Excerpts from:

Experience and Nature, 1925, ²1929*

John Dewey[†]

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0 Preface

p. v.... The office of physical science is to discover those properties and relations of things in virtue of which they are capable of being used as instrumentalities; physical science makes claim to disclose not the inner nature of things but only those connections of things with one another that determine outcomes and hence can be used as means. The *intrinsic* nature of events is revealed in experience as the

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immediately felt qualities of things. The intimate coordination and even fusion of these qualities with the regularities that form the objects of knowledge, in the proper sense of the work "knowledge," characterizes intelligently directed experience, as distinct from mere casual and uncritical experience.

- p. vi That character of everyday experience which has been most systematically ignored by philosophy is the extent to which it is saturated with the results of social intercourse and communication. Because this factor has been denied, meanings have either been denied all objective validity, or have been treated as miraculous extra-natural intrusions. If, however, language, for example, is recognized as the instrument of social cooperation and mutual participation, continuity is established between natural events (animal sound, cries, etc.) and the origin and development of meanings. Mind is seen to be a function of social interactions, and to be a genuine character of natural events when these attain the stage of widest and most complex interaction with one another. Ability to respond to meanings and to employ them, instead of reacting merely to physical contacts, makes the difference between man and other animals; it is the agency for elevating man into the realm of what is usually called the ideal and spiritual. In other words, the social participation affected by communication, through language and other tools, is the naturalistic link which does away with the often alleged necessity of dividing the objects of experience into two worlds, one physical and one ideal.
- p. viii ... The meanings that form mind become consciousness, or ideas, impressions, etc., when something within the meanings or in their application becomes dubious, and the meaning in question needs reconstruction.
- p. ix Philosophy, then, is a generalized theory of criticism. Its ultimate value for life-experience is that it continuously provides instruments for the criticism of those values whether of beliefs, institutions, actions or products that are found in all aspects of experience.

1 Experience and Philosophic Method

p. 1a

The title of this volume, Experience and Nature, is intended to signify that the philosophy here presented may be termed either empirical naturalism or naturalistic empiricism, or, .. naturalistic humanism.

empirical naturalism

p. 2a

In the natural sciences there is a union of experience and nature ..., the inquirer must use empirical method if his findings are to be treated as genuinely scientific. The investigator assumes as a matter of course that experience, controlled in specifiable ways, is the avenue that leads to the facts and laws of nature. He uses reason and calculation freely; he could not get along without them. But he sees to it that ventures of this theoretical sort start from and terminate in directly experienced subject-matter. Theory may intervene in a long course of reasoning, many portions of which are remote from what is directly experienced. But the vine of pendant theory is attached at both ends to the pillars of observed subject-matter. And this experienced material is the same for the scientific man and the man in the street. The latter cannot follow the intervening reasoning without special preparation. But stars, rocks, trees, and creeping things are the same material of experience for both.

p. 4a

.... It is not experience which is experienced, but nature – stones, plants, animals, diseases, health, temperature, electricity, and so on. Things interacting in certain ways are experience; they are what is experienced. Linked in certain other ways with another natural object –the human organism – they are *how* things are experienced as well. Experience thus reaches down into nature, it has depth. It also has breadth and to an indefinitely elastic extent. It stretches. That stretch constitutes inference.

- p. 1 Dialectical difficulties, perplexities due to definitions given to the concepts that enter into the discussion, may be raised..... The very existence of science is evidence that experience is such an occurrence that it penetrates into nature and expands without limit through it. in the case of natural science we habitually treat experience as starting-point, and as method for dealing with nature, and as the goal in which nature is disclosed for what it is.
- p. 2 If experience actually presents esthetic and moral traits, then these traits may also be supposed to reach down into nature, and to testify to something that belongs to nature as truly as does the mechanical structure attributed to it in physical science. To rule out that possibility by some general reasoning is to forget that the very meaning and purport of empirical method is that things are to be studied on their own account, so as to find out what is revealed when they are experienced. The traits possessed by the subject-matters of experience are as genuine as the characteristics of sun and electron. They are found, experienced, and are not to be shoved out of being by some trick of logic.

The scientific inquirer talks and writes about particular observed events and qualities, about specific calculations and reasonings. He makes no allusion to experience; one would probably have to search a long time through reports of special researches in order to find the word. The reason is that everything designated by the word "experience" is so adequately incorporated into scientific procedures and subject-matter that to mention experience would be only to duplicate in a general term what is already covered in definite terms.

no allusion to experience

p. 23 [cf. (Rorty, 1982), p. 82]

That the physiological organism with its structure, whether in man or in the lower animals, is concerned with making adaptations and uses of material in the interest of maintenance of the life-process, cannot be denied. The brain and nervous system are primarily organs of action-undergoing; biologically it can be asserted without contravention that primary experience is of a corresponding type. Hence, unless there is breach of historic and natural continuity, cognitive experience must originate within that of a noncognitive sort.

maintenance of the life-process,

2 Existence as Precarious and as Stable

p. 44

.... Through science we have secured a degree of power of prediction and of control; through tools, machinery and an accompanying technique we have made the world more conformable to our needs, a more secure abode. We have heaped up

science ... power of prediction and control

riches and means of comfort between ourselves and the risks of the world. We have professionalized amusement as an agency of escape and forgetfulness. But when all is said and done, the fundamentally hazardous character of the world is not seriously modified, much less eliminated.

p. 49

.... Kant assigns all that is manifold and chaotic to one realm, that of sense, and all that is uniform and regular to that of reason.

p. 53 -4

. . .

... In briefest formula "reality" becomes what we wish existence to be, after we have analyzed its defects and decided upon what would remove them; "reality" is what existence would be if our reasonably justified preferences were so completely established as to exhaust and define its entire being and thereby render search and struggle unnecessary. What is left over, (and since trouble, struggle, conflict, and error still empirically exist, something is left over) being excluded by definition from full reality is assigned to a grade or order of being which is asserted to be metaphysically inferior; an order variously called apppearance, illusion, mortal mind, or the merely empirical, against what really and truly is. Then the problem of metaphysics alters: instead of being a detection and description of the generic traits of existence, it becomes an endeavor to adjust or reconcile to each other two separate realms of being. Empirically we have just what we started with: the mixture of the precarious and problematic with the assured and complete.

"reality"

the problem of metaphysics

p. 66

. . . .

.... Thought like Being, has two forms, one real; the other phenomenal. It is compelled to take on reflective form, it involves doubt, inquiry and hypothesis, because it sets out from a subject-matter conditioned by sense, a fact which proves that thought, intellect, is not pure in man, but restricted by an animal organism that is but one part linked with other parts, of nature.

p. 67 A philosophy which accepts the denotative or empirical methods accepts at full value the fact that reflective thinking transforms confusion, ambiguity and discrepancy into illumination, definiteness and consistency. But it also points to the contextual situation in which thinking occurs. And it notes that the starting point is the actually *problematic*, and that the problematic phase resides in some actual and specifiable situation.

the actually *problematic* situation

It notes that the means of converting the dubious into the assured, and the incomplete into the determinate, is use of assured and established things, which are just as empirical and as indicative of the nature of experienced things as is the uncertain. It thus notes that thinking is no different in kind from the use of natural materials and energies, say fire and tools, to refine, re-order, and shape other natural material, say ore..... Thought and reason are not specific powers. They consist of the procedures intentionally employed in the application to each other of the unsatisfactorily confused and indeterminate on one side and the regular and stable on the other. Generalizing from such observations, empirical philosophy perceives that thinking is a continuous process of temporal re-organization within one and the same world of experienced things, not a jump from the latter world into one of objects constituted once for all by thought....

Thought and reason are not specific powers.

p. 68 Idealism fails to take into account the specified or concrete character of the uncertain situation in which thought occurs; it fails to note the empirically concrete nature of the subject-matter, acts, and tools by which determination and consistency are reached; it fails to note that the conclusive eventual objects having the latter properties are themselves as many as the situations dealt with.

Idealism

p. 74

. . . .

Nothing but unfamiliarity stands in the way of thinking of both mind and matter as different characters of natural events, in which matter expresses their sequential order, and mind the order of their meanings in their logical connections and dependencies.

both mind and matter different characters of natural events

3 Nature, Ends and Histories

p. 78

. . . .

Even philosophers who have conceived that pleasure is the sole motive of man and the attainment of happiness his whole aim, have given a curiously sober, drab, account of the working of pleasure and the search for happiness. Consider the utilitarians how they toiled, spun and wove, but who never saw man arrayed in joy as the lilies of the field. Happiness was to them a matter of calculation and effort, of industry guided by mathematical book-keeping. The history of man shows however that man takes his enjoyment neat, and at as short range as possible.

enjoyment neat

Direct appropriations and satisfactions were prior to anything but the most elementary and exigent prudence. just as the useful arts preceded the sciences. The body is decked before it is clothed. While homes are still hovels, temples and palaces are embellished. Luxuries prevail over necessities except when necessities can be festally celebrated. Men make a game of their fishing and hunting, and turn to the periodic and disciplinary labor of agriculture only when inferiors, women and slaves, cannot be had to do the work. Useful labor is, whenever possible, transformed by ceremonial and ritual accompaniments, subordinated to art that yields immediate enjoyment; otherwise it is attended to under the compulsion of circumstance during abbreviated surrenders of leisure.

p. 80

For man is more preoccupied with enhancing life than with bare living; so that a sense of living when it attends labor and utility is borrowed not intrinsic, having been generated in those periods of relief when activity was dramatic.

To say these things is only to say that man is naturally more interested in consummations than he is in preparations; and that consummations have first to be hit upon spontaneously and accidentally ... before they can be objects of foresight, invention and industry. The extensions and transformations of existence generated in imagination may come at last to attend work so as to make it significant and agreeable.... Labor, through its structure and order, lends play its pattern and plot; play then returns the loan with interest to work, in giving it a sense of beginning, sequence and climax.

consummations, preparations

p. 82

6

Modern psychiatry as well as anthropology have demonstrated the enormous role of symbolism in human experience. The word symbolism, however, is a product of reflection upon direct phenomena, not a description of what happens when so-called symbols are potent. For the feature which characterizes symbolism is precisely that the thing which later reflection calls a symbol is not a symbol, but a direct vehicle, a concrete embodiment, a vital incarnation. Symbolism in this sense dominates not only all early art and cult but social organization as well. Rites, designs, patterns are all charged with a significance which we may call mystic, but which is immediate and direct to those who have and celebrate them. Be the origin of the totem what it may, it is not a cold, intellectual sign of a social organization; it is that organization made present and visible, a center of emotionally charged behavior. Such symbols are not indicative or intellectual signs; they are condensed substitutes of actual things and events, which embody actual things with more direct and enhanced import than do the things themselves with their distractions, imposition, and irrelevancies. Meanings are intellectually distorted and depressed, but immediately they are heightened and concentrated.

symbolism

p. 83 Jespersen speaks of the origin of language in similar terms. He says that many linguistic philosophers appear to "imagine our primitive ancestors after their own image as serious and well meaning men, endowed with a large share of common sense They leave you with the impression that these first framers of speech were sedate citizens with a strong interest in the purely business and matter of fact aspects of life." But Jespersen finds that the prosaic side of early culture was capable only "of calling forth short monosyllabic interjections; they are the most immutable portions of language, and remain now at essentially the same standpoint as thousands of years ago." He concludes that the "genesis of language is found in the poetic side of life; the source of speech is not gloomy seriousness, but merry play and youthful hilarity." And no one would deny, I suppose that literature rather than business and science has developed and fixed our present linguistic resources.

Jespersen

It would be difficult to find a fact more significant of the traits of nature, more instructive for a naturalistic metaphysics of existence, than this cleavage of the things of human experience into actual but hard objects, and enjoyed but imagined objects.

p. 83-84

One might think that philosophers ... might have directed their attention to this direct phase of experience, in which objects are not a matter of sensations, ideas, beliefs or knowledge, but are something had and enjoyed.... the "self-evident" things of philosophers are recondite and technical.

The other most self-evident thing in experience is useful labor and its coercive necessity. As direct appreciative enjoyment exhibits things in their consummatory phase, labor manifests things in their connections of things with one another, in efficiency, productivity, furthering, hindering, generating, destroying. From the standpoint of enjoyment a thing is what it directly does for us. From that of labor a thing is what it will do to other things – the only way in which a tool or an obstacle can be defined. Extraordinary and subtle reasons have been assigned for belief in the principle of causation. Labor and the use of tools seem, however, to be a sufficient empirical reason: indeed, to be the only empirical events that can be specifically pointed to in this connection. The first thinker who proclaimed that every event is effect of something and cause of something else, that every particular existence is both conditioned and condition, merely put into words the procedure of the workman,

useful labor and its coercive necessity

principle of causation use of tools

converting a mode of practice into a formula.

p. 86 Things in their immediacy are unknown and unknowable, not because they are remote or behind some impenetrable veil of sensation of ideas, but because knowledge has no concern with them. For knowledge is a memorandum of conditions of their appearance, concerned, that is, with sequences, coexistences, relations. Immediate things may be pointed to by words, but not described or defined. Description when it occurs is but a part of a circuitous method of pointing or denoting; index to a starting point To the empirical thinker, immediate enjoyment and suffering are the conclusive exhibition and evidence that nature has its finalities as well as its relationships.

use of tools

Description

. . .

.... Without a basis in qualitative events, the characteristic subject-matter of knowledge would be algebraic ghosts, relations that do not relate. To dispose of things in which relations terminate by calling them elements, is to discourse within a relational and logical scheme. Only if elements are more than just elements in a whole, only if the have something qualitatively their own, can a relational system be prevented from complete collapse.

algebraic ghosts

p. 96-97

. . .

If experienced things are valid evidence, then nature in having qualities within itself has what in the literal sense must be called ends, terminals, arrests, enclosures.

p. 97 to assert that nature is characterized by ends, the most conspicuous of which is the life of mind, seems like engaging in an eulogistic, rather than an empirical account of nature. Something much more neutral than any such implication is, however, meant. It is a commonplace that no thing lasts forever.

The genuine implications of natural ends may be brought out by considering beginnings instead of endings. To insist that nature is an affair of beginnings is to assert that there is no one single and all-at-once beginning of everything. It does not imply that every beginning marks an advance or improvement. . . . Clearly the fact and idea of beginning is neutral, not eulogistic; temporal, not absolute. And since wherever one thing begins something else ends, what is true of beginnings is true of endings.

beginnings

4 Nature, Means and Knowledge

p. 121

The exacting conditions imposed by nature, that have to be observed in order that work be carried through to success, are the source of all noting and recording of nature's doings. They supply the discipline that chastens exuberant fancy into respect for the operation of events, and that effect subjection of thought to a pertinent order of space and time. While leisure is the mother of drama, sport and literary spell-binding, necessity is the mother of invention, discovery and consecutive reflection.... Spears, snares, gins, traps, utensils, baskets and webs may have their potency enhanced by adherence to ceremonial design, but the design is never a complete substitute for conformity to the efficacious resistances and adaptations of natural materials. Acumen, shrewdness, inventiveness, accumulation and transmission of information

information ...things as signs

are products of the necessity under which man labors to turn away from absorption in direct having and enjoying, so as to consider things in their active connections as means and as signs. Everything is done to bedeck utilities, instrumentalities, with reminders of consummatory events so as to lessen their burden, but useful arts in return supply ceremonial arts with their materials, appliances and patterns.

...By its nature technology is concerned with things and acts in their instrumentalities, not in their immediacies. Objects and events figure in work not as fulfillments, realizations, but in behalf of other things of which they are means and predictive signs.....

p. 123

A tool denotes a perception and acknowledgment of sequential bonds in nature.

p.124

The social division into a laboring class and a leisure class, between industry and esthetic contemplation, became a metaphysical division into things which are mere means and things which are ends. Means are menial, subservient, slavish; and ends liberal and final; things as means testify to inherent defect, to dependence, while ends testify to independent and intrinsically self-sufficing being. Hence the former can never be known in themselves but only in their subordination to objects that are final, while the latter can be known in and through themselves by self-enclosed reason. Thus the identification of knowledge with esthetic contemplation and the exclusion from science of trial, work, manipulation and administration of things, comes full circle.

p. 125

....if Greek thinkers did not achieve science, they achieved the idea of science. This accomplishment was beyond the reach of artist and artisan. For no matter how solid the content of their own observations and beliefs about natural events, that content was bound down to occasions of origin and use. The relations they recognized were of local areas in time and place. Subject-matter underwent a certain distortion when it was lifted out of this context, and placed in a realm of eternal forms. But the idea of knowledge was thereby liberated, and the scheme of logical relationships among existences held up as an ideal of inquiry. Thinking was uncovered as an enterprise having its own objects and procedures; and the discovery of thought as method of methods in all arts added a new dimension to all subsequent experience. It would be an academic matter to try to balance the credit items due to the discovery of thought and of logic as a free enterprise, against the debit consequences resulting from the hard and fast separation of the instrumental and final.

Greek thinkers ... not science, but a realm of eternal forms

tool

social division

metaphysical division

p. 126

. . .

.... The Sophists taught that man could largely control the fortunes of life by mastery of the arts. No one has exceeded Plato in awareness of present ills. But since they are due to ignorance and opinion, they are remediable, he holds, by adequate knowledge. Philosophy should terminate in an art of social control.

p. 127

This period ... did not endure.... Yet the episode ... manifests another way open to man in the midst of an uncertain, incomplete and precarious universe....

Through instrumental arts, arts of control based on study of nature, objects which are fulfilling and good, may be multiplied and rendered secure. This road after almost two millennia of obscuration and desertion was refound and retaken; its rediscovery marks

the Sophists

Plato: Philosophy as social control what we call the modern era. Consideration of the significance of science as a resource in a world of mixed uncertainty, peril, and of uniformity, stability, furnishes us with the theme of this chapter of experience.

p. 128

.... The distinctively intellectual attitude which marks scientific inquiry was generated in efforts at controlling persons and things so that consequences, issues, outcomes would be more stable and assured. In responding to things not in their immediate qualities are dimmed, while those features which are signs, indices of something else, are distinguished. A thing is more significantly what it makes possible than what it immediately is. The very conception of cognitive meaning, intellectual significance, is that things in their immediacy are subordinated to what they portend and give evidence of. An intellectual sign denotes that a thing is not taken immediately but is referred to something that may come in consequence of it. Intellectual meanings may themselves be appropriated, enjoyed and appreciated; but the character of intellectual meaning is instrumental.

p. 128-129

The first groping steps in defining spatial and temporal qualities, in transforming purely immediate qualities of local things into generic relationships, were taken through the arts. The finger, the foot, the unit of walking were used to measure space; measurements of weight originated in the arts of commercial exchange and manufacture. Geometry, beginning as agricultural art, further emancipated space from being a localized quality of immediate extensity. But the radically different ways of conceiving geometry found in ancient and in modern science is evidence of the slowness of the process of emancipation of even geometrical forms from direct or esthetic traits. In Greek astronomy the intrinsic qualities of figures always dominated their instrumental significance in inquiry; they were forms to which phenomena had to conform instead of means of indirect measurements. Hardly till our own day did spatial relations get emancipated from esthetic and moral qualities, and become wholly intellectual and relational, abstracted from immediate qualifications, and thereby generalized to their limit.

Geometry

.... In principle the step [of recognition of things in their intellectual or instrumental phase] is taken whenever objects are so reduced from their status of complete objects as to be treated as signs or indications of other objects.

Abstraction is not a psychological incident; it is a following to its logical conclusion of interest in those phases of natural existence which are dependable and fruitful signs of other things; which are means of prediction by formulation in terms implying other terms. Genuine science is impossible as long as the object esteemed for its own intrinsic qualities is taken as the object of knowledge. Its completeness, its immanent meaning, defeats its use as indicating and implying.

objects reduced to signs

p. 131

. . .

The net result of the new scientific method was conception of nature as a mathematical-mechanical object. If modern philosophy, reflecting the tendencies of the new science, abolished final causes from nature, it was because concern with qualitative ends ... blocked inquiry, discovery and control, and ended in barren dialectical disputes about definitions and classifications.

nature as a mathematicalmechanical object.

p. 132

.... Dependable material with which to know was found in a different realm of being; in spatial relations, positions, masses, mathematically defined, and in motion as change of space having direction and velocity.... The only world which defines and descries and explains was a world of masses in motion, arranged in a system of Cartesian coordinates.

p. 133

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Modern science represents a generalized recognition and adoption of the point of view of the useful arts, for it proceeds by employment of a similar operative technique of manipulation and reduction. Physical science would be impossible without the appliances and procedures of separation and combinations of the industrial arts.

Modern science

p. 144

Preoccupation with elementary units is as marked in logic, biology, and psychology, as in physics and chemistry. Sometimes it seems to have resulted in taking merely dialectical entities for actual unitary elements; but that is not logically necessary. Such an outcome signifies only that the right units were not found. Serious objection holds when the instrumental character of the elements is forgotten; and they are treated as independent, ultimate; when they are treated as metaphysical finalities, insoluble epistemological problems result. Whatever are designated as elements, whether logical, mathematical, physical or mental, depend especially upon the existence of immediate, qualitatively integral objects. Search for elements starts with such empirical objects already possessed. Sensory data, whether they are designated psychic or physical, are thus not starting points; they are the products of analysis. Denial of the primary reality of immediate empirical objects logically terminates in an abrogation of the reality of elements; for sensory data, or sensa and sensibilia, are the residua of analysis of these primary things. Moreover every step of analysis depends upon continual reference to these empirical objects.

p. 150

When the appliances of a technology that had grown more deliberate were adopted in inquiry, and the lens, pendulum, magnetic needle, lever were used as tools of knowing, and their functions were treated as models to follow in interpreting physical phenomena, science ceased to be identified with appreciative contemplation of noble and ideal objects, ..., became an affair of time and history intelligently managed.

lens, pendulum, magnetic needle, lever as tools of knowing

p. 151

... many critics take an "instrumental" theory of knowledge to signify that the value of knowing is instrumental to the knower. This is a matter which is as it may be in particular cases; but certainly in many cases the pursuit of science is sport, carried on, like other sports, for its own satisfaction. But "instrumentalism" is a theory not about personal disposition and satisfaction in knowing, but about the proper objects of science, what is "proper" being defined in terms of physics. the pursuit of knowledge is often an immediately delightful event; its attained products possess esthetic qualities of proportion, order, and symmetry. But these qualities do not mark off or define the characteristic and appropriate objects of science.

pursuit of science as sport

p. 152

.... In ancient science the essence of science was demonstration; the life blood

of modern science is discovery.

.... When the objects of knowledge are taken to be final, perfect, complete, metaphysical fulfillments of nature, proper methods consists in definition and classification; learning closes with demonstration of the rational necessity of definitions and classifications. ... Discovery was merely the perception that some particular material hitherto unclassified by the learner came under a universal form already known. The universal is already known because given to thought; and the particular is already known, because given to perception; learning merely brings these two given forms into connection, so that what is "discovered" is the subsumption of particular under its universal.

definition and classification; rational necessity

p. 158

.... idealism, while it has had an intimation of the constructively instrumental office of intelligence, has mistranslated the discovery. ... it took re-constitution to be constitution; re-construction to be construction. ...[it] had no way of noting that thought is intermediary between some empirical objects and others.... A conversion of actual immediate objects into better, into more secure and significant, objects was treated as a movement from merely apparent and phenomenal Being to the truly Real. In short, idealism is guilty of neglect that thought and knowledge are histories.

idealism

р. 159

thought and knowledge are histories

This theory, explicitly about thought as a condition of science, is actually a theory about nature. It involves attribution to nature of three defining characteristics. In the first place, it is implied that some natural events are endings whether enjoyed or obnoxious, which occur, apart from reflective choice and art, only casually, without control. In the second place, it implies that events, being events and not rigid and lumpy substances, are ongoing and hence as such unfinished, incomplete, indeterminate. Consequently they possess a possibility of being so managed and steered that ends may become fulfillments not just terminal, conclusions not just closings. Suspense, doubt, hypotheses, experiment with alternatives are exponents of this phase of nature. In the third place, regulation of ongoing and incomplete processes in behalf of selected consequences, implies that there are orders of sequence and coexistence involved; these orders or relations when ascertained are intellectual means which enable us to use events as concrete means of directing the course of affairs to forecast conclusions.

p. 160

These relations in themselves are hypothetical, and when isolated from application are subject-matter of mathematics Hence the *ultimate* objects of science are *guided* processes of change.

p. 162

. . . .

...Prejudice against the abstract, as something remote and technical, is often irrational; but there is sense in the conviction that in the abstract there is something lacking which should be recovered. The serious object to "applied" science lies in limitation of the application, as to private profit and class advantage.

Prejudice against the abstract

p. 16^3

.... There is superstitious awe reflected in the current estimate of science. If we could free ourselves from a somewhat abject emotion, it would be clear enough that what makes any proposition scientific is its power to yield understanding, insight,

superstitious awe of science

intellectual at-homeness, in connection with any existential state of affairs, by filling events with coherent and tested meanings.

...

Aside from mathematics, all knowledge is historic; chemistry, geology, physiology, as well as anthropology and those human events to which, arrogantly, we usually restrict the title of history. Only as science is seen to be fulfilled and brought to itself in intelligent management of historical processes in their continuity can man be envisaged as within nature, and not as a supernatural extrapolation. Just because nature is what it is, history is capable of being more truly known – understood, intellectually realized – than are mathematical and physical objects. Do what we can, there always remains something recondite and remote in the latter, until they are restored in the course of affairs from which they have been sequestrated. While the humanizing of science contributes to the life of humanity, it is even more required in behalf of science, in order that it may be intelligible, simple and clear; in order that it may have that correspondence with reality which true knowledge claims for itself.

knowledge is historic

humanizing of

16Nov96

5 Nature, Communication and Meaning

p. 166

Of all affairs, communication is the most wonderful. That things should be able to pass from the plane of external pushing and pulling to that of revealing themselves to man, and thereby to themselves; and that the fruit of communication should be participation, sharing, is a wonder by the side of which transsubstantiation pales.

fruit of communication ... participation

When communication occurs, all natural events are subject to reconsideration and revision; they are readapted to meet the requirements of conversation, whether it be public discourse or that preliminary discourse termed thinking. Events turn into objects, things with a meaning.

p. 167

.... Where communication exists, things in acquiring meaning, thereby acquire representatives, surrogates, signs and implicates, which are infinitely more amenable to management, more permanent and more accommodating, than events in their first estate.

things, meaning, signs, implicates

•••

In view of these increments and transformations, it is not surprising that meanings, under the name of forms and essences, have often been hailed as modes of Being beyond and above spatial and temporal existence ... nor that thought as their possession has been treated as a non-natural spiritual energy, disjoined from all that is empirical. Yet there is a natural bridge that joins the gap between existence and essence; namely communication, language, discourse.

communication, language, discourse

[cf. G. H. Mead, Habermas, TKH]

p. 168

... while they have discoursed so fluently about many topics [philosophers, even ... professed empiricists] have discoursed little about discourse itself.

...

Logos has been correctly identified with mind; but logos and hence mind was conceived supernaturally. Logic was thereby supposed to have its basis in what is beyond human conduct and relationships, and in consequence the separation of the physical and the rational, the actual and the ideal, received its traditional formulation.

p. 171

. . . .

.... Things conformed naturally and exactly to parts of speech

The resulting theory of substances, essential properties, accidental qualities and relations, and the identification of Being (by means of the copula "is") with the tenses of the verb, (so that the highest Being was, is now, and ever shall be ...) controlled the whole scheme of physics and metaphysics, which formed the philosophic tradition of Europe. It was a natural consequence of the insight that things, meanings, and words correspond.

p. 172 The insight was perverted by the notion that the correspondence of things and meanings is prior to discourse and social intercourse.

Thus ... the greatest single discovery of man ... became the source of an artificial physics of nature, the basis of a science, philosophy and theology in which the universe was an incarnate grammatical order constructed after the model of discourse.

The modern discovery of inner experience, of a realm of purely personal events that are always at the individual's command ... is also a great and liberating discovery. It implies a new worth and sense of dignity in human individuality.... It is the counterpart of what distinguishes modern science, experimental, hypothetical; a logic of discovery ...

p. 173

.... Failure to recognize that this world of inner experience is dependent upon an extension of language which is a social product and operation led to the subjectivistic, solipsistic and egotistic strain in modern thought. modern thinkers composed nature after the model of personal soliloquizing.

6 Nature, Mind and the Subject

p. 208

Personality, selfhood, subjectivity are eventual functions that emerge with complexly organized interactions, organic and social. Personal individuality has its basis and conditions in simpler events.

p. 219

... the whole history of science, art and morals proves that the mind that appears *in* individuals is not as such individual mind. The former is in itself a system of belief, recognitions, and ignorances, of acceptances and rejections, of expectancies and appraisals of meanings which have been instituted under the influence of custom and tradition.

mind *in*individuals not
individual mind

.... We bring to the simplest observation a complex apparatus of habits, of accepted meanings and techniques. Otherwise observation is the blankest of stares, and the natural object is a tale told by an idiot, full only of sound and fury.

p. 222

.... Let us admit the case of the conservative; if we once start thinking no one can guarantee where we shall come out, except that many objects, ends and institutions are surely doomed. Every thinker puts some portion of an apparently stable world in peril and no one can wholly predict what will emerge in its place.

p. 225-6

. . . .

.... Compte several times recurs to the idea that ... madness marks an excess of subjectivism ... that madness has to be construed historically and sociologically. Under primitive conditions all the larger ideas about nature are reveries constructed in the interest of emotions. Myths were fancies, but they were not insanities because they were the only reply to the challenge of nature which existing instrumentalities permitted. Assertion of similar ideas today is insanity, because available intellectual resources and agencies make possible and require radically different adjustments.... Inability to employ the methods of forming and checking beliefs which are available at a given time, whatever be the source of that inability, constitutes a disorientation.

Compte

myths

escape

p. 230

.... The road to freedom by escape into the inner life is no modern discovery; it was taken by savages, by the oppressed, by children, long before it was formulated in philosophical romanticism.

7 Nature, Life and Body-Mind

p. 255

. . .

.... Organization is an empirical trait of some events, no matter how speculative and dubious theories about it may be Organization is so characteristic of the nature of some events in their sequential linkages that no theory about it can be as speculative or absurd as those which ignore or deny its genuine existence.

organization

p. 258

... "mind" is an added property assumed by a feeling creature, when it reaches that organized interaction with other living creatures which is language, communication. Then the qualities of feeling become significant of objective differences in external things and of episodes past and to come. This state of things in which qualitatively different feelings are not just had but are significant of objective differences, is mind. Feelings are no longer just felt. They have and they make *sense*: record and prophesy.

"mind" is an added property

That is to say, differences in qualities (feelings) of acts when employed as indications of acts performed and to be performed and as signs of their consequences, mean something.

p. 278

. . . .

... traditional theories have separated life from nature, mind from organic life, and thereby created mysteries. Restore the connection, and the problem of how a mind can know an external world or even know that there is such a thing, is like the problem of how an animal eats things external to itself....

mysteries

A creature generated in a conjunctive union, dependent upon others ... for perpetuation of its being, and carrying in its own structure the organs and marks of its intimate connection with others will know other creatures if it knows itself.

p. 285

... body-mind simply designates what actually takes place when a living body is implicated in situations of discourse, communication and participation.

8 Existence, Ideas and Consciousness

p. 299

.... Meanings do not come into being without language, and language implies two selves involved in a conjoint or shared undertaking. Thus while its direct mechanism is found in the vocalizing and auditory apparatuses, this mechanism is in alliance with general organic behavior..... This alliance supplies language with the immediate qualitative "feel" that marks off signs immediately from one another in existence.

meanings, language

The same considerations define the "subconscious" of human thinking. Apart from language, from imputed and inferred meaning, we continually engage in an immense multitude of immediate organic selections, rejections, welcomings, expulsions, appropriations, withdrawals, shrinkings, expansions, elations and dejections, attacks, wardings off, of the most minute, vibratingly delicate nature. We are not aware of the qualities of many or most of these acts; we do not objectively distinguish and identify them. Yet they exist as feeling qualities, and have an enormous directive effect on our behavior. If for example, certain sensory qualities of which we are not cognitively aware cease to exist, we cannot stand or control our posture and movements. In a thoroughly normal organism, these "feelings" have an efficiency of operation which it is impossible for thought to match. Even our most highly intellectualized operations depend upon them as a "fringe" by which to guide our inferential movements. They give us our sense of rightness and wrongness, of what to select and emphasize and follow up, and what to drop...

subconscious

[Husserl, Habermas: "Lebenswelt"; Searle: "Background"] p. 300

.... Formulated discourse is mainly but a selected statement of what we wish to retain among all these incipient starts, following ups and breakings off.... The "reasoning" person is one who makes his "intuitions" more articulate, more deliverable in speech, as explicit sequence of initial premises, jointures, and conclusions.

formulated discourse

p. 300-1

habits

.... The subconscious of a civilized adult reflects all the habits he has acquired; that is to say, all the organic modifications he has undergone.... It is most reliable in just those activities with respect to which it is least spoken of, and least reliable with respect to those things where it is fashionable most to laud it.... It is surest to be wrong in connection with intimate matters of self-regulation in health, morals, social affairs – in matters most closely connected with basic needs and relationships. Where its use is popularly recommended it is most dangerous. To use feelings which are not the

expression of a rectitude of organic action, rectitude that in civilized or artificial conditions is acquired only by taking thought (taking thought is radically different to just "thinking"), is to act like an animal without having the structural facilities of animal life. It has the fascination of all easy surrender to fatality and may be eulogized as a return to nature, spontaneity, or to the quasi-divine. It has the charm of lazy and comfortable escape from responsibility; we die, but we die, like animals, upon the field, defeated and may hap disheartened, but without knowing it.

In a practical sense, here is the heart of the mind-body problem. Activities which develop, appropriate and enjoy meanings bear the same actualizing relation to psycho-physical affairs that the latter bear to physical characters.

p. 303

. . . .

While on the psycho-physical level, consciousness denotes the totality of actualized immediate qualitative differences, or "feelings," it denotes, upon the plane of mind, actualized apprehensions of meanings, that is, ideas. There is thus an obvious difference between mind and consciousness; meaning and an idea. Mind denotes the whole system of meanings as they are embodied in the workings of organic life; consciousness in a being with language denotes awareness or perception of meanings; it is the perception of actual events, whether past, contemporary or future, in their meanings, the having of actual ideas. The greater part of mind is only implicit in any conscious act or state; the field of mind – of operative meanings – is enormously wider than that of consciousness. Mind is contextual and persistent; consciousness is focal and transitive. Mind is, so to speak, structural, substantial; a constant background and foreground; perceptive consciousness is process, a series of heres and nows. Mind is a constant luminosity; consciousness intermittent, a series of flashed of varying intensities. Consciousness is, as it were, the occasional interception of messages continually transmitted, mechanical receiving device selects a few of the vibrations with which the air is filled and renders them audible.

consciousness

meanings, ideas

perceptive consciousness is process,

p. 304 The nature of awareness of meanings cannot be conveyed in speech. As with other immediate qualitative existences, words can only hint, point; the indication succeeding when it evokes an actual experience of the thing in question. Such words as apparency, conspicuousness, outstandingness, vividness, clearness, including of course their opposites vague, dim, confused, may assist the evocation. To denote the characteristics of mind a thoroughly different set of names must be used: organization, order, coherence. The relation of mind to consciousness may be partially suggested by saying that while mind as a system of meanings is subject to disorganization, disequilibration, perturbation, there is no sense in referring to a particular state of awareness in its immediacy as either organized or disturbed. An idea is just what it is when it occurs Emotional conditions do not occur as emotions, intrinsically defined as such; they occur as "tertiary" qualities of objects.

p. 305

... meanings existentially occurring are ideas.

p. 306

.... Indeed, the use of such words as context and background, fringe, etc., suggests something too external The larger sstem of meaning suffuses, interpenetrates, colors what is now and here uppermost; it gives them sense, feeling, as distinct from signification.

ideas

p. 307

It is impossible to tell what immediate consciousness is – not because there is some mystery in or behind it, but for the same reason that we cannot tell just what sweet or red immediately is: it is something had, not communicated and known. But words, as means of directing action, may evoke a situation in which the thing in question is had in some particularly illuminating way.

p.308

.... Consciousness, an idea, is that phase of a system of meanings which at a given time is undergoing re-direction, transitive transformation.... Consciousness is the meaning of events in course of remaking; its "cause" is only the fact that this is one of the ways in which nature goes on.

•••

There is a counterpart realist doctrine, according to which consciousness is like the eye running over a field of ready-make objects, or a light which illuminates now this and now that portion of a given field.... It postulates, even though only implicitly, a preestablished harmony of the knower and things known, passing over the fact that such harmony is always an attained outcome of prior inferences and investigations.....

p. 309

It is hard to believe that such an amiable and optimistic view of the nature of mind could have obtained currency, had it not been for a theology according to which God is perfect mind and man is created in the image of his maker Even so, however, it could hardly have persisted when science displaced theology, had not science provided a number of cases which satisfy the requirement of the theory, and thereby given it a kind of empirical content and basis. That is, the development of science does present (a) the rise of cognitional interest to a point of prestige, and (b) it supplies eventually many cases of valid cognitive perceptions.

theology

p. 310

.... Then when the existence of error, mistake, dreams, hallucinations, etc. is recognized, these things are treated as deviations and exceptions from the normal....

error, mistake, dreams,

... empirical facts indicate that not error but truth is the exception, the thing to be accounted for, and that the attainment of truth is the outcome of the development of complex and elaborate methods of searching, methods that while congenial to some men in some respects, in many respects go against the human grain, so that they are adopted only after long discipline in a school of hard knocks.... Empirically ... the characteristic thing about perceptions in their natural estate, apart from subjection to an art of knowing, is their irrelevance to both truth and error; they exist for the most part in another dimension, whose nature may be suggested by reference to imagination, fancy, reverie, affection, love and hate, desire, happiness and misery. This fact, more that the error-problem, proves the artificial character of the spectator, search-light, notion of consciousness.

not error but truth is the exception, the thing to be accounted for

perceptions

p. 314

. . .

.... In completely integrated function there is no room for distinction between things signifying and things signified.... The readier a response, the less consciousness, meaning, thinking it permits; division introduces mental confusion, but also, in need for redirection, opportunity for observation, recollection, anticipation.

There is then an empirical truth in the common opposition between theory and practice, between the contemplative, reflective type and the executive type.... a contrast between two modes of practice. One is the ... act-first and think-afterwards mode, to which events may yield as they give way to any strong force. The other mode is wary, observant, sensitive to slight hints and intimations....

theory and practice

p. 318

. . . .

.... Objects are precisely what we are aware of. For objects are events with meanings; tables, the milky way ... electrons, ghosts, centaurs ... and all the infinitely multifarious subject-matter of discourse designable by common nouns, verbs and their qualifiers.

Objects are precisely what we are aware of

p. 319

... the present thesis sticks to the common-sense belief that universals, relations, meanings, are of and about existences, not their exhaustive ingredients. The same existential events are capable of an infinite number of meanings.... Thus ... "paper" is "something to be written upon"... something to start a fire with; something like snow... property in the legal sense. There is no conceivable universe of discourse in which the thing may not figure having in each its own characteristic meaning.

p. 326

.... Philosophy has only to state, to make explicit, the difference between events which are challenges to thought and events which have met the challenge and hence possess meaning. It has only to note that bare occurrence in the way of having, being, or undergoing is the provocation and invitation to thought – seeking and finding unapparent connections, so that thinking terminates when an object is present: namely, when a challenging event is endowed with stable meanings through relationship to something extrinsic but connected.

... sensations are but one class of meanings.

p. 327

sensations are but one class of meanings

.... Sensa are the class of irreducible meanings which are employed in verifying and correcting other meanings..... Recognition, identified and distinguished meaning, is an indispensable condition of effective experience. It is a prerequisite of successful practise....

p. 329

.... Acquaintance is empirically distinguished from knowing about a thing, and from knowing that a thing is thus and so.... it involves a judgment as to what the object of acquaintance wil do in connection with other events....

Acquaintance

To be acquainted with anything is to have the kind of expectancy of its consequences which constitutes an immediate readiness to act, an adequate preparatory adjustment to whatever the thing in question may do. To know about it is to have a kind of knowledge which does not pass into direct response until some further term has been supplied.

p. 330

To assert that knowledge is classification is to assert in effect that kind,

knowledge is classification character, has overlaid and over ridden bare occurrence and existence.... These features, character, kind, sort, universal, likeness, fall within the universe of meaning. Hence the theories which make them constitutive of knowledge acknowledge that having meanings is a prerequisite for knowing.

p. 336

. . . .

... a stimulus is not an object of perception, for stimulus is correlative to response, and is undetermined except as response occurs.... we are aware of the stimuli only in terms of our response to them and of the consequences of this response.

p. 338

. . . .

... the word "perception" may be limited to designate awareness of objects contemporaneously affecting the bodily organs.... sensory-perceptual meanings are specifically discriminated objects of awareness; the discrimination takes place in the course of inquiry into causative conditions and consequences; the ultimate need for the inquiry is found in the necessity of discovering what is to be done, or of developing a response suitably adapted to the requirements of a situation.

"perception"

p. 339-40

. . . .

... the introspective doctrine ... as in the Cartesian-Spinozistic logical realism in which self-evidency, clearness, adequacy, or truth, are imputed to some conceptual meanings or ideas; or ... the more usual form of assigning to things appearing in the field of consciousness intrinsic properties which may be read off by direct inspection is the last desperate stand and fortress of the classic doctrine that knowledge is immediate grasp, intuition, envisagement, possession.,

p. 342

. . . .

...the objects of revery-consciousness are just as much cases of perceived meanings or ideas of events as are those of sensory perceptual consciousness. Only – they are not as good objects with respect to direction of subsequent conduct, including the conduct of knowledge.

p. 345-6

... the working logic of human action; the first, the way of objective transformation, is the method of action in the arts and sciences; the second, of action that is fanciful, "wish-fulfilling," romantic, myth-making.

the method of action vs. romantic myth-making

The immense difference between the two modes of action has had to be learned. There is no original and intrinsic difference in the respective modes of consciousness accompanying the two kinds of acts. In some matters, the lesson is readily and quickly learned. Such matters constitute the objects of usual every-day sense-perception, the objects of common-sense. Certain organic integrations have to occur if life is to continue.... Meanings and ideas connected with these organic-environmental adjustments are substantially sound as far as adjustments are successfully made ... or life cease. Such gross ideas as a world of things and persons external to our personal wishes and fancies ... are so recurrently and emphatically taught that they are never sincerely doubted.... They thus form a kind of privileged domain, which, although an island in a sea of ideas where ground is not readily touched, has been taken to form

meanings and ideas sound as far as adjustments are successfully made the original and inherent constitution of consciousness. In consequence ... a specious realistic theory which takes the island for a solid and complete continent.

p. 347

. . . .

Gradually the technique involved in making ordinary organic-environmental adjustments is discovered, and becomes capable of extension to cases where fancy had previously reigned. A larger and larger field of ideas becomes susceptible of analytic objective reference, with the promise of approximate validity. The secret of this technique lies in control of the ways in which the organism participates in the course of events. In the case of simple needs and simple environments, existing organic structures practically enforce correct participation; the result is so-called instinctive action. Within this range, modifications undergone by the organism form in the main effective habits. But organic preparation for varied situation having many factors and wide-reaching consequences is not so easily attained. Effective participation here depends upon the use of extra-organic conditions, which supplement structural agencies; namely, tools and other persons, by means of language spoken and recorded. Thus the ultimate buttress of the soundness of all but the simplest ideas consists in the cumulative objective appliances and arts of the community, not in anything found in "consciousness" itself or within the organism.

effective habits.

9 Experience, Nature and Art

p. 254

10 Experience, Value and Criticism

p. 394-439