question is raised.

IV

THE RELATION BETWEEN KNOWER AND KNOWN

[Footnote: Extract from an article entitled 'A World of Pure Experience,' in the Journal of Philosophy, etc., September 29,1904.]

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. Commonsense 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. I have treated of type 1, the kind of knowledge called perception, in an article in the Journal of Philosophy, for September 1, 1904, called 'Does consciousness exist?' 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. Type 3 can always formally and hypothetically be reduced to type 2, so that a brief description of that type will now 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 an intrinsic difference in the image makes 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 tho 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 other; 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 altho 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 its 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 tho 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 prediction through the copula 'is,' or elsewhere. If anywhere there were more absolute unions, 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? 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.

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 tact 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.

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, tho 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 [Footnote: Of which all that need be said in this essay is that it also an be conceived as functional, and defined in terms of transitions, or of the possibility of such.] 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 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. [Footnote: 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 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' 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 inter-related system of any kind will ever be made.]

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 motale 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 altho 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. Objective reference 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. What 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. Etherwaves and your anger, for example, are things in which my thoughts will never PERCTEPTUALLY 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 possess 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 liberatim 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.

The transcendentalist believes his ideas to be self-transcendent only because he finds that in fact they do bear fruits. Why need he quarrel with an account of knowledge that insists on naming this effect? Why not treat the working of the idea from next to next as the essence of its self-transcendency? 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.

V

THE ESSENCE OF HUMANISM

[Footnote: Reprinted from the Journal of Philosophy, Psychology and Scientific Methods, vol. ii. No. 5, March 2, 1905.]

Humanism is a ferment that has 'come to stay.' It is not a single hypothesis or theorem, and it dwells on no new facts. It is rather a slow shifting in the philosophic perspective, making things appear as from a new centre of interest or point of sight. Some writers are strongly conscious of the shifting, others half unconscious, even though their own vision may have undergone much change. The result is no small confusion in debate, the half-conscious humanists often taking part against the radical ones, as if they wished to count upon the other side. [Footnote: Professor Baldwin, for example. His address 'Selective Thinking' (Psychological Review, January, 1898, reprinted in his volume, 'Development and Evolution') seems to me an unusually well written pragmatic manifesto. Nevertheless in 'The Limits of Pragmatism' (ibid; January, 1904), he (much less clearly) joins in the attack.]

If humanism really be the name for such a shifting of perspective, it is obvious that the whole scene of the philosophic stage will change in some degree if humanism prevails. The emphasis of things, their foreground and background distribution, their sizes and values, will not keep just the same. [Footnote: The ethical changes, it seems to me, are beautifully made evident in Professor Dewey's series of articles, which will never get the attention they deserve till they are printed in a book. I mean: 'The Significance of Emotions,' Psychological Review, vol. ii, 13; 'The Reflex Arc Concept in Psychology,' ibid; iii, 357; 'Psychology and Social Practice,' ibid., vii, 105; 'Interpretation of Savage Mind,' ibid; ix, 217; 'Green's Theory of the Moral Motive,' Philosophical Review, vol. i, 593; 'Self-realization as the Moral Ideal,' ibid; ii, 652; 'The Psychology