Methods, vol. I, p. 253, May 12, 1904. I hope myself very soon to recur to the matter. [See below, pp. 52 ff.]

[19] [Cf. Shadworth Hodgson: *The Metaphysic of Experience*, vol. I. passim; *The Philosophy of Reflection*, bk. II, ch. IV, § 3. ED.]

- [20] Spencer's proof of his 'Transfigured Realism' (his doctrine that there is an absolutely non-mental reality) comes to mind as a splendid instance of the impossibility of establishing radical heterogeneity between thought and thing. All his painfully accumulated points of difference run gradually into their opposites, and are full of exceptions. [Cf. Spencer: *Principles of Psychology*, part VII, ch. XIX.]
- [21] I speak here of the complete inner life in which the mind plays freely with its materials. Of course the mind's free play is restricted when it seeks to copy real things in real space.
- [22] [But there are also "mental activity trains," in which thoughts do "work on each other." Cf. below, p. 184, note. ED.]
- [23] [This topic is resumed below, pp. 137 ff. ED.]
- [24] [Principles of Psychology, vol. I, pp. 299-305. Cf. below, pp. 169-171 (note).]

II

A WORLD OF PURE EXPERIENCE[25]

It is difficult not to notice a curious unrest in the philosophic atmosphere of the time, a loosening of old landmarks, a softening of oppositions, a mutual borrowing from one another on the part of systems anciently closed, and an interest in new suggestions, however vague, as if the one thing sure were the inadequacy of the extant school-solutions. The dissatisfaction with these seems due for the most part to a feeling that they are too abstract and academic. Life is confused and superabundant, and what the younger generation appears to crave is more of the temperament of life in its philosophy, even though it were at some cost of logical rigor and of formal purity. Transcendental idealism is inclining to let the world wag incomprehensibly, in spite of its Absolute Subject and his unity of purpose. Berkeleyan idealism is abandoning the principle of parsimony and dabbling in panpsychic speculations. Empiricism flirts with teleology; and, strangest of all, natural realism, so long decently buried, raises its head above the turf, and finds glad hands outstretched from the most unlikely quarters to help it to its feet again. We are all biased by our personal feelings, I know, and I am personally discontented with extant solutions; so I seem to read the signs of a great unsettlement, as if the upheaval of more real conceptions and more fruitful methods were imminent, as if a true landscape might result, less clipped, straight-edged and artificial.

If philosophy be really on the eve of any considerable rearrangement, the time should be propitious for any one who has suggestions of his own to bring forward. For many years past my mind has been growing into a certain type of *Weltanschauung*. Rightly or wrongly, I have got to the point where I can hardly see things in any other pattern. I propose, therefore, to describe the pattern as clearly as I can consistently with great brevity, and to throw my description into the bubbling vat of publicity where, jostled by rivals and torn by critics, it will eventually either disappear from notice, or else, if better luck befall it, quietly subside to the profundities, and serve as a possible ferment of new growths or a nucleus of new crystallization.

I. RADICAL EMPIRICISM

I give the name of 'radical empiricism' to my *Weltanschauung*. Empiricism is known as the opposite of rationalism. Rationalism tends to emphasize universals and to make wholes prior to parts in the order of logic as well as in that of being. Empiricism, on the contrary, lays the explanatory stress upon the part, the element,

the individual, and treats the whole as a collection and the universal as an abstraction. My description of things, accordingly, starts with the parts and makes of the whole a being of the second order. It is essentially a mosaic philosophy, a philosophy of plural facts, like that of Hume and his descendants, who refer these facts neither to Substances in which they inhere nor to an Absolute Mind that creates them as its objects. But it differs from the Humian type of empiricism in one particular which makes me add the epithet radical.

To be radical, an empiricism must neither admit into its constructions any element that is not directly experienced, nor exclude from them any element that is directly experienced. For such a philosophy, the relations that connect experiences must themselves be experienced relations, and any kind of relation experienced must be accounted as 'real' as anything else in the system. Elements may indeed be redistributed, the original placing of things getting corrected, but a real place must be found for every kind of thing experienced, whether term or relation, in the final philosophic arrangement.

Now, ordinary empiricism, in spite of the fact that conjunctive and disjunctive relations present themselves as being fully co-ordinate parts of experience, has always shown a tendency to do away with the connections of things, and to insist most on the disjunctions. Berkeley's nominalism, Hume's statement that whatever things we distinguish are as 'loose and separate' as if they had 'no manner of connection,' James Mill's denial that similars have anything 'really' in common, the resolution of the causal tie into habitual sequence, John Mill's account of both physical things and selves as composed of discontinuous possibilities, and the general pulverization of all Experience by association and the mind-dust theory, are examples of what I mean.[26]

The natural result of such a world-picture has been the efforts of rationalism to correct its incoherencies by the addition of trans-experiential agents of unification, substances, intellectual categories and powers, or Selves; whereas, if empiricism had only been radical and taken everything that comes without disfavor, conjunction as well as separation, each at its face value, the results would have called for no such artificial correction. *Radical empiricism*, as I understand it, *does full justice to conjunctive relations*, without, however, treating them as rationalism always tends to treat them, as being true in some supernal way, as if the unity of things and their variety belonged to different orders of truth and vitality altogether.

II. CONJUNCTIVE RELATIONS

Relations are of different degrees of intimacy. Merely to be 'with' one another in a universe of discourse is the most external relation that terms can have, and seems to involve nothing whatever as to farther consequences. Simultaneity and time-interval come next, and then space-adjacency and distance. After them, similarity and difference, carrying the possibility of many inferences. Then relations of activity, tying terms into series involving change, tendency, resistance, and the causal order generally. Finally, the relation experienced between terms that form states of mind, and are immediately conscious of continuing each other. The organization of the Self as a system of memories, purposes, strivings, fulfilments or disappointments, is incidental to this most intimate of all relations, the terms of which seem in many cases actually to compenetrate and suffuse each other's being.[27]

Philosophy has always turned on grammatical particles. With, near, next, like, from, towards, against, because, for, through, my--these words designate types of conjunctive relation arranged in a roughly ascending order of intimacy and inclusiveness. *A priori*, we can imagine a universe of withness but no nextness; or one of nextness but no likeness, or of likeness with no activity, or of activity with no purpose, or of purpose with no ego. These would be universes, each with its own grade of unity. The universe of human experience is, by one or another of its parts, of each and all these grades. Whether or not it possibly enjoys some still more absolute grade of union does not appear upon the surface.

Taken as it does appear, our universe is to a large extent chaotic. No one single type of connection runs through all the experiences that compose it. If we take space-relations, they fail to connect minds into any regular system. Causes and purposes obtain only among special series of facts. The self-relation seems

extremely limited and does not link two different selves together. *Prima facie*, if you should liken the universe of absolute idealism to an aquarium, a crystal globe in which goldfish are swimming, you would have to compare the empiricist universe to something more like one of those dried human heads with which the Dyaks of Borneo deck their lodges. The skull forms a solid nucleus; but innumerable feathers, leaves, strings, beads, and loose appendices of every description float and dangle from it, and, save that they terminate in it, seem to have nothing to do with one another. Even so my experiences and yours float and dangle, terminating, it is true, in a nucleus of common perception, but for the most part out of sight and irrelevant and unimaginable to one another. This imperfect intimacy, this bare relation of *withness* between some parts of the sum total of experience and other parts, is the fact that ordinary empiricism over-emphasizes against rationalism, the latter always tending to ignore it unduly. Radical empiricism, on the contrary, is fair to both the unity and the disconnection. It finds no reason for treating either as illusory. It allots to each its definite sphere of description, and agrees that there appear to be actual forces at work which tend, as time goes on, to make the unity greater.

The conjunctive relation that has given most trouble to philosophy is the *co-conscious transition*, so to call it, by which one experience passes into another when both belong to the same self. About the facts there is no question. My experiences and your experiences are 'with' each other in various external ways, but mine pass into mine, and yours pass into yours in a way in which yours and mine never pass into one another. Within each of our personal histories, subject, object, interest and purpose *are continuous or may be continuous*.[28] Personal histories are processes of change in time, and *the change itself is one of the things immediately experienced*. 'Change' in this case means continuous as opposed to discontinuous transition. But continuous transition is one sort of a conjunctive relation; and to be a radical empiricist means to hold fast to this conjunctive relation of all others, for this is the strategic point, the position through which, if a hole be made, all the corruptions of dialectics and all the metaphysical fictions pour into our philosophy. The holding fast to this relation means taking it at its face value, neither less nor more; and to take it at its face value means first of all to take it just as we feel it, and not to confuse ourselves with abstract talk *about* it, involving words that drive us to invent secondary conceptions in order to neutralize their suggestions and to make our actual experience again seem rationally possible.

What I do feel simply when a later moment of my experience succeeds an earlier one is that though they are two moments, the transition from the one to the other is *continuous*. Continuity here is a definite sort of experience; just as definite as is the *discontinuity-experience* which I find it impossible to avoid when I seek to make the transition from an experience of my own to one of yours. In this latter case I have to get on and off again, to pass from a thing lived to another thing only conceived, and the break is positively experienced and noted. Though the functions exerted by my experience and by yours may be the same (*e.g.*, the same objects known and the same purposes followed), yet the sameness has in this case to be ascertained expressly (and often with difficulty and uncertainty) after the break has been felt; whereas in passing from one of my own moments to another the sameness of object and interest is unbroken, and both the earlier and the later experience are of things directly lived.

There is no other *nature*, no other whatness than this absence of break and this sense of continuity in that most intimate of all conjunctive relations, the passing of one experience into another when they belong to the same self. And this whatness is real empirical 'content,' just as the whatness of separation and discontinuity is real content in the contrasted case. Practically to experience one's personal continuum in this living way is to know the originals of the ideas of continuity and of sameness, to know what the words stand for concretely, to own all that they can ever mean. But all experiences have their conditions; and over-subtle intellects, thinking about the facts here, and asking how they are possible, have ended by substituting a lot of static objects of conception for the direct perceptual experiences. "Sameness," they have said, "must be a stark numerical identity; it can't run on from next to next. Continuity can't mean mere absence of gap; for if you say two things are in immediate contact, *at* the contact how can they be two? If, on the other hand, you put a relation of transition between them, that itself is a third thing, and needs to be related or hitched to its terms. An infinite series is involved," and so on. The result is that from difficulty to difficulty, the plain conjunctive

experience has been discredited by both schools, the empiricists leaving things permanently disjoined, and the rationalist remedying the looseness by their Absolutes or Substances, or whatever other fictitious agencies of union they may have employed.[29] From all which artificiality we can be saved by a couple of simple reflections: first, that conjunctions and separations are, at all events, co-ordinate phenomena which, if we take experiences at their face value, must be accounted equally real; and second, that if we insist on treating things as really separate when they are given as continuously joined, invoking, when union is required, transcendental principles to overcome the separateness we have assumed, then we ought to stand ready to perform the converse act. We ought to invoke higher principles of *disunion*, also, to make our merely experienced disjunctions more truly real. Failing thus, we ought to let the originally given continuities stand on their own bottom. We have no right to be lopsided or to blow capriciously hot and cold.

III. THE COGNITIVE RELATION

The first great pitfall from which such a radical standing by experience will save us is an artificial conception of the *relations between knower and known*. Throughout the history of philosophy the subject and its object have been treated as absolutely discontinuous entities; and thereupon the presence of the latter to the former, or the 'apprehension' by the former of the latter, has assumed a paradoxical character which all sorts of theories had to be invented to overcome. Representative theories put a mental 'representation,' 'image,' or 'content' into the gap, as a sort of intermediary. Common-sense theories left the gap untouched, declaring our mind able to clear it by a self-transcending leap. Transcendentalist theories left it impossible to traverse by finite knowers, and brought an Absolute in to perform the saltatory act. All the while, in the very bosom of the finite experience, every conjunction required to make the relation intelligible is given in full. Either the knower and the known are:

- (1) the self-same piece of experience taken twice over in different contexts; or they are
- (2) two pieces of *actual* experience belonging to the same subject, with definite tracts of conjunctive transitional experience between them; or
- (3) the known is a *possible* experience either of that subject or another, to which the said conjunctive transitions *would* lead, if sufficiently prolonged.

To discuss all the ways in which one experience may function as the knower of another, would be incompatible with the limits of this essay.[30] I have just treated of type 1, the kind of knowledge called perception.[31] This is the type of case in which the mind enjoys direct 'acquaintance' with a present object. In the other types the mind has 'knowledge-about' an object not immediately there. Of type 2, the simplest sort of conceptual knowledge, I have given some account in two [earlier] articles.[32] Type 3 can always formally and hypothetically be reduced to type 2, so that a brief description of that type will put the present reader sufficiently at my point of view, and make him see what the actual meanings of the mysterious cognitive relation may be.

Suppose me to be sitting here in my library at Cambridge, at ten minutes' walk from 'Memorial Hall,' and to be thinking truly of the latter object. My mind may have before it only the name, or it may have a clear image, or it may have a very dim image of the hall, but such intrinsic differences in the image make no difference in its cognitive function. Certain *extrinsic* phenomena, special experiences of conjunction, are what impart to the image, be it what it may, its knowing office.

For instance, if you ask me what hall I mean by my image, and I can tell you nothing; or if I fail to point or lead you towards the Harvard Delta; or if, being led by you, I am uncertain whether the Hall I see be what I had in mind or not; you would rightly deny that I had 'meant' that particular hall at all, even though my mental image might to some degree have resembled it. The resemblance would count in that case as coincidental merely, for all sorts of things of a kind resemble one another in this world without being held for that reason

to take cognizance of one another.

On the other hand, if I can lead you to the hall, and tell you of its history and present uses; if in its presence I feel my idea, however imperfect it may have been, to have led hither and to be now *terminated;* if the associates of the image and of the felt hall run parallel, so that each term of the one context corresponds serially, as I walk, with an answering term of the others; why then my soul was prophetic, and my idea must be, and by common consent would be, called cognizant of reality. That percept was what I *meant*, for into it my idea has passed by conjunctive experiences of sameness and fulfilled intention. Nowhere is there jar, but every later moment continues and corroborates an earlier one.

In this continuing and corroborating, taken in no transcendental sense, but denoting definitely felt transitions, lies all that the knowing of a percept by an idea can possibly contain or signify. Wherever such transitions are felt, the first experience knows the last one. Where they do not, or where even as possibles they can not, intervene, there can be no pretence of knowing. In this latter case the extremes will be connected, if connected at all, by inferior relations--bare likeness or succession, or by 'withness' alone. Knowledge of sensible realities thus comes to life inside the tissue of experience. It is made; and made by relations that unroll themselves in time. Whenever certain intermediaries are given, such that, as they develop towards their terminus, there is experience from point to point of one direction followed, and finally of one process fulfilled, the result is that their starting-point thereby becomes a knower and their terminus an object meant or known. That is all that knowing (in the simple case considered) can be known-as, that is the whole of its nature, put into experiential terms. Whenever such is the sequence of our experiences we may freely say that we had the terminal object 'in mind' from the outset, even although at the outset nothing was there in us but a flat piece of substantive experience like any other, with no self-transcendency about it, and no mystery save the mystery of coming into existence and of being gradually followed by other pieces of substantive experience, with conjunctively transitional experiences between. That is what we mean here by the object's being 'in mind.' Of any deeper more real way of being in mind we have no positive conception, and we have no right to discredit our actual experience by talking of such a way at all.

I know that many a reader will rebel at this. "Mere intermediaries," he will say, "even though they be feelings of continuously growing fulfilment, only *separate* the knower from the known, whereas what we have in knowledge is a kind of immediate touch of the one by the other, an 'apprehension' in the etymological sense of the word, a leaping of the chasm as by lightning, an act by which two terms are smitten into one, over the head of their distinctness. All these dead intermediaries of yours are out of each other, and outside of their termini still."

But do not such dialectic difficulties remind us of the dog dropping his bone and snapping at its image in the water? If we knew any more real kind of union aliunde, we might be entitled to brand all our empirical unions as a sham. But unions by continuous transition are the only ones we know of, whether in this matter of a knowledge-about that terminates in an acquaintance, whether in personal identity, in logical predication through the copula 'is,' or elsewhere. If anywhere there were more absolute unions realized, they could only reveal themselves to us by just such conjunctive results. These are what the unions are worth, these are all that we can ever practically mean by union, by continuity. Is it not time to repeat what Lotze said of substances, that to act like one is to be one?[33] Should we not say here that to be experienced as continuous is to be really continuous, in a world where experience and reality come to the same thing? In a picture gallery a painted hook will serve to hang a painted chain by, a painted cable will hold a painted ship. In a world where both the terms and their distinctions are affairs of experience, conjunctions that are experienced must be at least as real as anything else. They will be' absolutely' real conjunctions, if we have no transphenomenal Absolute ready, to derealize the whole experienced world by, at a stroke. If, on the other hand, we had such an Absolute, not one of our opponents' theories of knowledge could remain standing any better than ours could; for the distinctions as well as the conjunctions of experience would impartially fall its prey. The whole question of how 'one' thing can know 'another' would cease to be a real one at all in a world where otherness itself was an illusion.[34]

So much for the essentials of the cognitive relation, where the knowledge is conceptual in type, or forms knowledge 'about' an object. It consists in intermediary experiences (possible, if not actual) of continuously developing progress, and, finally, of fulfilment, when the sensible percept, which is the object, is reached. The percept here not only *verifies* the concept, proves its function of knowing that percept to be true, but the percept's existence as the terminus of the chain of intermediaries *creates* the function. Whatever terminates that chain was, because it now proves itself to be, what the concept 'had in mind.'

The towering importance for human life of this kind of knowing lies in the fact that an experience that knows another can figure as its *representative*, not in any quasi-miraculous 'epistemological' sense, but in the definite practical sense of being its *substitute* in various operations, sometimes physical and sometimes mental, which lead us to its associates and results. By experimenting on our ideas of reality, we may save ourselves the trouble of experimenting on the real experiences which they severally mean. The ideas form related systems, corresponding point for point to the systems which the realities form; and by letting an ideal term call up its associates systematically, we may be led to a terminus which the corresponding real term would have led to in case we had operated on the real world. And this brings us to the general question of substitution.

IV. SUBSTITUTION

In Taine's brilliant book on 'Intelligence,' substitution was for the first time named as a cardinal logical function, though of course the facts had always been familiar enough. What, exactly, in a system of experiences, does the 'substitution' of one of them for another mean?

According to my view, experience as a whole is a process in time, whereby innumerable particular terms lapse and are superseded by others that follow upon them by transitions which, whether disjunctive or conjunctive in content, are themselves experiences, and must in general be accounted at least as real as the terms which they relate. What the nature of the event called 'superseding' signifies, depends altogether on the kind of transition that obtains. Some experiences simply abolish their predecessors without continuing them in any way. Others are felt to increase or to enlarge their meaning, to carry out their purpose, or to bring us nearer to their goal. They 'represent' them, and may fulfil their function better than they fulfilled it themselves. But to 'fulfil a function' in a world of pure experience can be conceived and defined in only one possible way. In such a world transitions and arrivals (or terminations) are the only events that happen, though they happen by so many sorts of path. The only function that one experience can perform is to lead into another experience; and the only fulfilment we can speak of is the reaching of a certain experienced end. When one experience leads to (or can lead to) the same end as another, they agree in function. But the whole system of experiences as they are immediately given presents itself as a quasi-chaos through which one can pass out of an initial term in many directions and yet end in the same terminus, moving from next to next by a great many possible paths.

Either one of these paths might be a functional substitute for another, and to follow one rather than another might on occasion be an advantageous thing to do. As a matter of fact, and in a general way, the paths that run through conceptual experiences, that is, through 'thoughts' or 'ideas' that 'know' the things in which they terminate, are highly advantageous paths to follow. Not only do they yield inconceivably rapid transitions; but, owing to the 'universal' character[35] which they frequently possess, and to their capacity for association with one another in great systems, they outstrip the tardy consecutions of the things themselves, and sweep us on towards our ultimate termini in a far more labor-saving way than the following of trains of sensible perception ever could. Wonderful are the new cuts and the short-circuits which the thought-paths make. Most thought-paths, it is true, are substitutes for nothing actual; they end outside the real world altogether, in wayward fancies, utopias, fictions or mistakes. But where they do re-enter reality and terminate therein, we substitute them always; and with these substitutes we pass the greater number of our hours.

This is why I called our experiences, taken all together, a quasi-chaos. There is vastly more discontinuity in the sum total of experiences than we commonly suppose. The objective nucleus of every man's experience, his

own body, is, it is true, a continuous percept; and equally continuous as a percept (though we may be inattentive to it) is the material environment of that body, changing by gradual transition when the body moves. But the distant parts of the physical world are at all times absent from us, and form conceptual objects merely, into the perceptual reality of which our life inserts itself at points discrete and relatively rare. Round their several objective nuclei, partly shared and common and partly discrete, of the real physical world, innumerable thinkers, pursuing their several lines of physically true cogitation, trace paths that intersect one another only at discontinuous perceptual points, and the rest of the time are quite incongruent; and around all the nuclei of shared 'reality,' as around the Dyak's head of my late metaphor, floats the vast cloud of experiences that are wholly subjective, that are non-substitutional, that find not even an eventual ending for themselves in the perceptual world—the mere day-dreams and joys and sufferings and wishes of the individual minds. These exist *with* one another, indeed, and with the objective nuclei, but out of them it is probable that to all eternity no interrelated system of any kind will ever be made.

This notion of the purely substitutional or conceptual physical world brings us to the most critical of all the steps in the development of a philosophy of pure experience. The paradox of self-transcendency in knowledge comes back upon us here, but I think that our notions of pure experience and of substitution, and our radically empirical view of conjunctive transitions, are *Denkmittel* that will carry us safely through the pass.

V. WHAT OBJECTIVE REFERENCE IS.

Whosoever feels his experience to be something substitutional even while he has it, may be said to have an experience that reaches beyond itself. From inside of its own entity it says 'more,' and postulates reality existing elsewhere. For the transcendentalist, who holds knowing to consist in a *salto mortale* across an 'epistemological chasm,' such an idea presents no difficulty; but it seems at first sight as if it might be inconsistent with an empiricism like our own. Have we not explained that conceptual knowledge is made such wholly by the existence of things that fall outside of the knowing experience itself--by intermediary experiences and by a terminus that fulfils? Can the knowledge be there before these elements that constitute its being have come? And, if knowledge be not there, how can objective reference occur?

The key to this difficulty lies in the distinction between knowing as verified and completed, and the same knowing as in transit and on its way. To recur to the Memorial Hall example lately used, it is only when our idea of the Hall has actually terminated in the percept that we know 'for certain' that from the beginning it was truly cognitive of *that*. Until established by the end of the process, its quality of knowing that, or indeed of knowing anything, could still be doubted; and yet the knowing really was there, as the result now shows. We were *virtual* knowers of the Hall long before we were certified to have been its actual knowers, by the percept's retroactive validating power. Just so we are 'mortal' all the time, by reason of the virtuality of the inevitable event which will make us so when it shall have come.

Now the immensely greater part of all our knowing never gets beyond this virtual stage. It never is completed or nailed down. I speak not merely of our ideas of imperceptibles like ether-waves or dissociated 'ions,' or of 'ejects' like the contents of our neighbors' minds; I speak also of ideas which we might verify if we would take the trouble, but which we hold for true although unterminated perceptually, because nothing says 'no' to us, and there is no contradicting truth in sight. *To continue thinking unchallenged is, ninety-nine times out of a hundred, our practical substitute for knowing in the completed sense.* As each experience runs by cognitive transition into the next one, and we nowhere feel a collision with what we elsewhere count as truth or fact, we commit ourselves to the current as if the port were sure. We live, as it were, upon the front edge of an advancing wave-crest, and our sense of a determinate direction in falling forward is all we cover of the future of our path. It is as if a differential quotient should be conscious and treat itself as an adequate substitute for a traced-out curve. Our experience, *inter alia*, is of variations of rate and of direction, and lives in these transitions more than in the journey's end. The experiences of tendency are sufficient to act upon--what more could we have *done* at those moments even if the later verification comes complete?

This is what, as a radical empiricist, I say to the charge that the objective reference which is so flagrant a character of our experiences involves a chasm and a mortal leap. A positively conjunctive transition involves neither chasm nor leap. Being the very original of what we mean by continuity, it makes a continuum wherever it appears. I know full well that such brief words as these will leave the hardened transcendentalist unshaken. Conjunctive experiences *separate* their terms, he will still say: they are third things interposed, that have themselves to be conjoined by new links, and to invoke them makes our trouble infinitely worse. To 'feel' our motion forward is impossible. Motion implies terminus; and how can terminus be felt before we have arrived? The barest start and sally forwards, the barest tendency to leave the instant, involves the chasm and the leap. Conjunctive transitions are the most superficial of appearances, illusions of our sensibility which philosophical reflection pulverizes at a touch. Conception is our only trustworthy instrument, conception and the Absolute working hand in hand. Conception disintegrates experience utterly, but its disjunctions are easily overcome again when the Absolute takes up the task.

Such transcendentalists I must leave, provisionally at least, in full possession of their creed.[36] I have no space for polemics in this article, so I shall simply formulate the empiricist doctrine as my hypothesis, leaving it to work or not work as it may.

Objective reference, I say then, is an incident of the fact that so much of our experience comes as an insufficient and consists of process and transition. Our fields of experience have no more definite boundaries than have our fields of view. Both are fringed forever by a *more* that continuously develops, and that continuously supersedes them as life proceeds. The relations, generally speaking, are as real here as the terms are, and the only complaint of the transcendentalist's with which I could at all sympathize would be his charge that, by first making knowledge to consist in external relations as I have done, and by then confessing that nine-tenths of the time these are not actually but only virtually there, I have knocked the solid bottom out of the whole business, and palmed off a substitute of knowledge for the genuine thing. Only the admission, such a critic might say, that our ideas are self-transcendent and 'true' already, in advance of the experiences that are to terminate them, can bring solidity back to knowledge in a world like this, in which transitions and terminations are only by exception fulfilled.

This seems to me an excellent place for applying the pragmatic method. When a dispute arises, that method consists in auguring what practical consequences would be different if one side rather than the other were true. If no difference can be thought of, the dispute is a quarrel over words. What then would the self-transcendency affirmed to exist in advance of all experiential mediation or termination, be *known-as*? What would it practically result in for *us*, were it true?

It could only result in our orientation, in the turning of our expectations and practical tendencies into the right path; and the right path here, so long as we and the object are not yet face to face (or can never get face to face, as in the case of ejects), would be the path that led us into the object's nearest neighborhood. Where direct acquaintance is lacking, 'knowledge about' is the next best thing, and an acquaintance with what actually lies about the object, and is most closely related to it, puts such knowledge within our grasp. Ether-waves and your anger, for example, are things in which my thoughts will never *perceptually* terminate, but my concepts of them lead me to their very brink, to the chromatic fringes and to the hurtful words and deeds which are their really next effects.

Even if our ideas did in themselves carry the postulated self-transcendency, it would still remain true that their putting us into possession of such effects *would be the sole cash-value of the self-transcendency for us*. And this cash-value, it is needless to say, is *verbatim et literatim* what our empiricist account pays in. On pragmatist principles therefore, a dispute over self-transcendency is a pure logomachy. Call our concepts of ejective things self-transcendent or the reverse, it makes no difference, so long as we don't differ about the nature of that exalted virtue's fruits--fruits for us, of course, humanistic fruits. If an Absolute were proved to exist for other reasons, it might well appear that *his* knowledge is terminated in innumerable cases where ours is still incomplete. That, however, would be a fact indifferent to our knowledge. The latter would grow neither

worse nor better, whether we acknowledged such an Absolute or left him out.

So the notion of a knowledge still in transitu and on its way joins hands here with that notion of a 'pure experience' which I tried to explain in my [essay] entitled 'Does Consciousness Exist?' The instant field of the present is always experience in its 'pure' state, plain unqualified actuality, a simple that, as yet undifferentiated into thing and thought, and only virtually classifiable as objective fact or as some one's opinion about fact. This is as true when the field is conceptual as when it is perceptual. 'Memorial Hall' is 'there' in my idea as much as when I stand before it. I proceed to act on its account in either case. Only in the later experience that supersedes the present one is this *naïf* immediacy retrospectively split into two parts, a 'consciousness' and its 'content,' and the content corrected or confirmed. While still pure, or present, any experience--mine, for example, of what I write about in these very lines--passes for 'truth.' The morrow may reduce it to 'opinion.' The transcendentalist in all his particular knowledges is as liable to this reduction as I am: his Absolute does not save him. Why, then, need he quarrel with an account of knowing that merely leaves it liable to this inevitable condition? Why insist that knowing is a static relation out of time when it practically seems so much a function of our active life? For a thing to be valid, says Lotze, is the same as to make itself valid. When the whole universe seems only to be making itself valid and to be still incomplete (else why its ceaseless changing?) why, of all things, should knowing be exempt? Why should it not be making itself valid like everything else? That some parts of it may be already valid or verified beyond dispute, the empirical philosopher, of course, like any one else, may always hope.

VI. THE CONTERMINOUSNESS OF DIFFERENT MINDS[37]

With transition and prospect thus enthroned in pure experience, it is impossible to subscribe to the idealism of the English school. Radical empiricism has, in fact, more affinities with natural realism than with the views of Berkeley or of Mill, and this can be easily shown.

For the Berkeleyan school, ideas (the verbal equivalent of what I term experiences) are discontinuous. The content of each is wholly immanent, and there are no transitions with which they are consubstantial and through which their beings may unite. Your Memorial Hall and mine, even when both are percepts, are wholly out of connection with each other. Our lives are a congeries of solipsisms, out of which in strict logic only a God could compose a universe even of discourse. No dynamic currents run between my objects and your objects. Never can our minds meet in the *same*.

The incredibility of such a philosophy is flagrant. It is 'cold, strained, and unnatural' in a supreme degree; and it may be doubted whether even Berkeley himself, who took it so religiously, really believed, when walking through the streets of London, that his spirit and the spirits of his fellow wayfarers had absolutely different towns in view.

To me the decisive reason in favor of our minds meeting in *some* common objects at least is that, unless I make that supposition, I have no motive for assuming that your mind exists at all. Why do I postulate your mind? Because I see your body acting in a certain way. Its gestures, facial movements, words and conduct generally, are 'expressive,' so I deem it actuated as my own is, by an inner life like mine. This argument from analogy is my *reason*, whether an instinctive belief runs before it or not. But what is 'your body' here but a percept in *my* field? It is only as animating *that* object, *my* object, that I have any occasion to think of you at all. If the body that you actuate be not the very body that I see there, but some duplicate body of your own with which that has nothing to do, we belong to different universes, you and I, and for me to speak of you is folly. Myriads of such universes even now may coexist, irrelevant to one another; my concern is solely with the universe with which my own life is connected.

In that perceptual part of *my* universe which I call *your* body, your mind and my mind meet and may be called conterminous. Your mind actuates that body and mine sees it; my thoughts pass into it as into their harmonious cognitive fulfilment; your emotions and volitions pass into it as causes into their effects.

But that percept hangs together with all our other physical percepts. They are of one stuff with it; and if it be our common possession, they must be so likewise. For instance, your hand lays hold of one end of a rope and my hand lays hold of the other end. We pull against each other. Can our two hands be mutual objects in this experience, and the rope not be mutual also? What is true of the rope is true of any other percept. Your objects are over and over again the same as mine. If I ask you where some object of yours is, our old Memorial Hall, for example, you point to my Memorial Hall with your hand which I see. If you alter an object in your world, put out a candle, for example, when I am present, my candle ipso facto goes out. It is only as altering my objects that I guess you to exist. If your objects do not coalesce with my objects, if they be not identically where mine are, they must be proved to be positively somewhere else. But no other location can be assigned for them, so their place must be what it seems to be, the same.[38]

Practically, then, our minds meet in a world of objects which they share in common, which would still be there, if one or several of the minds were destroyed. I can see no formal objection to this supposition's being literally true. On the principles which I am defending, a 'mind' or 'personal consciousness' is the name for a series of experiences run together by certain definite transitions, and an objective reality is a series of similar experiences knit by different transitions. If one and the same experience can figure twice, once in a mental and once in a physical context (as I have tried, in my article on 'Consciousness,' to show that it can), one does not see why it might not figure thrice, or four times, or any number of times, by running into as many different mental contexts, just as the same point, lying at their intersection, can be continued into many different lines. Abolishing any number of contexts would not destroy the experience itself or its other contexts, any more than abolishing some of the point's linear continuations would destroy the others, or destroy the point itself.

I well know the subtle dialectic which insists that a term taken in another relation must needs be an intrinsically different term. The crux is always the old Greek one, that the same man can't be tall in relation to one neighbor, and short in relation to another, for that would make him tall and short at once. In this essay I can not stop to refute this dialectic, so I pass on, leaving my flank for the time exposed.[39] But if my reader will only allow that the same 'now' both ends his past and begins his future; or that, when he buys an acre of land from his neighbor, it is the same acre that successively figures in the two estates; or that when I pay him a dollar, the same dollar goes into his pocket that came out of mine; he will also in consistency have to allow that the same object may conceivably play a part in, as being related to the rest of, any number of otherwise entirely different minds. This is enough for my present point: the common-sense notion of minds sharing the same object offers no special logical or epistemological difficulties of its own; it stands or falls with the general possibility of things being in conjunctive relation with other things at all.

In principle, then, let natural realism pass for possible. Your mind and mine *may* terminate in the same percept, not merely against it, as if it were a third external thing, but by inserting themselves into it and coalescing with it, for such is the sort of conjunctive union that appears to be experienced when a perceptual terminus 'fulfils.' Even so, two hawsers may embrace the same pile, and yet neither one of them touch any other part except that pile, of what the other hawser is attached to.

It is therefore not a formal question, but a question of empirical fact solely, whether, when you and I are said to know the 'same' Memorial Hall, our minds do terminate at or in a numerically identical percept. Obviously, as a plain matter of fact, they do *not*. Apart from color-blindness and such possibilities, we see the Hall in different perspectives. You may be on one side of it and I on another. The percept of each of us, as he sees the surface of the Hall, is moreover only his provisional terminus. The next thing beyond my percept is not your mind, but more percepts of my own into which my first percept develops, the interior of the Hall, for instance, or the inner structure of its bricks and mortar. If our minds were in a literal sense *con*terminous, neither could get beyond the percept which they had in common, it would be an ultimate barrier between them--unless indeed they flowed over it and became 'co-conscious' over a still larger part of their content, which (thought-transference apart) is not supposed to be the case. In point of fact the ultimate common barrier can always be pushed, by both minds, farther than any actual percept of either, until at last it resolves itself into the mere notion of imperceptibles like atoms or ether, so that, where we do terminate in percepts, our

knowledge is only speciously completed, being, in theoretic strictness, only a virtual knowledge of those remoter objects which conception carries out.

Is natural realism, permissible in logic, refuted then by empirical fact? Do our minds have no object in common after all?

Yes, they certainly have Space in common. On pragmatic principles we are obliged to predicate sameness wherever we can predicate no assignable point of difference. If two named things have every quality and function indiscernible, and are at the same time in the same place, they must be written down as numerically one thing under two different names. But there is no test discoverable, so far as I know, by which it can be shown that the place occupied by your percept of Memorial Hall differs from the place occupied by mine. The percepts themselves may be shown to differ; but if each of us be asked to point out where his percept is, we point to an identical spot. All the relations, whether geometrical or causal, of the Hall originate or terminate in that spot wherein our hands meet, and where each of us begins to work if he wishes to make the Hall change before the other's eyes. Just so it is with our bodies. That body of yours which you actuate and feel from within must be in the same spot as the body of yours which I see or touch from without. 'There' for me means where I place my finger. If you do not feel my finger's contact to be 'there' in my sense, when I place it on your body, where then do you feel it? Your inner actuations of your body meet my finger there: it is there that you resist its push, or shrink back, or sweep the finger aside with your hand. Whatever farther knowledge either of us may acquire of the real constitution of the body which we thus feel, you from within and I from without, it is in that same place that the newly conceived or perceived constituents have to be located, and it is through that space that your and my mental intercourse with each other has always to be carried on, by the mediation of impressions which I convey thither, and of the reactions thence which those impressions may provoke from you.

In general terms, then, whatever differing contents our minds may eventually fill a place with, the place itself is a numerically identical content of the two minds, a piece of common property in which, through which, and over which they join. The receptacle of certain of our experiences being thus common, the experiences themselves might some day become common also. If that day ever did come, our thoughts would terminate in a complete empirical identity, there would be an end, so far as *those* experiences went, to our discussions about truth. No points of difference appearing, they would have to count as the same.

VII. CONCLUSION

With this we have the outlines of a philosophy of pure experience before us. At the outset of my essay, I called it a mosaic philosophy. In actual mosaics the pieces are held together by their bedding, for which bedding the Substances, transcendental Egos, or Absolutes of other philosophies may be taken to stand. In radical empiricism there is no bedding; it is as if the pieces clung together by their edges, the transitions experienced between them forming their cement. Of course such a metaphor is misleading, for in actual experience the more substantive and the more transitive parts run into each other continuously, there is in general no separateness needing to be overcome by an external cement; and whatever separateness is actually experienced is not overcome, it stays and counts as separateness to the end. But the metaphor serves to symbolize the fact that Experience itself, taken at large, can grow by its edges. That one moment of it proliferates into the next by transitions which, whether conjunctive or disjunctive, continue the experiential tissue, can not, I contend, be denied. Life is in the transitions as much as in the terms connected; often, indeed, it seems to be there more emphatically, as if our spurts and sallies forward were the real firing-line of the battle, were like the thin line of flame advancing across the dry autumnal field which the farmer proceeds to burn. In this line we live prospectively as well as retrospectively. It is 'of' the past, inasmuch as it comes expressly as the past's continuation; it is 'of' the future in so far as the future, when it comes, will have continued it.

These relations of continuous transition experienced are what make our experiences cognitive. In the simplest

and completest cases the experiences are cognitive of one another. When one of them terminates a previous series of them with a sense of fulfilment, it, we say, is what those other experiences 'had in view.' The knowledge, in such a case, is verified; the truth is 'salted down.' Mainly, however, we live on speculative investments, or on our prospects only. But living on things *in posse* is as good as living in the actual, so long as our credit remains good. It is evident that for the most part it is good, and that the universe seldom protests our drafts.

In this sense we at every moment can continue to believe in an existing *beyond*. It is only in special cases that our confident rush forward gets rebuked. The beyond must, of course, always in our philosophy be itself of an experiential nature. If not a future experience of our own or a present one of our neighbor, it must be a thing in itself in Dr. Prince's and Professor Strong's sense of the term--that is, it must be an experience *for* itself whose relation to other things we translate into the action of molecules, ether-waves, or whatever else the physical symbols may be.[40] This opens the chapter of the relations of radical empiricism to panpsychism, into which I can not enter now.[41]

The beyond can in any case exist simultaneously--for it can be experienced *to have existed* simultaneously--with the experience that practically postulates it by looking in its direction, or by turning or changing in the direction of which it is the goal. Pending that actuality of union, in the virtuality of which the 'truth,' even now, of the postulation consists, the beyond and its knower are entities split off from each other. The world is in so far forth a pluralism of which the unity is not fully experienced as yet. But, as fast as verifications come, trains of experience, once separate, run into one another; and that is why I said, earlier in my article, that the unity of the world is on the whole undergoing increase. The universe continually grows in quantity by new experiences that graft themselves upon the older mass; but these very new experiences often help the mass to a more consolidated form.

These are the main features of a philosophy of pure experience. It has innumerable other aspects and arouses innumerable questions, but the points I have touched on seem enough to make an entering wedge. In my own mind such a philosophy harmonizes best with a radical pluralism, with novelty and indeterminism, moralism and theism, and with the 'humanism' lately sprung upon us by the Oxford and the Chicago schools.[42] I can not, however, be sure that all these doctrines are its necessary and indispensable allies. It presents so many points of difference, both from the common sense and from the idealism that have made our philosophic language, that it is almost as difficult to state it as it is to think it out clearly, and if it is ever to grow into a respectable system, it will have to be built up by the contributions of many co-operating minds. It seems to me, as I said at the outset of this essay, that many minds are, in point of fact, now turning in a direction that points towards radical empiricism. If they are carried farther by my words, and if then they add their stronger voices to my feebler one, the publication of this essay will have been worth while.

FOOTNOTES:

[25] [Reprinted from the *Journal of Philosophy, Psychology and Scientific Methods*, vol. I, 1904, No. 20, September 29, and No. 21, October 13. Pp. 52-76 have also been reprinted, with some omissions, alterations and additions, in *The Meaning of Truth*, pp. 102-120. The alterations have been adopted in the present text. This essay is referred to in *A Pluralistic Universe*, p. 280, note 5. ED.]

[26] [Cf. Berkeley: *Principles of Human Knowledge*, Introduction; Hume: *An Enquiry Concerning Human Understanding*, sect. VII, part II (Selby-Bigge's edition, p. 74); James Mill: *Analysis of the Phenomena of the Human Mind*, ch. VIII; J. S. Mill: *An Examination of Sir William Hamilton's Philosophy*, ch. XI, XII; W. K. Clifford: *Lectures and Essays*, pp. 274 ff.]

[27] [See "The Experience of Activity," below, pp. 155-189.]

[28] The psychology books have of late described the facts here with approximate adequacy. I may refer to

the chapters on 'The Stream of Thought' and on the Self in my own *Principles of Psychology*, as well as to S. H. Hodgson's *Metaphysic of Experience*, vol. I, ch. VII and VIII.

- [29] [See "The Thing and its Relations," below, pp. 92-122.]
- [30] For brevity's sake I altogether omit mention of the type constituted by knowledge of the truth of general propositions. This type has been thoroughly and, so far as I can see, satisfactorily, elucidated in Dewey's *Studies in Logical Theory*. Such propositions are reducible to the *S*-is-*P* form; and the 'terminus' that verifies and fulfils is the *SP* in combination. Of course percepts may be involved in the mediating experiences, or in the 'satisfactoriness' of the *P* in its new position.
- [31] [See above, pp. 9-15.]
- [32] ["On the Function of Cognition," *Mind*, vol. X, 1885, and "The Knowing of Things Together," *Psychological Review*, vol. II, 1895. These articles are reprinted, the former in full, the latter in part, in *The Meaning of Truth*, pp. 1-50. ED.] These articles and their doctrine, unnoticed apparently by any one else, have lately gained favorable comment from Professor Strong. ["A Naturalistic Theory of the Reference of Thought to Reality," *Journal of Philosophy, Psychology and Scientific Methods*, vol. I, 1904.] Dr. Dickinson S. Miller has independently thought out the same results ["The Meaning of Truth and Error," *Philosophical Review*, vol. II, 1893; "The Confusion of Function and Content in Mental Analysis," *Psychological Review*, vol. II, 1895], which Strong accordingly dubs the James-Miller theory of cognition.
- [33] [Cf. H. Lotze: *Metaphysik*, §§ 37-39, 97, 98, 243.]
- [34] Mr. Bradley, not professing to know his absolute *aliunde*, nevertheless derealizes Experience by alleging it to be everywhere infected with self-contradiction. His arguments seem almost purely verbal, but this is no place for arguing that point out. [Cf. F. H. Bradley; *Appearance and Reality, passim;* and below, pp. 106-122.]
- [35] Of which all that need be said in this essay is that it also can be conceived as functional, and defined in terms of transitions, or of the possibility of such. [Cf. *Principles of Psychology*, vol. I, pp. 473-480, vol. II, pp. 337-340; *Pragmatism*, p. 265; *Some Problems of Philosophy*, pp. 63-74; *Meaning of Truth*, pp. 246-247, etc. ED.]
- [36] [Cf. below, pp. 93 ff.]
- [37] [Cf. "How Two Minds Can Know One Thing," below, pp. 123-136.]
- [38] The notion that our objects are inside of our respective heads is not seriously defensible, so I pass it by.
- [39] [The argument is resumed below, pp. 101 sq. ED.]
- [40] Our minds and these ejective realities would still have space (or pseudo-space, as I believe Professor Strong calls the medium of interaction between 'things-in-themselves') in common. These would exist *where*, and begin to act *where*, we locate the molecules, etc., and *where* we perceive the sensible phenomena explained thereby. [Cf. Morton Prince: *The Nature of Mind, and Human Automatism*, part I, ch. III, IV; C. A. Strong: *Why the Mind Has a Body*, ch. XII.]
- [41] [Cf. below, p. 188; A Pluralistic Universe, Lect. IV-VII.]
- [42] I have said something of this latter alliance in an article entitled 'Humanism and Truth,' in *Mind*, October, 1904. [Reprinted in *The Meaning of Truth*, pp. 51-101. Cf. also "Humanism and Truth Once More," below,

pp. 244-265.]

Ш

THE THING AND ITS RELATIONS[43]

Experience in its immediacy seems perfectly fluent. The active sense of living which we all enjoy, before reflection shatters our instinctive world for us, is self-luminous and suggests no paradoxes. Its difficulties are disappointments and uncertainties. They are not intellectual contradictions.

When the reflective intellect gets at work, however, it discovers incomprehensibilities in the flowing process. Distinguishing its elements and parts, it gives them separate names, and what it thus disjoins it can not easily put together. Pyrrhonism accepts the irrationality and revels in its dialectic elaboration. Other philosophies try, some by ignoring, some by resisting, and some by turning the dialectic procedure against itself, negating its first negations, to restore the fluent sense of life again, and let redemption take the place of innocence. The perfection with which any philosophy may do this is the measure of its human success and of its importance in philosophic history. In [the last essay], 'A World of Pure Experience,' I tried my own hand sketchily at the problem, resisting certain first steps of dialectics by insisting in a general way that the immediately experienced conjunctive relations are as real as anything else. If my sketch is not to appear too *naïf*, I must come closer to details, and in the present essay I propose to do so.

I

Pure experience' is the name which I gave to the immediate flux of life which furnishes the material to our later reflection with its conceptual categories. Only new-born babes, or men in semi-coma from sleep, drugs, illnesses, or blows, may be assumed to have an experience pure in the literal sense of a *that* which is not yet any definite *what*, tho' ready to be all sorts of whats; full both of oneness and of manyness, but in respects that don't appear; changing throughout, yet so confusedly that its phases interpenetrate and no points, either of distinction or of identity, can be caught. Pure experience in this state is but another name for feeling or sensation. But the flux of it no sooner comes than it tends to fill itself with emphases, and these salient parts become identified and fixed and abstracted; so that experience now flows as if shot through with adjectives and nouns and prepositions and conjunctions. Its purity is only a relative term, meaning the proportional amount of unverbalized sensation which it still embodies.

Far back as we go, the flux, both as a whole and in its parts, is that of things conjunct and separated. The great continua of time, space, and the self envelope everything, betwixt them, and flow together without interfering. The things that they envelope come as separate in some ways and as continuous in others. Some sensations coalesce with some ideas, and others are irreconcilable. Qualities compenetrate one space, or exclude each other from it. They cling together persistently in groups that move as units, or else they separate. Their changes are abrupt or discontinuous; and their kinds resemble or differ; and, as they do so, they fall into either even or irregular series.

In all this the continuities and the discontinuities are absolutely co-ordinate matters of immediate feeling. The conjunctions are as primordial elements of 'fact' as are the distinctions and disjunctions. In the same act by which I feel that this passing minute is a new pulse of my life, I feel that the old life continues into it, and the feeling of continuance in no wise jars upon the simultaneous feeling of a novelty. They, too, compenetrate harmoniously. Prepositions, copulas, and conjunctions, 'is,' 'isn't,' 'then,' 'before,' 'in,' 'on,' 'beside,' 'between,' 'next,' 'like,' 'unlike,' 'as,' 'but,' flower out of the stream of pure experience, the stream of concretes or the sensational stream, as naturally as nouns and adjectives do, and they melt into it again as fluidly when we apply them to a new portion of the stream.