

# OBJECTS AND SUBJECTS<sup>1</sup>

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... Τὸ παρὸν ἐκάστῳ πάθος, ἐξ ὧν αἱ αἰσθήσεις καὶ αἱ κατὰ ταύτας δόξαι γίνονται, ... *Theaetetus*, 179c<sup>2</sup>

§ 1. *Prefatory*.—When Descartes, Locke, and Hume undertake the analysis of experience, they utilize those elements in their own experience which lie clear and distinct, fit for the exactitude of intellectual discourse. It is tacitly assumed, except by Plato, that the more fundamental factors will ever lend themselves for discrimination with peculiar clarity. This assumption is here directly challenged.

§ 2. *Structure of Experience*.—No topic has suffered more from this tendency of philosophers than their account of the object-subject structure of experience. In the first place, this structure has been identified with the bare relation of knower to known. The subject is the knower, the object is the known. Thus, with this interpretation, the object-subject relation is the known-knower relation. It then follows that the more clearly any instance of this relation stands out for discrimination, the more safely we can utilize it for the interpretation of the status of experience in the universe of things. Hence Descartes's appeal to clarity and distinctness.

This deduction presupposes that the subject-object relation is the fundamental structural pattern of experience. I agree with this presupposition, but not in the sense in which subject-object is identified with knower-known. I contend that the notion of mere knowledge is a high abstraction, and that conscious discrimination itself is a variable factor only present in the more elaborate examples of occasions of experience. The basis of experience is emotional. Stated more generally, the basic fact is the rise of an affective tone originating from things whose relevance is given.

§ 3. *Phraseology*.—Thus the Quaker word “concern,” divested of any suggestion of knowledge, is more fitted to express this fundamental structure. The occasion as subject has a “concern” for the object. And the “concern” at once places the object as a component in the experience of the subject, with an affective tone drawn from this object and directed towards it. With this interpretation the subject-object relation is the fundamental structure of experience.

Quaker usages of language are not widely spread. Also, each phraseology leads to a crop of misunderstandings. The subject-object relation can be conceived as Recipient and Provoker, where the fact provoked is an affective tone

about the status of the provoker in the provoked experience. Also the total provoked occasion is a totality involving many such examples of provocation.

§4. *Prehensions*.—A more formal explanation is as follows. An occasion of experience is an activity, analysable into modes of functioning, which jointly constitute its process of becoming. Each mode is analysable into the total experience as active subject, and into the thing or object with which the special activity is concerned. This thing is a datum, that is to say, is describable without reference to its entertainment in that occasion. An object is anything performing this function of a datum provoking some special activity of the occasion in question. Thus “subject” and “object” are relative terms. An occasion is a subject in respect to its special activity concerning an object; and anything is an object in respect to its provocation of some special activity within a subject. Such a mode of activity is termed a “prehension.” Thus, a prehension involves three factors. There is the occasion of experience within which the prehension is a detail of activity; there is the datum whose relevance provokes the origination of this prehension; this datum is the prehended object; there is the subjective form, which is the affective tone determining the effectiveness of that prehension in that occasion of experience. How the experience constitutes itself depends on its complex of subjective forms.

§5. *Individuality*.—The individual immediacy of an occasion is the final unity of subjective form, which is the occasion as an absolute reality. This immediacy is its moment of sheer individuality, bounded on either side by essential relativity. The occasion arises from relevant objects, and perishes into the status of an object for other occasions. But it enjoys its decisive moment of absolute self-attainment as emotional unity. As used here the words “individual” and “atom” have the same meaning, that they apply to composite things with an absolute reality which their components lack. These words properly apply to an actual entity in its immediacy of self-attainment when it stands out as for itself alone, with its own affective self-enjoyment. The term “monad” also expresses this essential unity at the decisive moment, which stands between its birth and its perishing. The creativity of the world is the throbbing emotion of the past hurling itself into a new transcendent fact. It is the flying dart, of which Lucretius [Carus] speaks, hurled beyond the bounds of the world.

§6. *Knowledge*.—All knowledge is conscious discrimination of objects experienced. But this conscious discrimination, which is knowledge, is nothing more than an additional factor in the subjective form of the interplay of subject with object. This interplay is the stuff constituting those individual things which make up the sole reality of the Universe. These individual things are the individual occasions of experience, the actual entities.

But we do not so easily get rid of knowledge. After all, it is knowledge that philosophers seek. And all knowledge is derived from, and verified by, direct intuitive observation. I accept this axiom of empiricism as stated in this general form. The question then arises how the structure of experience outlined above is

directly observed. In answering this challenge I remind myself of the old advice that the doctrines which best repay critical examination are those which for the longest period have remained unquestioned.

§7. *Sense perception*.—The particular age long group of doctrines which I have in mind is: (1) that all perception is by the mediation of our bodily sense-organs, such as eyes, palates, noses, ears, and the diffused bodily organization furnishing touches, aches, and other bodily sensations; (2) that all *percepta* are bare *sensa*, in patterned connections, given in the immediate present; (3) that our experience of a social world is an interpretative reaction wholly derivative from this perception; (4) that our emotional and purposive experience is a reflective reaction derived from the original perception, and intertwined with the interpretative reaction and partly shaping it. Thus the two reactions are different aspects of one process, involving interpretative, emotional, and purposive factors. Of course, we are all aware that there are powerful schools of philosophy which explicitly reject this doctrine. Yet I cannot persuade myself that this rejection has been taken seriously by writers belonging to the schools in question. When the direct question as to things perceived arises, it seems to me that the answer is always returned in terms of *sensa* perceived.

§8. *Perceptive Functions*.—In the examination of the sensationalist doctrine, the first question to be asked concerns the general definition of what we mean by those functions of experience which we term “perceptions.” If we define them as those experiential functions which arise directly from the stimulation of the various bodily sense-organs, then argument ceases. The traditional doctrine then becomes a mere matter of definition of the use of the word “perception.” Indeed, having regard to longstanding usage, I am inclined to agree that it may be advisable for philosophers to confine the word “perception” to this limited meaning. But the point on which I am insisting is that this meaning *is* limited, and that there is a wider meaning with which this limited use of the term “perception” has been tacitly identified.

§9. *Objects*.—The process of experiencing is constituted by the reception of entities, whose being is antecedent to that process, into the complex fact which is that process itself. These antecedent entities, thus received as factors into the process of experiencing, are termed “objects” for that experiential occasion. Thus primarily the term “object” expresses the relation of the entity, thus denoted, to one or more occasions of experiencing. Two conditions must be fulfilled in order that an entity may function as an object in a process of experiencing: (1) the entity must be *antecedent*, and (2) the entity must be experienced in virtue of its antecedence; it must be *given*. Thus an object must be a thing received, and must not be either a *mode* of reception or a thing *generated* in that occasion. Thus the process of experiencing is constituted by the reception of objects into the unity of that complex occasion which is the process itself. The process creates itself, but it does not create the objects which it receives as factors in its own nature.

“Objects” for an occasion can also be termed the “data” for that occasion. The choice of terms entirely depends on the metaphor which you prefer. One word carries the literal meaning of “lying in the way of,” and the other word carries the literal meaning of “being given to.” But both words suffer from the defect of suggesting that an occasion of experiencing arises out of a passive situation which is a mere welter of many data.

§10. *Creativity*.—The exact contrary is the case. The initial situation includes a factor of activity which is the reason for the origin of that occasion of experience. This factor of activity is what I have called “Creativity.” The initial situation with its creativity can be termed the “initial phase of the new occasion.” It can equally well be termed the “actual world” relative to that occasion. It has a certain unity of its own, expressive of its capacity for providing the objects requisite for a new occasion, and expressive of its conjoint activity whereby it is essentially the primary phase of a new occasion. It can thus be termed a “real potentiality.” The “potentiality” refers to the passive capacity, the term “real” refers to the creative activity, where the Platonic definition of “real” in the *Sophist* is referred to. This basic situation, this actual world, this primary phase, this real potentiality—however you characterize it—as a whole is active with its inherent creativity, but in its details it provides the passive objects which derive their activity from the creativity of the whole. The creativity is the actualization of potentiality, and the process of actualization is an occasion of experiencing. Thus viewed in abstraction objects are passive, but viewed in conjunction they carry the creativity which drives the world. The process of creation is the form of unity of the Universe.

§11. *Perception*.—In the preceding sections, the discovery of objects as factors in experience was explained. The discussion was phrased in terms of an ontology which goes beyond the immediate purpose, although the status of objects cannot be understood in the absence of some such ontology explaining their function in experience, that is to say, explaining why an occasion of experience by reason of its nature requires objects.

The objects are the factors in experience which function so as to express that that occasion originates by including a transcendent universe of other things. Thus it belongs to the essence of each occasion of experience that it is concerned with an otherness transcending itself. The occasion is one among others, and including the others which it is among. Consciousness is an emphasis upon a selection of these objects. Thus perception is consciousness analysed in respect to those objects selected for this emphasis. Consciousness is the acme of emphasis.

It is evident that this definition of perception is wider than the narrow definition based upon sense perception, *sensa*, and the bodily sense-organs.

§12. *Non-Sensuous Perception*.—This wider definition of perception can be of no importance unless we can detect occasions of experience exhibiting modes of functioning which fall within its wider scope. If we discover such in-

stances of non-sensuous perception, then the tacit identification of perception with sense perception must be a fatal error barring the advance of systematic metaphysics.

Our first step must involve the clear recognition of the limitations inherent in the scope of sense perception. This special mode of functioning essentially exhibits *percepta* as *here, now, immediate, and discrete*. Every impression of sensation is a distinct existence, declares Hume; and there can be no reasonable doubt of this doctrine. But even Hume clothes each impression with force and liveliness. It must be distinctly understood that no prehension, even of bare *sensa*, can be divested of its affective tone, that is to say, of its character of a "concern" in the Quaker sense. Concernedness is of the essence of perception.

Gaze at a patch of red. In itself as an object, and apart from other factors of concern, this patch of red, as the mere object of that present act of perception, is silent as to the past or the future. How it originates, how it will vanish, whether indeed there was a past, and whether there will be a future, are not disclosed by its own nature. No material for the interpretation of *sensa* is provided by the *sensa* themselves, as they stand starkly, barely, present and immediate. We *do* interpret them; but no thanks for the feat is due to them. The epistemologies of the last two hundred years are employed in the tacit introduction of alien considerations by the uncritical use of current forms of speech. A copious use of simple literary forms can thus provide a philosophy delightful to read, easy to understand, and entirely fallacious. Yet the usages of language do prove that our habitual interpretations of these barren *sensa* are in the main satisfying to common sense, though in particular instances liable to error. But the evidence on which these interpretations are based is entirely drawn from the vast background and foreground of non-sensuous perception with which sense perception is fused, and without which it can never be. We can discern no clean-cut sense perception wholly concerned with present fact.

In human experience, the most compelling example of non-sensuous perception is our knowledge of our own immediate past. I am not referring to our memories of a day past, or of an hour past, or of a minute past. Such memories are blurred and confused by the intervening occasions of our personal existence. But our immediate past is constituted by that occasion, or by that group of fused occasions, which enters into experience devoid of any perceptible medium intervening between it and the present immediate fact. Roughly speaking, it is that portion of our past lying between a tenth of a second and half a second ago. It is gone, and yet it is here. It is our indubitable self, the foundation of our present existence. Yet the present occasion while claiming self-identity, while sharing the very nature of the bygone occasion in all its living activities, nevertheless is engaged in modifying it, in adjusting it to *other* influences, in completing it with *other* values, in deflecting it to *other* purposes. The present moment is constituted by the influx of *the other* into that self-identity which is the continued life of the immediate past within the immediacy of the present.

§13. *Illustration.*—Consider a reasonably rapid speaker enunciating the proper name “United States.” There are four syllables here. When the third syllable is reached, probably the first is in the immediate past; and certainly during the word “States” the first syllable of the phrase lies beyond the immediacy of the present. Consider the speaker’s own occasions of existence. Each occasion achieves for him the immediate sense-presentation of sounds, the earlier syllables in the earlier occasions, the word “States” in the final occasion. As mere sensuous perception, Hume is right in saying that the sound “United” as a mere *sensum* has nothing in its nature referent to the sound “States,” yet the speaker is carried from “United” to “States,” and the two conjointly live in the present, by the energizing of the past occasion as it claims its self-identical existence as a living issue in the present. The immediate past as surviving to be again lived through in the present is the palmary instance of non-sensuous perception.

The Humian explanation, involving the “association of ideas,” has its importance for this topic. But it is not to the point for this example. The speaker, a citizen of the United States and therefore dominated by an immense familiarity with that phrase, may in fact have been enunciating the phrase “United Fruit Company”—a corporation which, for all its importance, he may not have heard of till half a minute earlier. In his experience the relation of the later to the earlier parts of this phrase is entirely the same as that described above for the phrase “United States.” In this latter example it is to be noted that while association would have led him to “States,” the fact of the energizing of the immediate past compelled him to conjoin “Fruit” in the immediacy of the present. He uttered the word “United” with the non-sensuous anticipation of an immediate future with the *sensum* “Fruit,” and he then uttered the word “Fruit” with the non-sensuous perception of the immediate past with the *sensum* “United.” But, unfamiliar as he was with the United Fruit Company, he had no association connecting the various words in the phrase “United Fruit Company”; while, patriot as he was, the orator had the strongest association connecting the words “United” and “States.” Perhaps indeed he was the founder of the Company, and also invented the name. He then uttered the mere sounds “United Fruit Company” for the first time in the history of the English language. There could not have been the vestige of an association to help him along. The final occasion of his experience which drove his body to the utterance of the sound “Company” is only explicable by his concern with the earlier occasions with their subjective forms of intention to procure the utterance of the complete phrase. Also, in so far as there was consciousness, there was direct observation of the past with its intention finding its completion in the present fact. This is an instance of direct intuitive observation which is incapable of reduction to the sensationalist formula. Such observations have not the clear sharp-cut precision of sense perception. But surely there can be no doubt about them. For instance, if the speaker had been interrupted after the words “United Fruit,” he might have resumed his speech with the words “I meant to add the word Company.” Thus during the interrup-

tion, the past was energizing in his experience as carrying in itself an unfulfilled intention.

§14. *Conformation of Feeling.*—Another point emerges in this explanation, namely, the doctrine of the continuity of nature. This doctrine balances and limits the doctrine of the absolute individuality of each occasion of experience. There is a continuity between the subjective form of the immediate past occasion and the subjective form of its primary prehension in the origination of the new occasion. In the process of synthesis of the many basic prehensions modifications enter. But the subjective forms of the immediate past are continuous with those of the present. I will term this doctrine of continuity, the “Doctrine of Conformation of Feeling.”

Suppose that for some period of time some circumstance of his life has aroused anger in a man. How does he now know that a quarter of a second ago he was angry? Of course, he remembers it; we all know that. But I am enquiring about this very curious fact of memory, and have chosen an overwhelmingly vivid instance. The mere word “memory” explains nothing. The first phase in the immediacy of the new occasion is that of the conformation of feelings. The feeling as enjoyed by the past occasion is present in the new occasion as datum felt, with a subjective form conformal to that of the datum. Thus if A be the past occasion, D the datum felt by A with subjective form describable as A angry, then this feeling—namely, A feeling D with subjective form of anger—is initially felt by the new occasion B with the same subjective form of anger. The anger is continuous throughout the successive occasions of experience. This continuity of subjective form is the initial sympathy of B for A. It is the primary ground for the continuity of nature.

Let us elaborate the consideration of the angry man. His anger is the subjective form of his feeling some datum D. A quarter of a second later he is, consciously, or unconsciously, embodying his past as a datum in the present, and maintaining in the present the anger which is a datum from the past. In so far as that feeling has fallen within the illumination of consciousness, he enjoys a non-sensuous perception of the past emotion. He enjoys this emotion both objectively, as belonging to the past, and also formally as continued in the present. This continuation is the continuity of nature. I have labored this point, because traditional doctrines involve its denial.

Thus non-sensuous perception is one aspect of the continuity of nature.

§15. *Hume’s Doctrine of Custom.*—Hume appeals to a doctrine of force and liveliness as an essential factor in an impression of sensation. This doctrine is nothing but a special case of the doctrine of subjective forms. Again he holds that the force and liveliness of one occasion of experience enter into the character of succeeding occasions. The whole doctrine of “custom” depends on this assumption. If the occasions be entirely separate, as Hume contends, this transition of character is without any basis in the nature of things. What Hume, in his

appeal to memory, is really doing is to appeal to an observed immanence of the past in the future, involving a continuity of subjective form.

With this addition, every argument of Part 3 of Hume's *Treatise*<sup>3</sup> can be accepted. But the conclusion follows that there is an observed relation of causation between such occasions. The general character of this observed relation explains at once memory and personal identity. They are all different aspects of the doctrine of the immanence of occasions of experience. The additional conclusion can also be derived, that in so far as we apply notions of causation to the understanding of events in nature, we must conceive these events under the general notions which apply to occasions of experience. For we can only understand causation in terms of our observations of these occasions. This appeal to Hume has the sole purpose of illustrating the common-sense obviousness of the present thesis.

§16. *The Flux of Energy*.—An occasion of experience which includes a human mentality is an extreme instance, at one end of the scale, of those happenings which constitute nature. As yet, this discussion has fixed attention upon this extreme. But any doctrine which refuses to place human experience outside nature must find in descriptions of human experience factors which also enter into the descriptions of less specialized natural occurrences. If there be no such factors, then the doctrine of human experience as a fact within nature is mere bluff, founded upon vague phrases whose sole merit is a comforting familiarity. We should either admit dualism, at least as a provisional doctrine, or we should point out the identical elements connecting human experience with physical science.

The science of physics conceives a natural occasion as a locus of energy. Whatever else that occasion may be, it is an individual fact harboring that energy. The words "electron," "proton," "photon," "wave-motion," "velocity," "hard" and "soft radiation," "chemical elements," "matter," "empty space," "temperature," "degradation of energy," all point to the fact that physical science recognizes qualitative differences between occasions in respect to the way in which each occasion entertains its energy.

These differences are entirely constituted by the flux of energy, that is to say, by the way in which the occasions in question have inherited their energy from the past of nature, and in which they are about to transmit their energy to the future. The discussion of the Poynting Flux of Energy is one of the most fascinating chapters of Electrodynamics. Forty-seven years ago, when a young graduate student, I first heard of it in a lecture delivered by Sir J[oseph] J[ohn] Thomson. It was then a new discovery recently published by [John Henry] Poynting. But its father was the great [James] Clerk-Maxwell who had expounded all the requisite principles. The sole conclusion with which we are concerned is that energy has recognizable paths through time and space. Energy passes from particular occasion to particular occasion. At each point there is a flux, with a quantitative flow and a definite direction.

This is a conception of physical nature in terms of continuity. In fact, the concept of continuity was dominant in Clerk-Maxwell's thought. But the alter-

native concept of distinguishable individualities has again emerged into importance in the more recent physics. Electrons and protons and photons are unit charges of electricity; also there are the quanta of the flux of energy. These contrasted aspects of nature, continuity and atomicity, have a long history in European thought, reaching back to the origin of science among the Greeks. The more probable conclusion is that neither can be dispensed with, and that we are only witnessing that modern phase of the contrast which is relevant to the present stage of science.

§17. *Mind and Nature Compared.*—The doctrine of human experience which I have outlined above, also for its own purposes preserves a doctrine of distinguishable individualities which are the separate occasions of experience, and a doctrine of continuity expressed by the identity of subjective form inherited conformally from one occasion to the other. The physical flux corresponds to the conformal inheritance at the base of each occasion of experience. This inheritance, in spite of its continuity of subjective form, is nevertheless an inheritance from definite individual occasions. Thus, if the analogy is to hold, in the account of the general system of relations binding the past to the present, we should expect a doctrine of quanta, where the individualities of the occasions are relevant, and a doctrine of continuity where the conformal transference of subjective form is the dominating fact.

The notion of physical energy, which is at the base of physics, must then be conceived as an abstraction from the complex energy, emotional and purposeful, inherent in the subjective form of the final synthesis in which each occasion completes itself. It is the total vigor of each activity of experience. The mere phrase that “physical science is an abstraction,” is a confession of philosophic failure. It is the business of rational thought to describe the more concrete fact from which that abstraction is derivable.

§18. *Personality.*—In our account of human experience we have attenuated human personality into a genetic relation between occasions of human experience. Yet personal unity is an inescapable fact. The Platonic and Christian doctrines of the Soul, the Epicurean doctrine of a Concilium of subtle atoms, the Cartesian doctrine of Thinking Substance, the Humanitarian doctrine of the Rights of man, the general Common Sense of civilized mankind—these doctrines between them dominate the whole span of Western thought. Evidently there is a fact to be accounted for. Any philosophy must provide some doctrine of personal identity. In some sense there is a unity in the life of each man, from birth to death. The two modern philosophers who most consistently reject the notion of a self-identical Soul-Substance are Hume and William James. But the problem remains for them, as it does for the philosophy of organism, to provide an adequate account of this undoubted personal unity, maintaining itself amidst the welter of circumstance.

§19. *Plato's Receptacle.*—In mathematical studies, where there is a problem to be solved it is a sound method to generalize, so as to divest the problem

of details irrelevant to the solution. Let us therefore give a general description of this personal unity, divesting it of minor details of humanity. For this purpose it is impossible to improve upon a passage from one of Plato's dialogues. I summarize it with the insertion of such terms as "personal unity," "events," "experience," and "personal identity," for two or three of its own phrases.

In addition to the notions of the welter of events and of the forms which they illustrate, we require a third term, "personal unity." It is a perplexed and obscure concept. We must conceive it the receptacle, the foster-mother as I might say, of the becoming of our occasions of experience. This personal identity is the thing which receives all occasions of the man's existence. It is there as a natural matrix for all transitions of life, and is changed and variously figured by the things that enter it; so that it differs in its character at different times. Since it receives all manner of experiences into its own unity, it must itself be bare of all forms. We shall not be far wrong if we describe it as invisible, formless, and all-receptive. It is a locus which persists, and provides an emplacement for all the occasions of experience. That which happens in it is conditioned by the compulsion of its own past, and by the persuasion of its immanent ideals.

You will have recognized that in this description I have been adapting from Plato's *Timaeus*,<sup>4</sup> with the slightest of changes. But this is not Plato's description of the Soul. It is his doctrine of the Receptacle (*ὑποδοχή*) or Locus (*χώρα*) whose sole function is the imposition of a unity upon the events of Nature. These events are together by reason of their community of locus, and they obtain their actuality by reason of emplacement within this community.

§20. *Immanence*.—This is at once the doctrine of the unity of nature, and of the unity of each human life. The conclusion follows that our consciousness of the self-identity pervading our life-thread of occasions, is nothing other than knowledge of a special strand of unity within the general unity of nature. It is a locus within the whole, marked out by its own peculiarities, but otherwise exhibiting the general principle which guides the constitution of the whole. This general principle is the object-to-subject structure of experience. It can be otherwise stated as the vector-structure of nature. Or otherwise, it can be conceived as the doctrine of the immanence of the past energizing in the present.

This doctrine of immanence is practically that doctrine adumbrated by the Hellenistic Christian theologians of Egypt. But they applied the doctrine only to the relation of God to the World, and not to all actualities.

§21. *Space and Time*.—The notion of Space-Time represents a compromise between Plato's basic Receptacle, imposing no forms, and the Actual World imposing its own variety of forms. This imposition of forms is subject to the perspective elimination required by incompatibilities of affective tone. Ge-

ometry is the doctrine of loci of intermediaries imposing perspective in the process of inheritance. In geometry this doctrine is restricted to its barest generalities of coördination prevailing for this epoch of the Universe. These generalities solely concern the complex of serial relations persistently illustrated in the connection of events.

Our perception of this geometrical order of the Universe brings with it the denial of the restriction of inheritance to mere personal order. For personal order means one-dimensional serial order. And space is many-dimensional. Spatiality involves separation by reason of the diversity of intermediate occasions, and also it involves connection by reason of the immanence involved in the derivation of present from past. There is thus an analogy between the transference of energy from particular occasion to particular occasion in physical nature and the transference of affective tone, with its emotional energy, from one occasion to another in any human personality. The object-to-subject structure of human experience is reproduced in physical nature by this vector relation of particular to particular. It was the defect of the Greek analysis of generation that it conceived it in terms of the bare incoming of novel abstract form. This ancient analysis failed to grasp the real operation of the antecedent particulars imposing themselves on the novel particular in process of creation. Thus the geometry exemplified in fact was disjoined from their account of the generation of fact.

§22. *The Human Body*.—But this analogy of physical nature to human experience is limited by the fact of the linear seriality of human occasions within any one personality and of the many-dimensional seriality of the occasions in physical Space-Time.

In order to prove that this discrepancy is only superficial, it now remains for discussion whether the human experience of direct inheritance provides any analogy to this many-dimensional character of space. If human occasions of experience essentially inherit in one-dimensional personal order, there is a gap between human occasions and the physical occasions of nature.

The peculiar status of the human body at once presents itself as negating this notion of strict personal order for human inheritance. Our dominant inheritance from our immediately past occasion is broken into by innumerable inheritances through other avenues. Sensitive nerves, the functionings of our viscera, disturbances in the composition of our blood, break in upon the dominant line of inheritance. In this way, emotions, hopes, fears, inhibitions, sense perceptions arise, which physiologists confidently ascribe to the bodily functionings. So intimately obvious is this bodily inheritance that common speech does not discriminate the human body from the human person. Soul and body are fused together. Also this common identification has survived the scientific investigation of physiologists, who are apt to see more body than soul in human beings.

But the human body is indubitably a complex of occasions which are part of spatial nature. It is a set of occasions miraculously coördinated so as to pour its inheritance into various regions within the brain. There is thus every reason

to believe that our sense of unity with the body has the same origin as our sense of unity with our immediate past of personal experience. It is another case of non-sensuous perception, only now devoid of the strict personal order.

But physiologists and physicists are equally agreed that the body inherits physical conditions from the physical environment according to the physical laws. There is thus a general continuity between human experience and physical occasions. The elaboration of such a continuity is one most obvious task for philosophy.

§23. *Dualism*.—This discussion has begged your attention to a complex argument. The topic is a large one, and the restrictions of time have made it impossible for the argument to rest upon the way. I will conclude by drawing attention to a general question which is relevant.

Is this discussion to be looked upon as another example of *The Revolt against Dualism*? We have all read with high appreciation Professor [Arthur Oncken] Lovejoy's brilliant book in criticism of this revolt.<sup>5</sup> Now superficially the position which I have here put forward is certainly an instance of the revolt which he criticizes. But in another sense, I have endeavored to put forward a defence of dualism, differently interpreted. Plato, Descartes, Locke, prepared the way for Hume; and Kant followed upon Hume. The point of this address is to show an alternative line of thought which evades Hume's deduction from philosophical tradition, and at the same time preserves the general trend of thought received from his three great predecessors. The dualism in the later Platonic dialogues between the Platonic "souls" and the Platonic "physical" nature, the dualism between the Cartesian "thinking substances" and the Cartesian "extended substances," the dualism between the Lockian "human understanding" and the Lockian "external things" described for him by Galileo and Newton—all these kindred dualisms are here found within each occasion of actuality. Each occasion has its physical inheritance and its mental reaction which drives it on to its self-completion. The world is not merely physical, nor is it merely mental. Nor is it merely *one* with many subordinate phases. Nor is it merely a complete fact, in its essence static with the illusion of change. Wherever a vicious dualism appears, it is by reason of mistaking an abstraction for a final concrete fact.

The universe is dual because, in the fullest sense, it is both transient and eternal. The universe is dual because each final actuality is both physical and mental. The universe is dual because each actuality requires abstract character. The universe is dual because each occasion unites its formal immediacy with objective otherness. The universe is *many* because it is wholly and completely to be analysed into many final actualities—or in Cartesian language, into many *res verae*. The Universe is *one*, because of the universal immanence. There is thus a dualism in this contrast between the unity and multiplicity. Throughout the universe there reigns the union of opposites, which is the ground of dualism.

**Notes**

1. Presidential Address delivered 29 December 1931 before the Annual Meeting of the Eastern Division of The American Philosophical Association, at Yale University, New Haven, Connecticut.
2. [But it is more difficult to prove that opinions are not true in regard to the momentary states of feeling of each person, from which our perceptions and the opinions concerning them arise,]
3. [David Hume, *A Treatise of Human Nature* (New York: E. P. Dutton & Co., 1930–1934).]
4. I have used A[lfred] E[dward] Taylor's translation, with compression and changes of phrase. [Plato, *A Commentary on Plato's Timaeus* (Oxford: Clarendon Press, 1928).]
5. [Arthur O. Lovejoy, *The Revolt against Dualism* (La Salle, IL: Open Court, 1929).]