has formally abjured belief in natural teleology because it found Greek and medieval teleology juvenile and superstitious. Yet facts have a way of compelling recognition of themselves. There is little scientific writing which does not introduce at some point or other the idea of tendency. The idea of tendency unites in itself exclusion of prior design and inclusion of movement in a particular direction, a direction that may be either furthered or counteracted and frustrated, but which is intrinsic. Direction involves a limiting position, a point or goal of culminating stoppage, as well as an initial starting point. To assert a tendency and to be fore-conscious of a possible terminus of movement are two names of the same fact. Such a consciousness may be fatalistic; a sense of inevitable march toward impending doom. But it may also contain a perception of meanings such as flexibly directs a forward movement. end is then an end-in-view and is in constant and cumulative reënactment at each stage of forward movement. It is no longer a terminal point, external to the conditions that have led up to it; it is the continually developing meaning of present tendencies—the very things which as directed we call "means." The process is art and its product, no matter at what stage it be taken, is a work of art.

To a person building a house, the end-in-view is not just a remote and final goal to be hit upon after a sufficiently great number of coerced motions have been duly performed. The end-in-view is a plan which is contemporaneously operative in selecting and arranging materials. The latter, brick, stone, wood and mortar, are means only as the end-in-view is actually incarnate in them, in form-

ing them. Literally, they are the end in its present stage of realization. The end-in-view is present at each stage of the process; it is present as the meaning of the materials used and acts done; without its informing presence, the latter are in no sense "means;" they are merely extrinsic causal conditions. The statement is generic; it applies equally at every stage. The house itself, when building is complete, is "end" in no exclusive sense. It marks the conclusion of the organization of certain materials and events into effective means; but these material and events still exist in causal interaction with other things. consequences are foreseen; new purposes, ends-in-view, are entertained; they are embodied in the coördination of the thing built, now reduced to material, although significant material, along with other materials, and thus transmuted into means. The case is still clearer, when instead of considering a process subject to as many rigid external conditions as is the building of a house, we take for illustration a flexibly and freely moving process, such as painting a picture or thinking out a scientific process, when these operations are carried on artistically. Every process of free art proves that the difference between means and end is analytic, formal, not material and chronologic.

What has been said enables us to re-define the distinction drawn between the artistic, as objectively productive, and the esthetic. Both involve a perception of meanings in which the instrumental and the consummatory peculiarly intersect. In esthetic perceptions an object interpenetrated with meanings is given; it may be taken for granted; it invites and awaits the act of appropriative enjoyment. In the esthetic object tendencies are sensed as brought to fruition; initis embodied a means-consequence

relationship, as the past work of his hands was surveyed by the Lord and pronounced good. This good differs from those gratifications to which the name sensual rather than sensuous is given, since the former are pleasing endings that occur in ways not informed with the meaning of materials and acts integrated into them. In appreciative possession, perception goes out to tendencies which have been brought to happy fruition in such a way as to release and arouse.

Artistic sense on the other hand grasps tendencies as possibilities; the invitation of these possibilities to perception is more urgent and compelling than that of the given already achieved. While the means-consequence relationship is directly sensed, felt, in both appreciation and artistic production, in the former the scale descends upon the side of the attained; in the latter there predominates the invitation of an existent consummation to bring into existence further perceptions. Art in being, the active productive process, may thus be defined as an esthetic perception together with an operative perception of the efficiencies of the esthetic object. In many persons with respect to most kinds of enjoyed perceptions, the sense of possibilities, the arousal or excitation attendant upon appreciation of poetry, music, painting, architecture or landscape remains diffuse and inchoate; it takes effect only in direct and undefined channels. The enjoyed perception of a visual scene is in any case a function of that scene in its total connections, but it does not link up adequately. In some happily constituted persons, this effect is adequately coördinated with other endowments and habits; it becomes an integral part of craft. taking effect in the creation of a new object of appreciation. The integration is, however, progressive and experimental, not momentarily accomplished. Thus every creative effort is temporal, subject to risk and deflection. In that sense the difference between the diffuse and post-poned change of action due in an ordinary person to release of energies by an esthetic object, and the special and axial direction of subsequent action in a gifted person is, after all, a matter of degree.

Without a sense of moving tendencies which are operative in conjunction with a state of fruition, there is appetitive gratification, but nothing that may be termed appreciation. Sense of moving tendencies supplies thrill, stimulation, excitation; sense of completion, consummation, affords composure, form, measure, composition. Emphasize the latter, and appreciation is of the classic type. This type fits conditions where production is professionalized among technical craftsmen, as among the Greeks; it is adapted to a contemplative enjoyment of the achievements of past ages or remote places, where conditions forbid urge to emulation or productive activity of a similar kind. Any work of art that persistently retains its power to generate enjoyed perception or appreciation becomes in time classic.

In so-called romantic art, the sense of tendencies operative beyond the limits of consummation is in excess; a lively sense of unrealized potentialities attaches to the object; but it is employed to enhance immediate appreciation, not to promote further productive achievement. Whatever is peculiarly romantic excites a feeling that the possibilities suggested go beyond not merely actual present realization, but are beyond effective attainment in any experience. In so far intentionally romantic art is

wilful, and in so far not art. Excited and uneasy perceptual enjoyment is made ultimate, and the work of art is accommodated to production of these feelings. The sense of unachieved possibilities is employed as a compensatory equivalent for endeavor in achievement. Thus when the romantic spirit invades philosophy the possibilities present in imaginative sentiment are declared to be the real, although "transcendental," substance of Being itself. In complete art, appreciation follows the object and moves with it to its completion; romanticism reverses the process and degrades the object to an occasion for arousing a predetermined type of appreciation. In classicism, objective achievement is primary, and appreciation not only conforms to the object, but the object is employed to compose sentiment and give it distinction. Its vice, as an 'ism, is that it turns the mind to what is given; the given is taken as if it were eternal and wholly separate from generation and movement. Art free from subjection to any "ism" has movement, creation, as well as order, finality.

To institute a difference of kind between useful and fine arts is, therefore, absurd, since art involves a peculiar interpenetration of means and ends. Many things are termed useful for reasons of social status, implying deprecation and contempt. Things are sometimes said to belong to the menial arts merely because they are cheap and used familiarly by common people. These things of daily use for ordinary ends may survive in later periods, or be transported to another culture, as from Japan and China to America, and being rare and sought by connoisseurs, rank forthwith as works of fine art. Other things may be called fine because their manner of use is

decorative or socially ostentatious. It is tempting to make a distinction of degree and say that a thing belongs to the sphere of use when perception of its meaning is incidental to something else; and that a thing belongs to fine art when its other uses are subordinate to its use in perception. The distinction has a rough practical value. but cannot be pressed too far. For in production of a painting or a poem, as well as in making a vase or a temple, a perception is also employed as means for something beyond itself. Moreover, the perception of urns, pots and pans as commodities may be intrinsically enjoyable. although these things are primarily perceived with reference to some use to which they are put. The only basic distinction is that between bad art and good art, and this distinction, between things that meet the requirements of art and those that do not, applies equally to things of use and of beauty. Capacity to offer to perception meaning in which fruition and efficacy interpenetrate is met by different products in various degrees of fulness; it may be missed altogether by pans and poems alike. The difference between the ugliness of a mechanically conceived and executed utensil and of a meretricious and pretentious painting is one only of content or material: in form, both are articles, and bad articles.

Thinking is pre-eminently an art; knowledge and propositions which are the products of thinking, are works of art, as much so as statuary and symphonies. Every successive stage of thinking is a conclusion in which the meaning of what has produced it is condensed; and it is no sooner stated than it is a light radiating to other things—unless it be a fog which obscures them. The antecedents of a conclusion are as causal and existential as those

of a building. They are not logical or dialectical, or an affair of ideas. While a conclusion follows from antecedents, it does not follow from "premises," in the strict, formal sense. Premises are the analysis of a conclusion into its logically justifying grounds; there are no premises till there is a conclusion. Conclusion and premise are reached by a procedure comparable to the use of boards and nails in making a box; or of paint and canvas in making a picture. If defective materials are employed or if they are put together carelessly and awkwardly, the result is defective. In some cases the result is called unworthy, in others, ugly; in others, inept; in others, wasteful, inefficient, and in still others untrue, false. But in each case, the condemnatory adjective refers to the resulting work judged in the light of its method of production. Scientific method or the art of constructing true perceptions is ascertained in the course of experience to occupy a privileged position in undertaking other arts. But this unique position only places it the more securely as an art; it does not set its product, knowledge, apart from other works of art.

The existential origin of valid cognitive perceptions is sometimes recognized in form and denied in substance; the name "psychological" is given to the events which generate valid beliefs. Then a sharp distinction is made between genesis as psychological and validity as logical. Of course lexicographic names are of no special moment; if any one wishes to call the efficient causes of knowledge and truth psychological, he is entitled to do so—provided the actual traits of these causative events are recognized. Such a recognition will note however that psychological does not mean psychic, or refer to events going on exclu-

sively within the head or "subcutaneously." To become aware of an object cognitively as distinct from esthetically, involves external physical movements and external physical appliances physically manipulated. Some of these active changes result in unsound and defective perceptions: some have been ascertained to result usually in valid perceptions. The difference is precisely that which takes place when the art of architecture or sculpture is skilfully conducted or is carried on carelessly, and without adequate appliances. Sometimes the operations productive of tested beliefs are called "inductive;" with an implication in the naming, of discrediting them, as compared with deductive functions, which are assigned a superior exclusive status. Of deduction, when thus defined, the following assertions may be made. First, it has nothing to do with truth about any matter of existence. Secondly, it is not even concerned with consistency or correctness, save in a formal sense whose opposite (as has been previously pointed out) is not inconsistency but nonsense. Thirdly, the meanings which figure in it are the conclusions of prior inquiries which are "inductive," that is, are products of an experimental art of changing external things by appropriate external movements and appliances.

Deduction as it actually occurs in science is not deduction as deduction should be according to a common definition. Deduction deals directly with meanings in their relations to one another, rather than with meanings directly referred to existence. But these meanings are what they are in themselves and are related to one another by means of acts of taking and manipulating—an art of discourse. They possess intellectual import

and enter fruitfully into scientific method only because they are selected, employed, separated and combined by acts extraneous to them, acts which are as existential and causative as those concerned in the experimental use of apparatus and other physical things. The act of knowing. whether solicitous about inference or about demonstration, is always inductive. There is only one mode of thinking, the inductive, when thinking denotes anything that actually happens. The notion that there is another kind called deduction is another evidence of the prevalent tendency in philosophy to treat functions as antecedent operations, and to take essential meanings of existence as if they were a kind of Being. As a concrete operation, deduction is generative, not sterile; but as a concrete operation, it contains an extraneous act of taking and using which is selective, experimental and checked constantly by consequences.

Knowledge or science, as a work of art, like any other work of art, confers upon things traits and potentialities which did not previously belong to them. Objection from the side of alleged realism to this statement springs from a confusion of tenses. Knowledge is not a distortion or perversion which confers upon its subject-matter traits which do not belong to it, but is an act which confers upon non-cognitive material traits which did not belong to it. It marks a change by which physical events exhibiting properties of mechanical energy, connected by relations of push and pull, hitting, rebounding, splitting and consolidating, realize characters, meanings and relations of meanings hitherto not possessed by them. Architecture does not add to stone and wood something which does not belong to them, but it does add to them

properties and efficacies which they did not possess in their earlier state. It adds them by means of engaging them in new modes of interaction, having a new order of consequences. Neither engineering nor fine art limits itself to imitative reproduction or copying of antecedent conditions. Their products may nevertheless be more effectively natural, more "life like," than were antecedent states of natural existence. So it is with the art of knowing and its works.

The failure to recognize that knowledge is a product of art accounts for an otherwise inexplicable fact: that science lies today like an incubus upon such a wide area of beliefs and aspirations. To remove the deadweight, however, recognition that it is an art will have to be more than a theoretical avowal that science is made by man for man, although such recognition is probably an initial preliminary step. But the real source of the difficulty is that the art of knowing is limited to such a narrow area. Like everything precious and scarce, it has been artificially protected; and through this very protection it has been dehumanized and appropriated by a class. As costly jewels of jade and pearl belong only to a few, so with the jewels of science. The philosophic theories which have set science on an altar in a temple remote from the arts of life, to be approached only with peculiar rites, are a part of the technique of retaining a secluded monopoly of belief and intellectual authority. Till the art of achieving adequate and liberal perceptions of the meanings of events is incarnate in education, morals and industry, science will remain a special luxury for a few; for the mass, it will consist of a remote and abstruse body of curious propositions having little to do with life, except

where it lays the heavy hand of law upon spontaneity, and invokes necessity and mechanism to witness against generous and free aspiration.

Every error is attended with a contrary and compensatory error, for otherwise it would soon be self-revealing. The conception that causes are metaphysically superior to effects is compensated for by the conception that ends are superior esthetically and morally to means. The two beliefs can be maintained together only by removing "ends" out of the region of the causal and efficacious. This is accomplished nowadays by first calling ends intrinsic values, and then by making a gulf between value and existence. The consequence is that science, dealing as it must, with existence, becomes brutal and mechanical, while criticism of values, whether moral or esthetic, becomes pedantic or effeminate, expressing either personal likes and dislikes, or building up a cumbrous array of rules and authorities. The thing that is needful, discriminating judgment by methods whose consequences improve the art, easily slips through such coarse meshes, and by far the greater part of life goes on in a darkness unillumined by thoughtful inquiry. As long as such a state of thing persists, the argument of this chapter that science is art—like many other propositions of this book—is largely prophetic, or more or less dialectical. When an art of thinking as appropriate to human and social affairs has grown up as that used in dealing with distant stars, it will not be necessary to argue that science is one among the arts and among the works of art. It will be enough to point to observable situations. The separation of science from art, and the division of arts into those concerned with mere means and those concerned with ends in themselves, is a mask for lack of conjunction between power and the goods of life. It will lose plausibility in the degree in which foresight of good informs the display of power.

Evidence of the interpenetration of the efficacious with the final in art is found in the slow emancipation of art from magical rite and cult, and the emergence of science from superstition. For magic and superstition could never have dominated human culture, nor poetry have been treated as insight into natural causes, if means and ends were empirically marked off from each other. intimacy of their union in one and the same object is that which makes it easy to impute to whatever is consummatory a kind of efficacy which it does not pos-Whatever is final is important; to say this is to enunciate a truism. Lack of instrumentalities and of skill by which to analyze and follow the particular efficacies of the immediately enjoyed object lead to imputation to it of wholesale efficacy in the degree of its importance. To the short-cut pragmatism congenial to natural man, importance measures "reality" and reality in turn defines efficacious power. Lovalties evoked in the passionate citizen by sight of the flag or in the devout Christian by the cross are attributed directly to the intrinsic nature of these objects. Their share in a consummatory experience is translated into a mysterious inner sacred power, an indwelling efficacy. Thus a souvenir of the beloved one, arousing in the lover enjoyment similar to that awakened by the precious one to whom it belonged, possesses delightful, exciting, and consoling efficacies. No matter what things are directly implicated in a consummatory situation, they gain potencies for weal or woe similar to the good or evil which directly marks the situation. Obviously error here resides in the gross and undiscriminating way in which power is attributed; inquiry to reveal the specified elements which form the sequential order is lacking.

It is a commonplace of anthropologists that for the most part clothing originated in situations of unusual awe or prestigious display, rather than as a utility or protection. It was part of a consummatory object, rather than a means to specified consequences. Like the robes of priests, clothes were vestments, and investiture was believed to convey directly to the one ceremonially garbed dread potency or fascinating charm. Clothes were worn to confer authority; a man did not lend his significance to them. Similarly, a victorious hunter and warrior celebrated a triumphant return to camp by affixing to his person in conspicuous fashion claws and teeth of the wild beast or enemy that his prowess had subjugated. These signal proofs of power were integral portions of the object of admiration, loyalty and reverence. Thus the trophy became an emblem, and the emblem was endowed with mystic force. From a sign of glory it became a cause of glorification, and even when worn by another aroused the acclaim due to a hero. In time such trophies became the documented seal of prestigious authority. They had an intrinsic causal potency of their own. Legal history is full of like instances. Acts originally performed in connection with, say, the exchange of property, performed as part of the dramatic ceremony of taking possession of land, were not treated as mere evidences of title, but as having a mystic power to confer title.

Later, when such things lose their original power and become "mere matters of form," they may still be essential to the legal force of a transaction, as seals have had to be affixed to a contract to give it force, even though there was no longer sense or reason in their use. Things which have an efficacy imputed to them simply because they have shared in some eminent consummatory experience are symbols. They are called symbols, however, only afterwards and from without. To the devout in politics and religion they are other than symbols; they are articles possessed of occult potency. To one man, two crossed lines are an indication of an arithmetical operation to be performed; to another, they are evidence of the existence of Christianity as a historic fact, as a crescent is a reminder of the existence of Islam. But to another, a cross is more than a poignant reminder of a tragically significant death; it has intrinsic sacred power to protect Since a flag stirs passionate loyalty to and to bless. sudden and pervasive ebullition, the flag must have properties and potencies not possessed by other and differently configured pieces of cloth; it must be handled with reverence; it is the natural object of ceremonial adoration.

Phenomena like these when manifested in primitive culture are often interpreted as if they were attempts at a causal explanation of natural occurrences; magic is said to be science gone wrong. In reality, they are facts of direct emotional and practical response; beliefs, ideas, interpretations, only come later when responses not being direct and inevitably appropriate seem to demand explanation. As immediate responses they exemplify the fact that anything involved, no matter how incidentally, in a consummatory situation has the power of arousing the awe, excitement, relief, admiration belonging to

the situation as a whole. Industry displaces magic, and science reduces myth, when the elements that enter into the constitution of the consummatory whole are discriminated, and each one has its own particular place in sequential order assigned it. Thus materials and efficacies characteristic of different kinds of arts are distinguished. But because the ceremonial, literary and poetic arts have quite other ways of working and other consequences, than industrial and scientific arts, it is far from following, as current theories assume, that they have no instrumental power at all, or that a sense of their instrumental agency is not involved in their appreciative perception. The pervasive operation of symbolism in human culture is all the proof that is needed to show that an intimate and direct sense of place and connection in a prolonged history enters into the enjoyed and suffered constituents of the history, and especially into the final or terminal members.

Further confirmation of this proposition is found in classic philosophy itself, in its theory that essential forms "make" things what they are, even though not causing them to occur. "Essence," as it figures in Greek theory, represents the mysterious potency of earlier "symbols" emancipated from their superstitious context and envisaged in a dialectic and reflective context. The essences of Greek-medieval science were in short poetic objects, treated as objects of demonstrative science, used to explain and understand the inner and ultimate constitution of things. While Greek thought was sufficiently emancipated from magic to deny "efficient" causality to formal and final essences, yet the latter were conceived of as making particular things to be what they are, members of natural kinds. Moreover, by a reversal of causal resi-

dence, intrinsic seeking for such forms was imputed to changing events. Thus the ground was prepared for the later frank return of patristic and scholastic thought to a frank animistic supernaturalism. The philosophic theory erred, as did magic and myth, regarding the nature of the efficacy involved in ends; and the error was due to the same causes, namely, failure of analysis into elements. It could not have occurred, were there that sharp division between means and ends, fruitions and instrumentalities, assumed by current thought.

In short, the history of human experience is a history of the development of arts. The history of science in its distinct emergence from religious, ceremonial and poetic arts is the record of a differentiation of arts, not a record of separation from art. The chief significance of the account just given, lies, for our present purpose, in its bearing upon the theory of experience and nature. It is not, however, without import for a theory of criticism. The present confusion, deemed chaos by some. in the fine arts and esthetic criticism seems to be an inevitable consequence of the underlying, even if unavowed, separation of the instrumental and the consummatory. The further men go in the concrete the more they are forced to recognize the logical consequence of their controlling assumptions. We owe it to theories of art prevalent to-day in one school of critics that certain implications, long obscured, of the traditional theory of art and nature have been brought to light. Gratitude for this debt should not be stinted because the adherents of the traditional theory regarding the newer views as capricious heresies, wild aberrations. For these critics, in proclaiming that esthetic qualities in works of fine art are

unique, in asserting their separation from not only every thing that is existential in nature but also from all other forms of good, in proclaiming that such arts as music, poetry, painting have characters unshared with any natural things whatsoever:—in asserting such things the critics carry to its conclusion the isolation of fine art from the useful, of the final from efficacious. They thus prove that the separation of the consummation from the instrumental makes art wholly esoteric.

There are substantially but two alternatives. Either art is a continuation, by means of intelligent selection and arrangement, of natural tendencies of natural events; or art is a peculiar addition to nature springing from something dwelling exclusively within the breast of man, whatever name be given the latter. In the former case, delightfully enhanced perception or esthetic appreciation is of the same nature as enjoyment of any object that is consummatory. It is the outcome of a skilled and intelligent art of dealing with natural things for the sake of intensifying, purifying, prolonging and deepening the satisfactions which they spontaneously afford. That, in this process, new meanings develop, and that these afford uniquely new traits and modes of enjoyment is but what happens everywhere in emergent growths.

But if fine art has nothing to do with other activities and products, then of course it has nothing inherently to do with the objects, physical and social, experienced in other situations. It has an occult source and an esoteric character. It makes little difference what the source and the character be called. By strict logic it makes literally no difference. For if the quality of the esthetic experience is by conception unique, then the words

employed to describe it have no significance derived from or comparable to the qualities of other experiences; their signification is hidden and specialized to a degree. Consider some of the terms which are in more or less current use among the critics who carry the isolation of art and the esthetic to its limit. It is sometimes said that art is the expression of the emotions; with the implication that, because of this fact, subject-matter is of no significance except as material through which emotion is expressed. Hence art becomes unique. For in works of science, utility and morals the character of the objects forming this subject-matter is all-important. But by this definition, subject-matter is stripped of all its own inherent characters in art in the degree in which it is genuine art; since a truly artistic work is manifest in the reduction of subject-matter to a mere medium of expression of emotion.

In such a statement emotion either has no significance at all, and it is mere accident that this particular combination of letters is employed; or else, if by emotion is meant the same sort of thing that is called emotion in daily life, the statement is demonstrably false. For emotion in its ordinary sense is something called out by objects, physical and personal; it is response to an objective situation. It is not something existing somewhere by itself which then employs material through which to express itself. Emotion is an indication of intimate participation, in a more or less excited way in some scene of nature or life; it is, so to speak, an attitude or disposition which is a function of objective things. It is intelligible that art should select and assemble objective things in such ways as to evoke emotional response of a refined, sensitive and endur-

ing kind; it is intelligible that the artist himself is one capable of sustaining these emotions, under whose temper and spirit he performs his compositions of objective materials. This procedure may indeed be carried to a point such that the use of objective materials is economized to the minimum, and the evocation of the emotional response carried to its relative maximum. But it still remains true that the origin of the art-process lay in emotional responses spontaneously called out by a situation occurring without any reference to art, and without "esthetic" quality save in the sense in which all immediate enjoyment and suffering is esthetic. Economy in use of objective subject-matter may with experienced and trained minds go so far that what is ordinarily called "representation" is much reduced. But what happens is a highly funded and generalized representation of the formal sources of ordinary emotional experience.

The same sort of remark is to be made concerning "significant form" as a definition of an esthetic object. Unless the meaning of the term is so isolated as to be wholly occult, it denotes a selection, for sake of emphasis, purity, subtlety, of those forms which give consummatory significance to every-day subject-matters of experience. "Forms" are not the peculiar property or creation of the esthetic and artistic; they are characters in virtue of which anything meets the requirements of an enjoyable perception. "Art" does not create the forms; it is their selection and organization in such ways as to enhance, prolong and purify the perceptual experience. It is not by accident that some objects and situations afford marked perceptual satisfactions; they do so because of their structural properties and relations. An artist may work

with a minimum of analytic recognition of these structures or "forms;" he may select them chiefly by a kind of sympathetic vibration. But they may also be discriminatively ascertained; and an artist may utilize his deliberate awareness of them to create works of art that are more formal and abstract than those to which the public is accustomed. Tendency to composition in terms of the formal characters marks much contemporary art, in poetry, painting, music, even sculpture and architecture. At their worst, these products are "scientific" rather than artistic; technical exercises, sterile and of a new kind of pedantry. At their best, they assist in ushering in new modes of art and by education of the organs of perception in new modes of consummatory objects; they enlarge and enrich the world of human vision.

Thus, by only a slight forcing of the argument, we reach a conclusion regarding the relations of instrumental and fine art which is precisely the opposite of that intended by seclusive estheticians; namely, that fine art consciously undertaken as such is peculiarly instrumental in quality. It is a device in experimentation carried on for the sake of education. It exists for the sake of a specialized use, use being a new training of modes of perception. The creators of such works of art are entitled, when successful, to the gratitude that we give to inventors of microscopes and microphones; in the end, they open new objects to be observed and enjoyed. This is a genuine service; but only an age of combined confusion and conceit will arrogate to works that perform this special utility the exclusive name of fine art.

Experience in the form of art, when reflected upon, we conclude by saying, solves more problems which have

troubled philosophers and resolves more hard and fast dualisms than any other theme of thought. As the previous discussion has indicated, it demonstrates the intersection in nature of individual and generic; of chance and law, transforming one into opportunity and the other into liberation; of instrumental and final. More evidently still, it demonstrates the gratuitous falsity of notions that divide overt and executive activity from thought and feeling and thus separate mind and matter. In creative production, the external and physical world is more than a mere means or external condition of perceptions, ideas and emotions; it is subject-matter and sustainer of conscious activity; and thereby exhibits, so that he who runs may read, the fact that consciousness is not a separate realm of being, but is the manifest quality of existence when nature is most free and most active.