## NORMS AND REASON

## GEORGE P. ADAMS

The normative sciences undertake to apply the apparatus of reason, reflection, and scientific or philosophical method to the realm of values. Like all other sciences, their interest is in the first instance theoretical. That is, they are concerned with the solution of problems; they attempt an intelligible understanding and penetration of a certain area of our experience and whatever our experience may reveal. It is important to be clear about this at the outset, because considerable confusion arises by virtue of the fact that many of the values—if indeed not all —with which the normative sciences concern themselves are so obviously practical. They express and formulate situations in which we are practically interested. They bear upon decisions, performances, behavior, and attitudes which are assuredly practical, if anything is. This is abundantly clear in the field of ethics. What ought I to do, in what should I be interested, to what causes shall I devote my energies, these are of course problems about practice. And the conflicts of interests, loyalties, and ideals, of parties, classes, nations, and races are the source of our major difficulties and problems, all of them ominously practical. Because these problems are so momentous for our conduct and our welfare, their attempted solution through reflection, insight, and scientific method has frequently been called practical, also, and ethics has commonly been labeled a practical science. It is worth our while to emphasize, on the other hand, what seems to me indubitable, that the attempt to solve any problem is necessarily a theoretical undertaking, let the problem be as intensely and momentously practical as you please. Nothing can be more practical in its own way than the

problem of obtaining and mixing properly the ingredients of mince pie. But the solution of the problem, indeed the recognition of it as a problem, calls for the same generic use of insight, inventiveness, imagination, knowledge, as does the solution of a theoretical problem of pure geometry. To face any situation as problematic, or as the source of problems, to recognize and act upon the need for careful scrutiny, comparison, analysis, and all of the other processes which comprise reflection and understanding, is always in itself a theoretical enterprise which, if successful, yields knowledge. The knowledge of what is needful to be done or of what ought to be done is no less knowledge because its object is a practical way of doing something. there be any science of ethics, e.g., any orderly understanding of the values which are concerned in human doing and planning, then there exists a body of knowledge which, as reflective knowledge, is of necessity theoretical. When it is urged that ethics ought to be practical and not remote and academic, what is intended, I suppose, is that the study of ethics ought to yield a knowledge of precisely the concrete ways of doing things needful for our salvation or our happiness, and it is often implied that knowledge of anything other than this (within the domain of ethics, that is) is of no worth, because it is not knowledge of what to do. I can imagine, however, the supposititious last man on this frozen planet, roasting the last potato with the last piece of coal, with nothing to hope for, and nothing more to do or to plan, spending his last hour in reflecting upon the values and interests now vanishing from the human scene, and seeking to lay bare their nature, their meaning, and the scheme of their economy.

Here in any case are two different regions in which there are problems about values. If we choose to call the one type of problem practical because it concerns what specifically needs to be done in a given set of circumstances, there is no harm provided we remember that any intellectual or reflective solution of such a problem (contrasted with falling back on routine or

custom), calling as it does for knowledge, is theoretical. The other type of problem is that of understanding what values are, what conditions they depend upon, and what their locus and range are in the real world. These problems are psychological, logical, historical, and metaphysical. Inquiries of this second sort are just as theoretical as are investigations into the nature, the conditions, and the varieties of electricity or of stars. Questions of the first sort—what is to be done—are practical only in the sense that that which is being investigated and inquired into is a certain sort of conduct. But the inquiry, if carried on according to the methods of intelligence and understanding is perforce theoretical. How much we need to know about the seemingly more remote and theoretical aspects of values, their psychological roots, if such they have, or their metaphysical status—should such be granted them—in order most effectively to resolve our practical confusions and conflicts, is a fair question for discussion. He would be rash indeed who would ban as otiose all inquiries save those which immediately promise practical aid. I can imagine a reasoned decision as to whether Guild Socialism is worth working for, coming under the rightful influence of quite remote reflections, almost if not quite within the pale of metaphysics. On the other hand, it may happen that no aid is forthcoming for the practical question of what here and now to do, from reflection upon the general nature and meaning of value. It would be sheer dullness of imagination alone which would, on that account, wish to banish such reflections. No general theory and analysis of knowledge or of truth as such will ever yield information as to whether any specific proposition in history, algebra, or physics is true or false. Nor will any reflection upon the question as to why it is worth while doing anything at all, answer for me the question of whether I ought, here and now, to do this rather than that. The normative sciences cannot then safely or wisely be restricted solely to a determination of how specifically we should act, of what we ought to do, of how we ought to feel,

and in what manner we have to carry on the conduct of our understanding. Wherever values and norms emerge and are found, there is something to be analyzed and understood, to be rendered intelligible if possible, both in the interests of sheer theoretical wonder, and also (we have a right to hope) for the sake of the clearness and integrity of our practical purposings.

But genuine perplexities and difficulties face us the moment we undertake any rational penetration or theoretical understanding of the world of values. I have thought it not wholly useless to try to state certain of these problems, a discussion of which might constitute a sort of prolegomena to the normative sciences.

The concept of a normative science seems to imply the hope and the possibility of subjecting judgments of value to some measure of rational control. By the rational control of a judgment I mean the possession of some reasonable criterion capable of determining the validity to which the judgment makes claim. I take it that there are no isolated self-evident and axiomatic judgments anywhere in science, either as to matters of fact or values, either in mathematics or in ethics. The validity of any judgment depends upon something which lies outside the judgment itself. And the more orderly, massive, and coherent any structure is, the more does it suggest the traits of rationality and the more appeal does it rightfully make to our reason. what extent are value judgments linked to one another, supporting and implying one another, so that they, in their totality, comprise something like a single integral and coherent system? Are there any perturbing initial traits of value and hence of value judgments which set bounds to their comprehension within such structures? If there are, the possibility of any normative science is dubious and precarious. The practical consequences of such an admission, the admission that no rational control of value judgments is possible, if such an admission be necessary. are momentous. It would mean that there is no reasonable solution to any of the ultimate conflicts of interests, whether

of different specific desires within a single self, of social groups, of nations, or of races; that, in the last analysis, the warfare of moral ideals must inevitably exhibit itself in the warfare of ultimately clashing interests. Or. one might rather say, the basic *de facto* interests which simply are, which press for release and expansion, and which find themselves in inevitable mutual competition and hostility, become articulate in divergent conscious purposes and moral ideals.

Now, one irremovable barrier to the complete rational control of value judgments has been thought to lie in the fact that every value judgment is the expression of a preference, and every preference in its turn but expresses a matter of fact interest which is what it happens to be and which might have been something different. This is one of the things which is meant when it is said that our ultimate preferences are irrational. One starts here, I think, with the premise that if one imagines a world in which there are no sentient or at least living beings, it would be nonsense to ascribe anything like value to such a world. There would be facts, events, processes, in infinite profusion, no doubt, but there could be no basis for any preference or value judgment.

"Imagine an absolutely material world," writes James in one of his earlier essays, . . . "containing only physical and chemical facts and existing from eternity without a God, without even an interested spectator; would there be any sense in saying of that world that one of its states is better than another? . . . No world composed of merely physical facts can possibly be a world to which ethical propositions apply." But, he adds, "The moment one sentient being is made a part of the universe, there is a chance for goods and evils really to exist."

Such a center of vital or conscious interests has something at stake, it has needs, and it makes demands upon its world. It welcomes the useful and shuns the harmful. It discriminates, selects, and creates a perspective out of what, without its presence, would have been a bare, flat monotone. The greeting of anything whatever as good or as bad, as an aid or an obstacle,

<sup>&#</sup>x27;'The Moral Philosopher and the Moral Life,' in The Will to Believe, 189.

as friend or as enemy, as a value or an unvalue, always presupposes an initial bias, an "intent," as Santayana likes to call Hence follows the impossibility of assessing the worth of that initial bias or intent, save perhaps from the fulcrum of some other de facto interest, if its jurisdiction be in any manner competent. The interest or intent which provides a reason why anything is preferred or judged to be good, itself is amenable to no such justification. It has causes of course, to be found in nature's habit of generating vital and sentient beings. That which is presupposed in order that anything may be judged to be good, will not itself come under the jurisdiction of a value judgment. It simply is whatever it is. Its de facto and contingent nature becomes enacted in the purposes it formulates and the ideals it pursues. If these ideals are challenged they can only affirm that they are the spokesmen of actual interests which are what they are and not another thing. In the light of this analysis, a value judgment is seen to be really a judgment which asserts the existence of the interest, bias, or intent which generates and renders intelligible the value. The fish who would judge that water is a better place to live in than air is really but announcing the fact that he happens to be constructed in a certain way which happens to include the possession of gills. The bird who might argue with the fish as to the relative value of air and water as habitats, would propound a different value judgment and express a different preference from that of the But really, the bird's judgment of value would merely fish. be a way of declaring the de facto existence of its own type of structure, with lungs instead of with gills. Neither bird nor fish would be in any position to estimate the worth of lungs or gills, or rather of the unitary life structure and interest of which gills and lungs are organic parts. When Mill asked what reason could be given for the assertion that pleasure is the good other than the fact that everybody desires pleasure, he was making use of this dissolving of a value judgment into a fact judgment.

What does such a picture as this imply as to the possibility of a normative science, i.e., the possibility of a rational control

of value judgments? I will put the question in this way: The introduction into a world otherwise dead and inert of at least one vital interest centered in a living and sentient being is essential for the existence of any value whatever. Suppose such a solitary sentient interest to acquire now the power of thought and reflection. What rôle might reason perform in such a situation? I think we may point to at least two contributions which reason—by which I mean primarily the higher level of reflective knowledge-might make. The initial vital bent and structure determines the good and the bad; reason has nothing whatever to do with this, on the premises now before us. But if the situation is one in which the valuable end or good thing lies remote, if it has to be sought for, if a chain of causal connections must be provided before the demand can be met, then there is obviously a needful place for the intelligent choice of The sagacious choice of the best means—the most means. efficient and economical—for securing a desirable end, depends wholly upon knowledge. And it is a knowledge of the causal sequences of things as events which is here in question, a knowledge completely positive and empirical, if any knowledge is. Knowing what it is that you want, what your matter of fact vital interest is bent upon, success hinges entirely upon your positive knowledge of causes and effects. Our manipulation and control of instrumental values, of means, is the application of our scientific knowledge. The ethics of positivism and of pragmatism builds upon this. Where an end is clear and indisputable, all intelligent behavior, e.g., all behavior other than routine and habit, hinges upon knowing how things work and act. The application of such knowledge to conduct constitutes the art of intelligent practice in any domain whatever. Were every practical problem simply that of manipulating means intelligently so as to secure an unquestioned result, then assuredly a scientific ethics would be but the application of biology, psychology, and other fields of descriptive, natural knowledge, to human use. But unfortunately the case seems not nearly so simple, ultimately because there exists a class of

practical problems (problems concerning practice) which are not of this sort at all. These are the problems which arise from the uncertainty and, above all, the disagreements and conflicts among ends themselves. If I know clearly what I want, what for me possesses intrinsic value, then there is always an intelligent way of proceeding to obtain it, to utilize for the purpose in hand some known causal relation amongst the things and energies concerned. Here is a clear and unambiguous field where rational control both of judgments (of instrumental value) and of behavior is possible. But if I am in doubt as to what does possess inherent worth, as to what it is that I ought to desire, or which one of several incompatible and competing ends is the more valid, here there is no opportunity for any such rational control or verification. One simply comes against the ultimately opaque fact—here is such and such a propulsive élan, with its specific needs and demands, rooted in its de facto structure. It is idle to say of it that it ought to be other than what it is

While this is true, yet even so, the boundaries of rationality are not quite reached. For this vital interest, whose own intrinsic nature determines all of its ideals, ends, and goods, may not be completely and rightly divulged at the outset of its career. The task of exploring and discovering as far as possible what kind of structure and interest it is which is actively determining, through the wants and exigencies of its life, its own range of values, this, too, is the function of insight and knowledge, of intelligence and of reason. To clarify one's own intent and basic preferences, to take the measure of that total bundle of interests which comprise the self, to see just what it is that one does esteem, such Socratic self-knowledge provides no inconsiderable scope for a rational ethics. This will be true even if such dialectic and insight merely disclose, without any alteration or development, the factual bent and interest which gives birth to every preference. To lay exclusive stress upon the application of our knowledge of causal sequences to the manipulation and

control of means, to ignore this Socratic clarification of intent and self-knowledge, even though such insight be thought to leave its object wholly unchanged, is a serious omission on the part of some types of pragmatic and positivistic ethics.

But can we stop here? Is there not something for reason to do additional to controlling the means, and clarifying the nature of one's own interests? If reason can discover one interest, and render it articulate and self-conscious, it may discover and recognize other interests, even those which are alien to itself. Yet the knowledge that there are interests different from my own, that other persons and vital centers desire things which make no appeal to me or even animate me with aversion, must not be supposed to make doubtful or to abolish my own aims and wishes. Holding fast to these because they are mine, because they express my own nature and disposition, I can nevertheless arrive at some dim recognition that other creatures, with natures and aims different from or even hostile to my own, coexist with me. The fish without ceasing to continue his life in the water, might through an enlargement of his apprehension come to recognize that there are creatures who, mysteriously and perversely, choose the air rather than the water for a home.

Are we here just in sight of a principle which, when deepened and expanded, is capable of making the entire world of values and practical interests, a rational structure? You start with a single solitary sentient impulse or being introduced into a world hitherto devoid of all life, and forthwith the good and bad, the desirable and the undesirable, choice, preference, and values are generated. This vital impulse, at first blind, becomes intelligent; it begins to know something of its own nature, and to know how to utilize the things and energies surrounding it, in the satisfaction of its own life. The rudiments at least of self-knowledge and applied science, both fairly to be called rational, are here clearly in evidence. But this single sentient being is not solitary; it is surrounded by a chaos of other interests and desires, other natures and beings with their own

perspectives and preferences. The expansion of intelligence, the growth of ideas and of reason, will eventually discover these different and alien interests. Can we now say that having come to this recognition, the life of reason, as it expands, will seek to organize this discovered world of interests, initially indifferent or repellent to each other, into a single harmonious order of mutually consistent interests? Do justice and sympathy, the idea of some common or comprehensive, sharable good, do impartiality and inclusiveness lie along the path of this development? Remember that the initial premise must still hold: every interest and good is the expression of a factual and irrational intent and propulsion which possesses just this one configuration and nature, causing it to make just the choices and preferences which it happens to make. From this premise, that of a naturalistic ethics, our question has been, how much scope is there for intelligence and rationality? Some scope there unquestionably is, the discovery of efficient means, the clarification of the intent itself, and the bare recognition that the world contains other and differing interests. Our question now is whether this recognition expands into the active desire to satisfy not only the special and particular bias which initiates the entire emergence and development, thus far, of values, but all interests and needs however distant from and unlike my own.

This question has been answered in the affirmative. Santayana's theory of value throughout is built upon the naturalistic thesis that at bottom every good is the expression of a *de facto*, contingent interest, irrational in the sense that while it alone can render intelligible every value, no rational justification can be found for it. But, he says, the same rational motive which discovers the intent and preference of its own life, may equally become interested in other more remote and outlying centers of life, of interest and purpose.

"When we apply reason to life we immediately demand that life be consistent, complete and satisfactory when reflected upon and viewed as a whole. This view, as it presents each moment in its relations, extends to all moments affected by the action or maxim under discussion, it has no

more ground for stopping at the limits of what is called a single life than at the limits of a single adventure. To stop at selfishness is not particularly rational. The same principle that creates the ideal of a self creates the ideal of a family or an institution.''2

There is surely something marvelous and perplexing in this. One can easily understand the earlier interests and scope of reason which, on the naturalistic assumption, arise solely out of the exigencies of a partial and precarious creature, needful of discriminating the better and the worse in a world which has flung it forth. One sees the necessity and the reasonableness of observing the ways of the world in which the creature is placed, and of turning that knowledge to practical account in its struggle for life; one sees the necessity for the maximum of insight into the demands imposed by its own nature and life. The growth of knowledge may further explain why the world is discovered to contain other interests and purposes, just as it contains a wealth of diverse structures and energies, at first wholly unsuspected. But why should the mere discovery that there are interests other than my own impel me to satisfy them all in order that the whole world of values shall be consistent, unified, and harmonious? Would one not expect rather that their recognition would lead to their being exploited in the service of the initial local and particular interest, or exterminated as dangerous competitors, actual or potential?

The full burden of this query will become more apparent if I approach it from another side. Our problem is that of the degree and depth to which values, both judgments of value and the world of values, may be penetrated by intelligence and reason. What limits are there to the intelligibility of values? The scope or even the possibility of the normative sciences hinges upon the answer to this question. There does exist a ground for doubting any application of intelligence and reason to the world of values beyond that already suggested, the intelligent control of means, Socratic self-knowledge, and the bare discovery that other facts exist, relevant to other lives and interests. The

<sup>&</sup>lt;sup>2</sup> Reason in Science, 249.

difficulty comes to light when one ascribes to reason the task of organizing in one comprehensive and harmonious structure the entire world of diverse and conflicting interests, and the goods and values which express these interests. You will recall the manner in which this rational ideal of the organization of life is depicted by Royce in his earliest book, as at once the implication and the correction of ethical skepticism, as the resolution of the antimony of ethical idealism and ethical realism.

"The facts of life show us a conflict of wills. To realize this conflict is to see that no will is more justified in its separateness than is any other, This realization is ethical scepticism, a necessary stage on the way to the true moral insight. The ethical doubt means and is the realization of the conflict. But this realization means, as we see on reflection, a real will in us that unites these realized wills in one, and demands the end of their conflict. This is our realization of an Universal Will."

The motive here at work is the conviction that reason means, in the last analysis, organization, coherence, a concrete universal, the synthesis of details and particulars within a single organic and spiritual structure. The material entering into and subjected to such organization is the world of interests, desires, wills, preferences, purposes, and ideals. Thus to depict the application of reason to interests and values is to carry over from the realm of theoretical knowledge to the world of practical interests, the demand for synthesis, coherence, and totality. The legitimacy of this demand, in our theoretical life, in all science and all knowledge, is beyond dispute in any theory of knowledge and of truth. Consistency and coherence are the traits of a system of true propositions for any theory of knowledge. The coherence theory but gives to this demand a central and controlling position. The task of science is to organize in a single conspectus all of the observable data relevant to the theoretical interest and field in question. An adequate and valid scientific hypothesis or theory must, in Plato's well-worn phrase, "save all the appearances." Present me with a theory of perception. it asks, which will provide equally for the stick which is straight

<sup>3</sup> J. Royce, The Religious Aspect of Philosophy, 198.

when seen and felt out of water, and which is seen as bent when half-immersed in water. The point needs no further laboring. What more natural than that this ideal of reason as consistency, coherence, and organization, should be turned to account not only in the theoretical knowledge of the facts within our world, but in furthering the organization of our practical interests, and in demanding a similar coherence and totality in the world of values. Yet, barriers in the way of this extension exist. They have, I think, been too frequently ignored or glossed over, in traditional idealistic theories of ethics, in philosophical attempts to picture our practical reason as doing for our interests and values what our theoretical reason does for the facts which we thereby render intelligible.

There are familiar yet profound differences between these two regions, some of which I shall briefly name. They arise out of the consideration already mentioned, the fact, namely, that, for any value whatever to exist and to be recognized, some selecting and preferential interest must first be present. There is partiality and discrimination whenever anything is judged to be good or valuable. The defining interest or intent never confronts its owner with impartiality, it searches for and seizes upon just the one object which satisfies its needs and require-That object is attended to with an exclusive interest. Other objects are no less really there for a purely theoretical and cognitive interest, but they are ignored, unattended to by the selective bent which is exclusive in its attention, affection, and loyalty. The effective environment, that is, the region of objects which are noticed, desired and shunned by any living creature, in the fulfillment of its practical activities, is always vastly smaller than its total and real environment. My dog knows nothing—does not even sense—the countless details of color and sound, of marks and signs which the objects of my world present to me. This selective partiality of all vital and practical interests is no less true for man than it is for plants and animals. No man has an equal affection for all persons, a

colorless and impartial attachment to all causes and institutions, a like loyalty to every nation, every class, and every ideal. Were it otherwise, how could he be loyal to anything, devote his life to any cause at all? Not everything can be eaten, nor used, nor enjoyed, nor loved, nor sensed as beautiful or practically significant. But everything can, in principle, be known if it is only there to be observed by a creature sufficiently catholic and disinterested in its curiosity. But this means that in the life of such a creature a theoretical interest, the desire just to discover and know anything and everything has supervened upon its active, partial, and selective practical interests. And will not the emergence and cultivation of this impartial, inclusive, and catholic interest, tend, in some measure and fashion, to dampen the primitive ardor of our native and natural preferences and loyalties, a reflective conscience that "doth make cowards of us all" disclosing an infinite realm of possible goods and loyalties where formerly but one claimed our attention and our single-minded and exclusive devotion? Thus patent is the antimony of values and rationality. Values exist only in so far as some life-interest, with something at stake, discriminates decisively, selects, and is partial. Reason, as theoretical, i.e., interested solely in knowing, is wholly impartial and impersonal, admitting into its world every datum with complete and inclusive catholicity. A coherence theory of truth is in any case plausible and in accord with certainly very much of the actual procedure of science, whatever the more ultimate perplexities of the theory may be. But to carry over the idea and ideal of coherence and systematic and inclusive totality into the entire world of values, would violate the very condition upon which the existence and recognition of any value depends.

That values are a function of discriminating and selective interests, that they are relative to some local and contingent interest and that, in consequence, any total apprehension and knowledge of reality simply would not disclose any of the practical values which fill our lives, this lies at the root of familiar and profound types of philosophical structure. Spinoza and Bradley need but to be named. Good and evil, worth and unworth are here rightly seen to be either the expression of our human and limiting imagination, or appearances which fall short of reality. When I say "rightly" I mean in accordance with the requirements of a coherence theory of truth and reality, which forms the background and premise of both thinkers. The implication is that only in case this premise undergoes some revision, can values really be understood and rendered intelligible.

This pervasive characteristic of values, their dependence upon a contingent particular intent or interest which is necessarily selective and partial, is definitely related to another feature of values. I refer to the empirical fact that the existential range of anything valuable is definitely and markedly restricted. Any entity which is prized as valuable is a final and specialized culmination and concentration of processes and energies which spread outward and backward from the thing which is valuable, in infinite ranges. Measured in terms of the vast outlying area, values are always local, contingent, sporadic, and precarious. Let us contrast the vast stretches of time in which men have lived, acted, and died and the few brief periods of history during which things of enduring and supreme worth have been enacted and achieved. In the history of literature, art, science, and philosophy, there appear to be long dull stretches of mediocrity broken by a few bright ages which stand out against a lowlier and more common background. One will not deny that these longer and less significant ages are periods of silent preparation, nor that the humble toil of many nameless ones is needful for the final achievement of great worth. But one would not willingly exchange the works of half a dozen great thinkers and writers for those of all the remaining hundreds and thousands which fill in the gaps between the chosen few. It ill accords with the temper of a democratic age to stress this characteristic of values, nor would I imply that the manifest

lesson of it lies on the surface. But that values are in a sense aristocratic, that their achievement is rare and sporadic, that only bare existence is pervasive and democratic, something of this sort is inescapable. Let one again ask whether in the life of an individual, the few moments and hours of supreme achievement and realization do not outweigh in value the more level and monotonous stretches which, existentially, fill the bulk of our lives. Or again, but consider the apparent locus of values in their cosmic setting. That which is most universally pervasive is matter or energy, or even space and time. Those much more unstable chemical compounds which compose living matter never even make their first appearance until very late in cosmic history, and one has no empirical evidence of the existence of such organic compounds anywhere in nature save on a special planet which is but one of countless others. And that which we empirically know as mind stands in something of the same quantitative and existential relation to life, that life bears to the physical processes of nature. And in the development of mind, in itself a sufficiently long process, the discovery and recognition of valid and ideal norms emerges at length out of the psychological mechanism of habit and association. empirical facts about the quantitative relation of values to existence are, in their broad features, striking and indubitable. An adequate interpretation of the situation may prove perplexing enough.

There is an interpretation, seemingly facile and compelling, which comes into view when one pieces together those characteristics of value which we have noted. The picture which is then formed is that of nature or reality, as a congeries of physical events presumably infinite, present throughout the whole expanse of space and time. There is no other feature of being-neither life, nor mind, nor any form of value, which is coequal in extent and range, with matter or space-time. All these other existences, life and mind, societies and persons, are definitely restricted. Their being depends upon something more special and localized

than just matter. Matter takes on here and there, in spots, and at specific local times in its career, new qualities, which may be due either to a novel organization of elements which are old and common to everything, or possibly to the real emergence of fresh entities or features which are not resolvable into new forms of the familiar elements. In any case, the new quality is an emergent, local and contingent. It follows that the specific character of what comes into existence in such a sporadic and contingent spot cannot be taken as a sample of what exists throughout a wider range of being. Its conditions are external and reach back as far as one pleases. But the actual quality of the thing itself is restricted and circumscribed. The orthodox account of the relation between the secondary and primary qualities of matter is a case in point. qualities exist only where there is an organism with specific and highly organized sense organs and nervous system. Secondary qualities are not scattered broadcast throughout nature, prevalent and pervasive as are the primary qualities. They are not like anything external to the organism, although their fragile and local existence is contingent upon primary conditions wholly unlike themselves. It is the dissimilarity and discontinuity of the local, circumscribed quality with the wider, more extensive primary features which condemns the former to some kind and degree of unreality, or subjectivity. Thus are secondary qualities declared not to be objective, or like anything which is objective. Let the circumscribed entity, so much narrower in its existential range than the environing nature, be a living body, and you have at once a center of interest which introduces a sharp perspective into its environment, principles of selection and choice, a discrimination of edible and inedible, of friend and enemy, the familiar and the strange, the favorable and the unfavorable. Objects acquire the attribute of value, solely in relation to the defining interest. The worth imputed to objects is an expression of the nature of that interest. Since the interest is so definitely local and circumscribed, the values which it generates are equally limited and subjective. They are unlike the surrounding things which simply exist, and are discontinuous with them. If the defining interest is that of human beings, the values which these interests determine will be equally limited in their scope, equally human and subjective. They will contain no clew as to the real and existing qualities of nature. It is their uniqueness, their dependence on specific, specialized, and circumscribed interests, which makes them discontinuous with reality. And this is why, be it noted, it is so plausible to say, and so frequently urged, that values are both irrational and subjective; irrational because they spring from a local, contingent, and particular center, and subjective because all that is there generated is so unlike the outlying external conditions and causes.

'To be sure, we have seen that, even so, reason may have some application to values and to their realization. It may do so through reflective insight which seeks to uncover the real nature of the intent defining the perspective where values alone exist. This is the Socratic motive and use of reason. And too, reason, having learned the habits and sequences of natural events may apply this knowledge to the manipulation and control of means instrumental in the realization of ends. This is the pragmatic and positivistic motive. But beyond this, from the naturalistic point of view which we have outlined, reason has no concern with values or with norms. A normative science which would seek to render norms intelligible, that is, the value aspect of norms, and not merely the existential interest defining the norm, becomes meaningless. Moreover, on these same premises of naturalism, it is difficult to see what justification there is for supposing that the application of reason to the world of values will tend to organize the entire world of values into a single harmonious and organic system. For, the initial assumption is that each value is determined by a very local and contingent interest, that the specific qualities of that interest and hence of the value to which it is tied, are unlike the qualities and entities

which surround the interest and possess an existential extent so vastly greater. The values are partial to the defining interest as long as they remain values. The moment they are linked with their outlying conditions, and are once more made continuous with the real world, they cease to be the specific values they were before; they become instances of general and pervasive conditions and laws.

Yet, a normative science which would attempt to penetrate farther, to render intelligible the interest which, on the assumptions of naturalism, is of necessity wholly contingent, de facto, and irrational, can at least be said to be a desideratum. It is the existence of divergent and conflicting interests, ends, and ideals, which generates the major problems of ethics. The desire for an increasing measure of organization and unity among warring ideals and purposes is, we should all admit, of great moment, both practical and theoretical. It does belong to the life of reason to interest itself in and, so far as may be possible, to achieve such harmony.

The success of any such venture, however, rests upon conditions and presuppositions somewhat different from those which hitherto we have been considering. The naturalistic perspective of values which I have sketched, is an interpretation of three empirical characteristics of our actual experience of values. These are, first, the indissoluble linkage of every value to an existential, de facto interest or intent; second, the fact that the realization and achievement of any value is dependent upon conditions, upon the play of forces, the organization of energies which extend far out into the nature of things, and which are remote and seemingly alien to the values which they condition; and thirdly, there is the restricted, local, and sporadic character, the relatively few and isolated spots in which values are realized, when compared with the pervasive and possibly infinite range of existence, of nature, of space-time and its continuous material contents. How contingent, and superficial, how irrational and factual do values seem, how scanty is the material for any

autonomous normative sciences, when the mind dwells upon these three unquestioned empirical features of all our human values. And yet, in spite of the ease with which a naturalistic interpretation of the whole situation appears to emerge from reflection upon these features, there are, I think, further considerations which at least make possible another perspective, and one which is more adequate. I wish, in conclusion, to try to give a bare outline of such an alternative, one which would permit a further penetration of the world of values and norms by reason than appears to be possible upon the premises of naturalism. When it is urged, as it is by many characteristic contemporary analyses of value, that values are functions of and dependent upon interests, and that interests imply life and mind structures with a specific native bent and bias-with all the consequent implications that values are subjective while their factual conditions are alone objective—there is, I think, a distinction which needs to be made. It is the distinction between the existential and, if you choose, natural structure and process, biological, psychical, or social, and the quality, content, or meaning, which 'fills,' which is embodied by, and realized in, the structure and process. Every vital structure and process is a congeries of natural elements and energies; 'natural' because it is a part of and dependent upon the continuous world of nature in space and time. Now, consciousness too, as a stream and process in time, and as a structure, is a part of nature, as much as are the organs and processes of digestion and metabolism. But this, it seems to me, never exhaustively describes all that consciouness is. Even at its lowest and most primitve level consciousness exhibits another feature, namely, some quality, content, or meaning of which there is awareness. A feeling of pleasure or pain is a process, a sequence of occurrences, both physiological and psychical, conjoined in a manner which we need not here try to describe. But the pleasure quality which is felt is distinguishable from the event which is the feeling of it. And if such a distinction, on the level of primitive feeling,

appear dubious and artificial, it becomes more and more insistent as we ascend the successive levels of sensation, perception, imagination, and ideation. The events in Euclid's mind or body or both, which once existed when he was apprehending the theorems and demonstrations of geometry, were certainly not identical with the content apprehended. The former were processes, localized in a particular part of space and time, and integral to the organized stream of events which comprised the mind and body of Euclid. The latter, the apprehended content, was nothing biological or psychological; it was no process or sequence of particular events at all, though it became incorporated within the mental processes of Euclid in the way which we denote when we say that it was known by him. The mechanism, the structures and processes through which such incorporation or knowledge is made possible, may be fully describable, and it is foolish to predict in advance what kind of structure would and what would not be able to carry on this sort of function, to represent or incorporate systems of qualities and relations so that these latter become known. The mechanism which achieves this, is whatever it is, and it awaits our empirical discovery. But no discovery of the mechanism and structure of these processes and events through which knowledge flows, can obliterate the distinction between these processes, whatever they are, and the content which they apprehend; between the vehicles which carry, and the burden which is conveyed.

Now I should suppose that the fundamental question, upon an answer to which the enterprise of the normative sciences must wait, is this: In the mind's non-theoretical intercourse with its world, in these practical attitudes which are commonly called interests, is there anything analogous to this distinction between particular processes, biological and mental, and a content which becomes at least partially incorporated within the interests, in a manner somewhat similar to the way in which systems of knowable facts and truths become incorporated, again in part, within the mind that knows them. And to this question I should give

an affirmative answer, for this reason, among others, that each generic category of conscious experience is definable in terms of the type of relation or attitude which it bears to an 'object.' 'Object' of course must here mean something wider and more inclusive than object of cognition. And an objective content, a character or system of characters or qualities, is the correlate of every conscious act or process. Let me state this in the following very crude manner. All of us know what it means to use objects, to enjoy objects and, in some measure, to know them. I use an apple when I toss it and catch it as if it were a ball; I use it and perhaps enjoy it, too, when I eat the apple; I know it when I classify it botanically, or when I subject it to physical and chemical analysis. Now while it is of course true that one and the same apple might be first used as a ball, say, then known, at least partially, and finally enjoyed by eating, so that there is only one apple which is the object of these three interests, nevertheless, each interest attaches itself to an aspect or dimension of the one apple which is different from those upon which the other two attitudes are directed. So that, to use another example, one can almost, if not quite say that the hammer which I use to pound a nail is not the aggregate of billions or what not of electrons revolving around their nuclei which the physicist tells me the hammer is, when he sets out to know it as only a scientist can. The hammer is—and is really what the physicist tells me it is; it is also the compact, continuous, hard, cold piece of steel which I can use to drive a nail; it is also, if it is well made, a symmetrical and graceful thing not wholly lacking in beauty. How it can be all these things at once and still remain a single hammer is a question for metaphysics.

We note so far then, this: There are mental processes, which as mental, have their seat in the mind; these processes or acts terminate upon objective qualities or characters and systems of qualities. The conscious act, each moment of experience, is specified and defined both by the attitude or the kind of relation

in which the conscious act stands to its objective terminal, and also by the inherent nature of the object itself. (Object is here not identical with *physical* object.) Conscious acts of the same generic type are different because of the differences in their objects, as, for instance, seeing a patch of green differs from seeing a patch of red. Conscious acts belonging to different generic types differ both in respect to the attitudes or interests which they display, and also in respect to the nature and dimension of the objective characters in which they terminate and which they incorporate. Using a hammer is different from knowing its physical and chemical nature, because of the inherent difference between these two conscious interests and also because of the different aspects or dimensions of the hammer which are correlative with these respective attitudes.

This suggests, I think, a solution of the difficulty referred to earlier, the difficulty arising from the seeming conflict and antimony of theoretical and practical interests. A world completely known, we saw, would be a world inclusive of everything, without any partiality or bias in the selective preference of one object rather than another. But in such a world no action would be possible, no hierarchy or perspective of values, no better and worse, no love and hate, no loyalty and affection. But thus to conceive the situation is to assume that our cognitive and our non-cognitive interests and attitudes attach themselves to the very same attributes and aspects of objects, that the object as described and as known must be in every respect the same object which I like or dislike, which I use or enjoy. Once it be recognized that the total texture of objects and of reality holds aspects which are disclosed to interests other than cognitive, however problematic be the relation amongst these various objective structures, then this antimony of theoretical and practical is, in principle, solved.

What follows from this recognition of the objective diversity of the real is of central importance for our inquiry as to the possibility of a normative science, of discovering a structure

within the world of values which may not unfairly be called rational. A familiar observation with respect to the development and procedure of the cognitive interest supplies us, I think, with a clew. Knowing is a mental process. It is achieved by Everything that the mind does simply as a process, conforms to the nature and the laws of behavior of minds, or minds and bodies. (The question as to what the mind may be and how it is related to the body is just now irrelevant.) Yet everyone but an extreme humanist or subjectivist supposes that certain of the mental processes performed by minds have a significance and import other than that which inheres in their existence as mental or bodily processes. We may grant that by far the greater number of the untold mental processes which have gone on in men's minds since there have been human minds at all, have had little enough of a logical or scientific or philosophical importance. Yet a certain small fraction at least of such mental processes as have comprised, as processes, the biographies of individual minds, have also discovered, incorporated, and have thus been the bearers of the discoverable and at least partially real natures of things. Something other than merely biological or psychological structures and relations has become displayed within some of these mental processes. This is what occurs whenever any mind happens to think truly, and to achieve something worthy of the name of knowledge. An objective structure becomes displayed to or within the congeries of perceptions, images, and ideas comprising the mind's pro-The relationships and complexities, the logic of these objective structures constrain the mind's processes so that these latter really become something more than just local incidents and events, exhaustively to be described in terms just of these processes themselves. A thunderstorm may perhaps be so described and analyzed without remainder, but not a mental process which is the bearer of structures whose locus is not within or coincident with the processes themselves.

Now in an analogous way, as it seems to me, those qualities, structures, and dimensions which are the terminals of our noncognitive interests, the objects of our interests, are capable of and do really in some measure become displayed and incorporated within our interests. There is a right way of using a hammer supplying us with a norm, which is determined by the usable characters of the tool, which are quite objective, though they are not identical with the characteristics of the hammer which determine the truth or falsity of its physical and chemical description. And so it is, I should hold, with all existing preferences and interests. They are the meeting place of processes which are particular and local, always owned by some concrete historical mind or community or civilization, and of objective characters and structures whose nature constrains in part the historical careers and sequences of the interests in which they become displayed. To discover the type of structure and relationship which exercises for any species of interest such an objective constraint, is the task of the normative sciences. Their enterprise is rendered both possible and necessary by two facts. First, the fact that every interest does terminate in and embody something objective as its content, and secondly, the fact that there are discoverable complexities, principles, and relationships within the objective field of each typical interest and attitude. In a wide but legitimate use of the term, each of these objective fields, whether economic, aesthetic, religious, moral, or scientific, may be said to possess its own logic, and consequently to exercise its own type of constraint.

Certainly for some of these typical interests, if not for all, a range of processes wider than those which comprise an individual biography must be surveyed, in order that the objective structure pertinent to the interest in question may become at all apparent. Historical processes, inclusive of many biographies, are the bearers of values, and meanings; they exhibit the constraint, not only of vital interests as biological and

psychical facts, but of ideals and principles characteristic of objective structures. The internal arrangement and detail, the structure and logic exhibited by each type of objective system of meanings and values, is not capable of prediction in advance, nor of deduction from any simple first principle. We are dependent upon what experience discloses, the experience which is spread out in history as well as that which belongs to individual minds. But wherever there is experience there exist both processes which are rooted in a local and contingent focus and also objective structures which are displayed within them, and which give them their meaning and significance.

The constraint which is exercised upon the sequences of biographical and historical events by the internal complexities of such objective structures belongs to no one rigid or simple pattern, such as that of formal logic; the ways in which the realm of mathematical, logical, aesthetic, ethical, and religious values become displayed in the processes of mind and of history, are assuredly not uniform. A large measure of autonomy must be accorded to these several interests, and the structures in which they participate. Yet there are valid grounds for saying, I think, that the constraint thus exercised, dependent though we are upon experience and upon history for our knowledge of its modus operandi, is essentially rational. It is rational because the complexities and wealth of detail which are disclosed successively in the historical growth of our valuation and appreciation, give at least some suggestion of order, of continuity, of linkage and connections which surpass in scope anything which we verify.

I am aware how abstract and formal this must seem, if indeed the reader will accord it any sense at all. Such a point of view, such a conception of a normative science as I have suggested, is worth little enough until one takes a block of concrete human experience and is able to show what the objective structure is which is incorporated within the processes of mind and of history. I believe that this could be done for science,

for art, for religion, for morality, for civilization itself, if one had the necessary knowledge, insight, and imagination. could be carried out with relative independence of any metaphysics. Yet there is one implication or presupposition of a metaphysical character, and a recognition of this may perhaps serve to render what I have been saying somewhat more clear. There are familiar types of metaphysics, all of them I think naturalistic, according to which our conscious experience exhibits much—very much—to which there is no objective correlate in reality. To any such perspective as this, human experience may be said to be richer in content than in reality. The instance of secondary qualities to which I earlier made reference, is a case in point. Secondary qualities are, to be sure, initiated and caused by external stimuli, but these are lacking in the qualitative content and richness which belong to the internal and subjective centers of conscious experience. And so for all values which are the creatures of interest and vital intent; though brought into being by the remote play of nature's energies, they live within and express only the local and ephemeral focus, which holds so much more than the world to which these values are alien. But it is possible, I think, to project another perspective, one in which it would be said that experience, as it arises and flows in local, finite, and contingent centers of life and mind, is not richer, but poorer than the reality which lies outside. In such an hypothesis, experience is a selection from and hence a discovery of a world richer in its own content than what can be compressed into the fragmentary processes which we know as minds and communities. perforce left here wholly untouched the many questions concerning the real nature of those objective structures which in our thinking, our feeling and enjoying, our striving and purposing, come to be displayed and incorporated, questions to most of which, I am afraid, I have but a scant answer or none at all. Objective structures, even those which are known by the physical sciences, are not to be identified with the physical objects which

meet us in our perceptual intercourse with nature. Yet they are there, constraining our thinking, our feeling, and our striving, lending something of their own wealth of meaning to the human spirit. I conceive the task of the normative sciences to be the exploration of the experiences and achievements of the human spirit, in order to lay bare the systems of meaning which these experiences and achievements in part incorporate and display, the recognition of whose rightful constraint is the function of our reason.