

journey into these abstractions, with an increase both of vision and of power. It is no wonder that earlier thinkers, forgetting that concepts are only man-made extracts from the temporal flux, should have ended by treating them as a superior type of being, bright, changeless, true, divine, and utterly opposed in nature to the turbid, restless lower world. The latter then appears as but their corruption and falsification.

Intellectualism in the vicious sense began when Socrates and Plato taught that what a thing really is, is told us by its *definition*. Ever since Socrates we have been taught that reality consists of essences, not of appearances, and that the essences of things are known whenever we know their definitions. So first we identify the thing with a concept and then we identify the concept with a definition, and only then, inasmuch as the thing *is* whatever the definition expresses, are we sure of apprehending the real essence of it or the full truth about it.

So far no harm is done. The misuse of concepts begins with the habit of employing them privatively as well as positively, using them not merely to assign properties to things, but to deny the very properties with which the things sensibly present themselves. Logic can extract all its possible consequences from any definition, and the logician who is *unerbittlich consequent* is often tempted, when he cannot extract a certain property from a definition, to deny that the concrete object to which the definition applies can possibly possess that property. The definition that fails to yield it must exclude or negate it. This is Hegel's regular method of establishing his system.

It is but the old story, of a useful practice first becoming a method, then a habit, and finally a tyranny that defeats the end it was used for. Concepts, first employed to make things intelligible, are clung to even when they make them unintelligible. Thus it comes that when once you have conceived things as 'independent,' you must proceed to deny the possibility of any connexion whatever among them, because the notion of connexion is not contained in the definition of independence. For a like reason you must deny any possible forms or modes of unity among things which you have begun by defining as a 'many.' We have cast a glance at Hegel's and Bradley's use of this sort of reasoning, and you will remember Sigwart's epigram that according to it a horseman can never in his life go on foot, or a photographer ever do anything but photograph.

The classic extreme in this direction is the denial of the possibility of change, and the consequent branding of the world of change as unreal, by certain philosophers. The definition of A is changeless, so is the definition of B. The one definition cannot change into the other, so the notion that a concrete thing A should change into another concrete thing B is made out to be contrary to reason. In Mr. Bradley's difficulty in seeing how sugar can be sweet intellectualism outstrips itself and becomes openly a sort of verbalism. Sugar is just sugar and sweet is just sweet; neither is the other; nor can the word 'is' ever be understood to join any subject to its predicate rationally. Nothing 'between' things can connect them, for 'between' is just that third thing, 'between,' and would need itself to be connected to the first and second things by two still finer between's, and so on ad infinitum.

The particular intellectualistic difficulty that had held my own thought so long in a vise was, as we have seen at such tedious length, the impossibility of understanding how 'your' experience and 'mine,' which 'as such' are defined as not conscious of each other, can nevertheless at the same time be members of a world-experience defined expressly as having all its parts co-conscious, or known together. The definitions are contradictory, so the things defined can in no way be united. You see how unintelligible intellectualism here seems to make the world of our most accomplished philosophers. Neither as they use it nor as we use it does it do anything but make nature look irrational and seem impossible.

In my next lecture, using Bergson as my principal topic, I shall enter into more concrete details and try, by giving up intellectualism frankly, to make, if not the world, at least my own general thesis, less unintelligible.

LECTURE VI

BERGSON AND HIS CRITIQUE OF INTELLECTUALISM

I gave you a very stiff lecture last time, and I fear that this one can be little less so. The best way of entering into it will be to begin immediately with Bergson's philosophy, since I told you that that was what had led me personally to renounce the intellectualistic method and the current notion that logic is an adequate measure of what can or cannot be.

Professor Henri Bergson is a young man, comparatively, as influential philosophers go, having been born at Paris in 1859. His career has been the perfectly routine one of a successful french professor. Entering the école normale supérieure at the age of twenty-two, he spent the next seventeen years teaching at *lycées*, provincial or parisian, until his fortieth year, when he was made professor at the said école normale. Since 1900 he has been professor at the Collège de France, and member of the Institute since 1900. So far as the outward facts go, Bergson's career has then been commonplace to the utmost. Neither one of Taine's famous principles of explanation of great men, *the race, the environment, or the moment*, no, nor all three together, will explain that peculiar way of looking at things that constitutes his mental individuality. Originality in men dates from nothing previous, other things date from it, rather. I have to confess that Bergson's originality is so profuse that many of his ideas baffle me entirely. I doubt whether any one understands him all over, so to speak; and I am sure that he would himself be the first to see that this must be, and to confess that things which he himself has not yet thought out clearly, had yet to be mentioned and have a tentative place assigned them in his philosophy. Many of us are profusely original, in that no man can understand us--violently peculiar ways of looking at things are no great rarity. The rarity is when great peculiarity of vision is allied with great lucidity and unusual command of all the classic expository apparatus. Bergson's resources in the way of erudition are remarkable, and in the way of expression they are simply phenomenal. This is why in France, where *l'art de bien dire* counts for so much and is so sure of appreciation, he has immediately taken so eminent a place in public esteem. Old-fashioned professors, whom his ideas quite fail to satisfy, nevertheless speak of his talent almost with bated breath, while the youngsters flock to him as to a master.

If anything can make hard things easy to follow, it is a style like Bergson's. A 'straightforward' style, an american reviewer lately called it; failing to see that such straightforwardness means a flexibility of verbal resource that follows the thought without a crease or wrinkle, as elastic silk underclothing follows the movements of one's body. The lucidity of Bergson's way of putting things is what all readers are first struck by. It seduces you and bribes you in advance to become his disciple. It is a miracle, and he a real magician.

M. Bergson, if I am rightly informed, came into philosophy through the gateway of mathematics. The old antinomies of the infinite were, I imagine, the irritant that first woke his faculties from their dogmatic slumber. You all remember Zeno's famous paradox, or sophism, as many of our logic books still call it, of Achilles and the tortoise. Give that reptile ever so small an advance and the swift runner Achilles can never overtake him, much less get ahead of him; for if space and time are infinitely divisible (as our intellects tell us they must be), by the time Achilles reaches the tortoise's starting-point, the tortoise has already got ahead of *that* starting-point, and so on *ad infinitum*, the interval between the pursuer and the pursued growing endlessly minuter, but never becoming wholly obliterated. The common way of showing up the sophism here is by pointing out the ambiguity of the expression 'never can overtake.' What the word 'never' falsely suggests, it is said, is an infinite duration of time; what it really means is the inexhaustible number of the steps of which the overtaking must consist. But if these steps are infinitely short, a finite time will suffice for them; and in point of fact they do rapidly converge, whatever be the original interval or the contrasted speeds, toward infinitesimal shortness. This proportionality of the shortness of the times to that of the spaces required frees us, it is claimed, from the sophism which the word 'never' suggests.

But this criticism misses Zeno's point entirely. Zeno would have been perfectly willing to grant that if the tortoise can be overtaken at all, he can be overtaken in (say) twenty seconds, but he would still have insisted that he can't be overtaken at all. Leave Achilles and the tortoise out of the account altogether, he would have said--they complicate the case unnecessarily. Take any single process of change whatever, take the twenty seconds themselves elapsing. If time be infinitely divisible, and it must be so on intellectualist principles, they simply cannot elapse, their end cannot be reached; for no matter how much of them has already elapsed,

before the remainder, however minute, can have wholly elapsed, the earlier half of it must first have elapsed. And this ever re-arising need of making the earlier half elapse *first* leaves time with always something to do *before* the last thing is done, so that the last thing never gets done. Expressed in bare numbers, it is like the convergent series $1/2$ plus $1/4$ plus $1/8$..., of which the limit is one. But this limit, simply because it is a limit, stands outside the series, the value of which approaches it indefinitely but never touches it. If in the natural world there were no other way of getting things save by such successive addition of their logically involved fractions, no complete units or whole things would ever come into being, for the fractions' sum would always leave a remainder. But in point of fact nature doesn't make eggs by making first half an egg, then a quarter, then an eighth, etc., and adding them together. She either makes a whole egg at once or none at all, and so of all her other units. It is only in the sphere of change, then, where one phase of a thing must needs come into being before another phase can come that Zeno's paradox gives trouble.

And it gives trouble then only if the succession of steps of change be infinitely divisible. If a bottle had to be emptied by an infinite number of successive decrements, it is mathematically impossible that the emptying should ever positively terminate. In point of fact, however, bottles and coffee-pots empty themselves by a finite number of decrements, each of definite amount. Either a whole drop emerges or nothing emerges from the spout. If all change went thus drop-wise, so to speak, if real time sprouted or grew by units of duration of determinate amount, just as our perceptions of it grow by pulses, there would be no zenonian paradoxes or kantian antinomies to trouble us. All our sensible experiences, as we get them immediately, do thus change by discrete pulses of perception, each of which keeps us saying 'more, more, more,' or 'less, less, less,' as the definite increments or diminutions make themselves felt. The discreteness is still more obvious when, instead of old things changing, they cease, or when altogether new things come. Fechner's term of the 'threshold,' which has played such a part in the psychology of perception, is only one way of naming the quantitative discreteness in the change of all our sensible experiences. They come to us in drops. Time itself comes in drops.

Our ideal decomposition of the drops which are all that we feel into still finer fractions is but an incident in that great transformation of the perceptual order into a conceptual order of which I spoke in my last lecture. It is made in the interest of our rationalizing intellect solely. The times directly *felt* in the experiences of living subjects have originally no common measure. Let a lump of sugar melt in a glass, to use one of M. Bergson's instances. We feel the time to be long while waiting for the process to end, but who knows how long or how short it feels to the sugar? All *felt* times coexist and overlap or compenetrates each other thus vaguely, but the artifice of plotting them on a common scale helps us to reduce their aboriginal confusion, and it helps us still more to plot, against the same scale, the successive possible steps into which nature's various changes may be resolved, either sensibly or conceivably. We thus straighten out the aboriginal privacy and vagueness, and can date things publicly, as it were, and by each other. The notion of one objective and 'evenly flowing' time, cut into numbered instants, applies itself as a common measure to all the steps and phases, no matter how many, into which we cut the processes of nature. They are now definitely contemporary, or later or earlier one than another, and we can handle them mathematically, as we say, and far better, practically as well as theoretically, for having thus correlated them one to one with each other on the common schematic or conceptual time-scale.

Motion, to take a good example, is originally a turbid sensation, of which the native shape is perhaps best preserved in the phenomenon of vertigo. In vertigo we feel that movement *is*, and is more or less violent or rapid, more or less in this direction or that, more or less alarming or sickening. But a man subject to vertigo may gradually learn to co-ordinate his felt motion with his real position and that of other things, and intellectualize it enough to succeed at last in walking without staggering. The mathematical mind similarly organizes motion in its way, putting it into a logical definition: motion is now conceived as 'the occupancy of serially successive points of space at serially successive instants of time.' With such a definition we escape wholly from the turbid privacy of sense. But do we not also escape from sense-reality altogether? Whatever motion really may be, it surely is not static; but the definition we have gained is of the absolutely static. It gives a set of one-to-one relations between space-points and time-points, which relations themselves are as

fixed as the points are. It gives *positions* assignable ad infinitum, but how the body gets from one position to another it omits to mention. The body gets there by moving, of course; but the conceived positions, however numerous multiplied, contain no element of movement, so Zeno, using nothing but them in his discussion, has no alternative but to say that our intellect repudiates motion as a non-reality. Intellectualism here does what I said it does--it makes experience less instead of more intelligible.

We of course need a stable scheme of concepts, stably related with one another, to lay hold of our experiences and to co-ordinate them withal. When an experience comes with sufficient saliency to stand out, we keep the thought of it for future use, and store it in our conceptual system. What does not of itself stand out, we learn to *cut* out; so the system grows completer, and new reality, as it comes, gets named after and conceptually strung upon this or that element of it which we have already established. The immutability of such an abstract system is its great practical merit; the same identical terms and relations in it can always be recovered and referred to--change itself is just such an unalterable concept. But all these abstract concepts are but as flowers gathered, they are only moments dipped out from the stream of time, snap-shots taken, as by a kinoscopic camera, at a life that in its original coming is continuous. Useful as they are as samples of the garden, or to re-enter the stream with, or to insert in our revolving lantern, they have no value but these practical values. You cannot explain by them what makes any single phenomenon be or go--you merely dot out the path of appearances which it traverses. For you cannot make continuous being out of discontinuities, and your concepts are discontinuous. The stages into which you analyze a change are *states*, the change itself goes on between them. It lies along their intervals, inhabits what your definition fails to gather up, and thus eludes conceptual explanation altogether.

'When the mathematician,' Bergson writes, 'calculates the state of a system at the end of a time *t*, nothing need prevent him from supposing that betweenwhiles the universe vanishes, in order suddenly to appear again at the due moment in the new configuration. It is only the *t*-th moment that counts--that which flows throughout the intervals, namely real time, plays no part in his calculation.... In short, the world on which the mathematician operates is a world which dies and is born anew at every instant, like the world which Descartes thought of when he spoke of a continued creation.' To know adequately what really *happens* we ought, Bergson insists, to see into the intervals, but the mathematician sees only their extremities. He fixes only a few results, he dots a curve and then interpolates, he substitutes a tracing for a reality.

This being so undeniably the case, the history of the way in which philosophy has dealt with it is curious. The ruling tradition in philosophy has always been the platonic and aristotelian belief that fixity is a nobler and worthier thing than change. Reality must be one and unalterable. Concepts, being themselves fixities, agree best with this fixed nature of truth, so that for any knowledge of ours to be quite true it must be knowledge by universal concepts rather than by particular experiences, for these notoriously are mutable and corruptible. This is the tradition known as rationalism in philosophy, and what I have called intellectualism is only the extreme application of it. In spite of sceptics and empiricists, in spite of Protagoras, Hume, and James Mill, rationalism has never been seriously questioned, for its sharpest critics have always had a tender place in their hearts for it, and have obeyed some of its mandates. They have not been consistent; they have played fast and loose with the enemy; and Bergson alone has been radical.

To show what I mean by this, let me contrast his procedure with that of some of the transcendentalist philosophers whom I have lately mentioned. Coming after Kant, these pique themselves on being 'critical,' on building in fact upon Kant's 'critique' of pure reason. What that critique professed to establish was this, that concepts do not apprehend reality, but only such appearances as our senses feed out to them. They give immutable intellectual forms to these appearances, it is true, but the reality *an sich* from which in ultimate resort the sense-appearances have to come remains forever unintelligible to our intellect. Take motion, for example. Sensibly, motion comes in drops, waves, or pulses; either some actual amount of it, or none, being apprehended. This amount is the datum or *gabe* which reality feeds out to our intellectual faculty; but our intellect makes of it a task or *aufgabe*--this pun is one of the most memorable of Kant's formulas--and insists that in every pulse of it an infinite number of successive minor pulses shall be ascertainable. These

minor pulses *we* can indeed *go on* to ascertain or to compute indefinitely if we have patience; but it would contradict the definition of an infinite number to suppose the endless series of them to have actually counted *themselves* out piecemeal. Zeno made this manifest; so the infinity which our intellect requires of the sense-datum is thus a future and potential rather than a past and actual infinity of structure. The datum after it has made itself must be decomposable *ad infinitum* by our conception, but of the steps by which that structure actually got composed we know nothing. Our intellect casts, in short, no ray of light on the processes by which experiences *get made*.

Kant's monistic successors have in general found the data of immediate experience even more self-contradictory, when intellectually treated, than Kant did. Not only the character of infinity involved in the relation of various empirical data to their 'conditions,' but the very notion that empirical things should be related to one another at all, has seemed to them, when the intellectualistic fit was upon them, full of paradox and contradiction. We saw in a former lecture numerous instances of this from Hegel, Bradley, Royce, and others. We saw also where the solution of such an intolerable state of things was sought for by these authors. Whereas Kant had placed it outside of and *before* our experience, in the *dinge an sich* which are the causes of the latter, his monistic successors all look for it either *after* experience, as its absolute completion, or else consider it to be even now implicit within experience as its ideal signification. Kant and his successors look, in short, in diametrically opposite directions. Do not be misled by Kant's admission of theism into his system. His God is the ordinary dualistic God of Christianity, to whom his philosophy simply opens the door; he has nothing whatsoever in common with the 'absolute spirit' set up by his successors. So far as this absolute spirit is logically derived from Kant, it is not from his God, but from entirely different elements of his philosophy. First from his notion that an unconditioned totality of the conditions of any experience must be assignable; and then from his other notion that the presence of some witness, or ego of apperception, is the most universal of all the conditions in question. The post-kantians make of the witness-condition what is called a concrete universal, an individualized all-witness or world-self, which shall imply in its rational constitution each and all of the other conditions put together, and therefore necessitate each and all of the conditioned experiences.

Abridgments like this of other men's opinions are very unsatisfactory, they always work injustice; but in this case those of you who are familiar with the literature will see immediately what I have in mind; and to the others, if there be any here, it will suffice to say that what I am trying so pedantically to point out is only the fact that monistic idealists after Kant have invariably sought relief from the supposed contradictions of our world of sense by looking forward toward an *ens rationis* conceived as its integration or logical completion, while he looked backward toward non-rational *dinge an sich* conceived as its cause. Pluralistic empiricists, on the other hand, have remained in the world of sense, either naïvely and because they overlooked the intellectualistic contradictions, or because, not able to ignore them, they thought they could refute them by a superior use of the same intellectualistic logic. Thus it is that John Mill pretends to refute the Achilles-tortoise fallacy.

The important point to notice here is the intellectualist logic. Both sides treat it as authoritative, but they do so capriciously: the absolutists smashing the world of sense by its means, the empiricists smashing the absolute--for the absolute, they say, is the quintessence of all logical contradictions. Neither side attains consistency. The Hegelians have to invoke a higher logic to supersede the purely destructive efforts of their first logic. The empiricists use their logic against the absolute, but refuse to use it against finite experience. Each party uses it or drops it to suit the vision it has faith in, but neither impugns in principle its general theoretic authority.

Bergson alone challenges its theoretic authority in principle. He alone denies that mere conceptual logic can tell us what is impossible or possible in the world of being or fact; and he does so for reasons which at the same time that they rule logic out from lordship over the whole of life, establish a vast and definite sphere of influence where its sovereignty is indisputable. Bergson's own text, felicitous as it is, is too intricate for quotation, so I must use my own inferior words in explaining what I mean by saying this.

In the first place, logic, giving primarily the relations between concepts as such, and the relations between natural facts only secondarily or so far as the facts have been already identified with concepts and defined by them, must of course stand or fall with the conceptual method. But the conceptual method is a transformation which the flux of life undergoes at our hands in the interests of practice essentially and only subordinately in the interests of theory. We live forward, we understand backward, said a danish writer; and to understand life by concepts is to arrest its movement, cutting it up into bits as if with scissors, and immobilizing these in our logical herbarium where, comparing them as dried specimens, we can ascertain which of them statically includes or excludes which other. This treatment supposes life to have already accomplished itself, for the concepts, being so many views taken after the fact, are retrospective and post mortem. Nevertheless we can draw conclusions from them and project them into the future. We cannot learn from them how life made itself go, or how it will make itself go; but, on the supposition that its ways of making itself go are unchanging, we can calculate what positions of imagined arrest it will exhibit hereafter under given conditions. We can compute, for instance, at what point Achilles will be, and where the tortoise will be, at the end of the twentieth minute. Achilles may then be at a point far ahead; but the full detail of how he will have managed practically to get there our logic never gives us--we have seen, indeed, that it finds that its results contradict the facts of nature. The computations which the other sciences make differ in no respect from those of mathematics. The concepts used are all of them dots through which, by interpolation or extrapolation, curves are drawn, while along the curves other dots are found as consequences. The latest refinements of logic dispense with the curves altogether, and deal solely with the dots and their correspondences each to each in various series. The authors of these recent improvements tell us expressly that their aim is to abolish the last vestiges of intuition, *videlicet* of concrete reality, from the field of reasoning, which then will operate literally on mental dots or bare abstract units of discourse, and on the ways in which they may be strung in naked series.

This is all very esoteric, and my own understanding of it is most likely misunderstanding. So I speak here only by way of brief reminder to those who know. For the rest of us it is enough to recognize this fact, that altho by means of concepts cut out from the sensible flux of the past, we can re-descend upon the future flux and, making another cut, say what particular thing is likely to be found there; and that altho in this sense concepts give us knowledge, and may be said to have some theoretic value (especially when the particular thing foretold is one in which we take no present practical interest); yet in the deeper sense of giving *insight* they have no theoretic value, for they quite fail to connect us with the inner life of the flux, or with the causes that govern its direction. Instead of being interpreters of reality, concepts negate the inwardness of reality altogether. They make the whole notion of a causal influence between finite things incomprehensible. No real activities and indeed no real connexions of any kind can obtain if we follow the conceptual logic; for to be distinguishable, according to what I call intellectualism, is to be incapable of connexion. The work begun by Zeno, and continued by Hume, Kant, Herbart, Hegel, and Bradley, does not stop till sensible reality lies entirely disintegrated at the feet of 'reason.'

Of the 'absolute' reality which reason proposes to substitute for sensible reality I shall have more to say presently. Meanwhile you see what Professor Bergson means by insisting that the function of the intellect is practical rather than theoretical. Sensible reality is too concrete to be entirely manageable--look at the narrow range of it which is all that any animal, living in it exclusively as he does, is able to compass. To get from one point in it to another we have to plough or wade through the whole intolerable interval. No detail is spared us; it is as bad as the barbed-wire complications at Port Arthur, and we grow old and die in the process. But with our faculty of abstracting and fixing concepts we are there in a second, almost as if we controlled a fourth dimension, skipping the intermediaries as by a divine winged power, and getting at the exact point we require without entanglement with any context. What we do in fact is to *harness up* reality in our conceptual systems in order to drive it the better. This process is practical because all the termini to which we drive are *particular* termini, even when they are facts of the mental order. But the sciences in which the conceptual method chiefly celebrates its triumphs are those of space and matter, where the transformations of external things are dealt with. To deal with moral facts conceptually, we have first to transform them, substitute brain-diagrams or physical metaphors, treat ideas as atoms, interests as mechanical forces, our conscious 'selves' as 'streams,' and the like. Paradoxical effect! as Bergson well remarks, if our intellectual life were not practical but destined to

reveal the inner natures. One would then suppose that it would find itself most at home in the domain of its own intellectual realities. But it is precisely there that it finds itself at the end of its tether. We know the inner movements of our spirit only perceptually. We feel them live in us, but can give no distinct account of their elements, nor definitely predict their future; while things that lie along the world of space, things of the sort that we literally *handle*, are what our intellects cope with most successfully. Does not this confirm us in the view that the original and still surviving function of our intellectual life is to guide us in the practical adaptation of our expectancies and activities?

One can easily get into a verbal mess at this point, and my own experience with pragmatism' makes me shrink from the dangers that lie in the word 'practical,' and far rather than stand out against you for that word, I am quite willing to part company with Professor Bergson, and to ascribe a primarily theoretical function to our intellect, provided you on your part then agree to discriminate 'theoretic' or scientific knowledge from the deeper 'speculative' knowledge aspired to by most philosophers, and concede that theoretic knowledge, which is knowledge *about* things, as distinguished from living or sympathetic acquaintance with them, touches only the outer surface of reality. The surface which theoretic knowledge taken in this sense covers may indeed be enormous in extent; it may dot the whole diameter of space and time with its conceptual creations; but it does not penetrate a millimeter into the solid dimension. That inner dimension of reality is occupied by the *activities* that keep it going, but the intellect, speaking through Hume, Kant & Co., finds itself obliged to deny, and persists in denying, that activities have any intelligible existence. What exists for *thought*, we are told, is at most the results that we illusorily ascribe to such activities, strung along the surfaces of space and time by *regeln der verknüpfung*, laws of nature which state only coexistences and successions.[1]

Thought deals thus solely with surfaces. It can name the thickness of reality, but it cannot fathom it, and its insufficiency here is essential and permanent, not temporary.

The only way in which to apprehend reality's thickness is either to experience it directly by being a part of reality one's self, or to evoke it in imagination by sympathetically divining some one else's inner life. But what we thus immediately experience or concretely divine is very limited in duration, whereas abstractly we are able to conceive eternities. Could we feel a million years concretely as we now feel a passing minute, we should have very little employment for our conceptual faculty. We should know the whole period fully at every moment of its passage, whereas we must now construct it laboriously by means of concepts which we project. Direct acquaintance and conceptual knowledge are thus complementary of each other; each remedies the other's defects. If what we care most about be the synoptic treatment of phenomena, the vision of the far and the gathering of the scattered like, we must follow the conceptual method. But if, as metaphysicians, we are more curious about the inner nature of reality or about what really makes it go, we must turn our backs upon our winged concepts altogether, and bury ourselves in the thickness of those passing moments over the surface of which they fly, and on particular points of which they occasionally rest and perch.

Professor Bergson thus inverts the traditional platonic doctrine absolutely. Instead of intellectual knowledge being the profounder, he calls it the more superficial. Instead of being the only adequate knowledge, it is grossly inadequate, and its only superiority is the practical one of enabling us to make short cuts through experience and thereby to save time. The one thing it cannot do is to reveal the nature of things--which last remark, if not clear already, will become clearer as I proceed. Dive back into the flux itself, then, Bergson tells us, if you wish to *know* reality, that flux which Platonism, in its strange belief that only the immutable is excellent, has always spurned; turn your face toward sensation, that flesh-bound thing which rationalism has always loaded with abuse.--This, you see, is exactly the opposite remedy from that of looking forward into the absolute, which our idealistic contemporaries prescribe. It violates our mental habits, being a kind of passive and receptive listening quite contrary to that effort to react noisily and verbally on everything, which is our usual intellectual pose.

What, then, are the peculiar features in the perceptual flux which the conceptual translation so fatally leaves out?

The essence of life is its continuously changing character; but our concepts are all discontinuous and fixed, and the only mode of making them coincide with life is by arbitrarily supposing positions of arrest therein. With such arrests our concepts may be made congruent. But these concepts are not *parts* of reality, not real positions taken by it, but *suppositions* rather, notes taken by ourselves, and you can no more dip up the substance of reality with them than you can dip up water with a net, however finely meshed.

When we conceptualize, we cut out and fix, and exclude everything but what we have fixed. A concept means a *_that-and-no-other_*. Conceptually, time excludes space; motion and rest exclude each other; approach excludes contact; presence excludes absence; unity excludes plurality; independence excludes relativity; 'mine' excludes 'yours'; this connexion excludes that connexion--and so on indefinitely; whereas in the real concrete sensible flux of life experiences compenetrates each other so that it is not easy to know just what is excluded and what not. Past and future, for example, conceptually separated by the cut to which we give the name of present, and defined as being the opposite sides of that cut, are to some extent, however brief, co-present with each other throughout experience. The literally present moment is a purely verbal supposition, not a position; the only present ever realized concretely being the 'passing moment' in which the dying rearward of time and its dawning future forever mix their lights. Say 'now' and it *was* even while you say it.

It is just intellectualism's attempt to substitute static cuts for units of experienced duration that makes real motion so unintelligible. The conception of the first half of the interval between Achilles and the tortoise excludes that of the last half, and the mathematical necessity of traversing it separately before the last half is traversed stands permanently in the way of the last half ever being traversed. Meanwhile the living Achilles (who, for the purposes of this discussion, is only the abstract name of one phenomenon of impetus, just as the tortoise is of another) asks no leave of logic. The velocity of his acts is an indivisible nature in them like the expansive tension in a spring compressed. We define it conceptually as $[_s/t_]$, but the *s* and *t* are only artificial cuts made after the fact, and indeed most artificial when we treat them in both runners as the same tracts of 'objective' space and time, for the experienced spaces and times in which the tortoise inwardly lives are probably as different as his velocity from the same things in Achilles. The impetus of Achilles is one concrete fact, and carries space, time, and conquest over the inferior creature's motion indivisibly in it. He perceives nothing, while running, of the mathematician's homogeneous time and space, of the infinitely numerous succession of cuts in both, or of their order. End and beginning come for him in the one onrush, and all that he actually experiences is that, in the midst of a certain intense effort of his own, the rival is in point of fact outstripped.

We are so inveterately wedded to the conceptual decomposition of life that I know that this will seem to you like putting muddiest confusion in place of clearest thought, and relapsing into a molluscoid state of mind. Yet I ask you whether the absolute superiority of our higher thought is so very clear, if all that it can find is impossibility in tasks which sense-experience so easily performs.

What makes you call real life confusion is that it presents, as if they were dissolved in one another, a lot of differentials which conception breaks life's flow by keeping apart. But *are* not differentials actually dissolved in one another? Hasn't every bit of experience its quality, its duration, its extension, its intensity, its urgency, its clearness, and many aspects besides, no one of which can exist in the isolation in which our verbalized logic keeps it? They exist only *durcheinander*. Reality always is, in M. Bergson's phrase, an endosmosis or conflux of the same with the different: they compenetrates and telescope. For conceptual logic, the same is nothing but the same, and all same with a third thing are the same with each other. Not so in concrete experience. Two spots on our skin, each of which feels the same as a third spot when touched along with it, are felt as different from each other. Two tones, neither distinguishable from a third tone, are perfectly distinct from each other. The whole process of life is due to life's violation of our logical axioms. Take its continuity as an example. Terms like A and C appear to be connected by intermediaries, by B for example. Intellectualism calls this absurd, for 'B-connected-with-A' is, 'as such,' a different term from 'B-connected-with-C.' But real life laughs at logic's veto. Imagine a heavy log which takes two men to carry it. First A and B take it. Then C takes hold and A drops off; then D takes hold and B drops off, so that C and D now bear it; and so on. The log

meanwhile never drops, and keeps its sameness throughout the journey. Even so it is with all our experiences. Their changes are not complete annihilations followed by complete creations of something absolutely novel. There is partial decay and partial growth, and all the while a nucleus of relative constancy from which what decays drops off, and which takes into itself whatever is grafted on, until at length something wholly different has taken its place. In such a process we are as sure, in spite of intellectualist logic with its 'as suches,' that it *is* the same nucleus which is able now to make connexion with what goes and again with what comes, as we are sure that the same point can lie on diverse lines that intersect there. Without being one throughout, such a universe is continuous. Its members interdigitate with their next neighbors in manifold directions, and there are no clean cuts between them anywhere.

The great clash of intellectualist logic with sensible experience is where the experience is that of influence exerted. Intellectualism denies (as we saw in lecture ii) that finite things can act on one another, for all things, once translated into concepts, remain shut up to themselves. To act on anything means to get into it somehow; but that would mean to get out of one's self and be one's other, which is self-contradictory, etc. Meanwhile each of us actually *is* his own other to that extent, livingly knowing how to perform the trick which logic tells us can't be done. My thoughts animate and actuate this very body which you see and hear, and thereby influence your thoughts. The dynamic current somehow does get from me to you, however numerous the intermediary conductors may have to be. Distinctions may be insulators in logic as much as they like, but in life distinct things can and do commune together every moment.

The conflict of the two ways of knowing is best summed up in the intellectualist doctrine that 'the same cannot exist in many relations.' This follows of course from the concepts of the two relations being so distinct that 'what-is-in-the-one' means 'as such' something distinct from what 'what-is-in-the-other' means. It is like Mill's ironical saying, that we should not think of Newton as both an Englishman and a mathematician, because an Englishman as such is not a mathematician and a mathematician as such is not an Englishman. But the real Newton was somehow both things at once; and throughout the whole finite universe each real thing proves to be many different without undergoing the necessity of breaking into disconnected editions of itself.

These few indications will perhaps suffice to put you at the bergsonian point of view. The immediate experience of life solves the problems which so baffle our conceptual intelligence: How can what is manifold be one? how can things get out of themselves? how be their own others? how be both distinct and connected? how can they act on one another? how be for others and yet for themselves? how be absent and present at once? The intellect asks these questions much as we might ask how anything can both separate and unite things, or how sounds can grow more alike by continuing to grow more different. If you already know space sensibly, you can answer the former question by pointing to any interval in it, long or short; if you know the musical scale, you can answer the latter by sounding an octave; but then you must first have the sensible knowledge of these realities. Similarly Bergson answers the intellectualist conundrums by pointing back to our various finite sensational experiences and saying, 'Lo, even thus; even so are these other problems solved livingly.'

When you have broken the reality into concepts you never can reconstruct it in its wholeness. Out of no amount of discreteness can you manufacture the concrete. But place yourself at a bound, or *'d'émblée'*, as M. Bergson says, inside of the living, moving, active thickness of the real, and all the abstractions and distinctions are given into your hand: you can now make the intellectualist substitutions to your heart's content. Install yourself in phenomenal movement, for example, and velocity, succession, dates, positions, and innumerable other things are given you in the bargain. But with only an abstract succession of dates and positions you can never patch up movement itself. It slips through their intervals and is lost.

So it is with every concrete thing, however complicated. Our intellectual handling of it is a retrospective patchwork, a post-mortem dissection, and can follow any order we find most expedient. We can make the thing seem self-contradictory whenever we wish to. But place yourself at the point of view of the thing's interior *doing*, and all these back-looking and conflicting conceptions lie harmoniously in your hand. Get at

the expanding centre of a human character, the *_élan vital_* of a man, as Bergson calls it, by living sympathy, and at a stroke you see how it makes those who see it from without interpret it in such diverse ways. It is something that breaks into both honesty and dishonesty, courage and cowardice, stupidity and insight, at the touch of varying circumstances, and you feel exactly why and how it does this, and never seek to identify it stably with any of these single abstractions. Only your intellectualist does that,--and you now also feel why *he* must do it to the end.

Place yourself similarly at the centre of a man's philosophic vision and you understand at once all the different things it makes him write or say. But keep outside, use your post-mortem method, try to build the philosophy up out of the single phrases, taking first one and then another and seeking to make them fit, and of course you fail. You crawl over the thing like a myopic ant over a building, tumbling into every microscopic crack or fissure, finding nothing but inconsistencies, and never suspecting that a centre exists. I hope that some of the philosophers in this audience may occasionally have had something different from this intellectualist type of criticism applied to their own works!

What really *exists* is not things made but things in the making. Once made, they are dead, and an infinite number of alternative conceptual decompositions can be used in defining them. But put yourself *in the making* by a stroke of intuitive sympathy with the thing and, the whole range of possible decompositions coming at once into your possession, you are no longer troubled with the question which of them is the more absolutely true. Reality *falls* in passing into conceptual analysis; it *mounts* in living its own undivided life--it buds and bourgeons, changes and creates. Once adopt the movement of this life in any given instance and you know what Bergson calls the *_devenir réel_* by which the thing evolves and grows. Philosophy should seek this kind of living understanding of the movement of reality, not follow science in vainly patching together fragments of its dead results.

Thus much of M. Bergson's philosophy is sufficient for my purpose in these lectures, so here I will stop, leaving unnoticed all its other constituent features, original and interesting tho they be. You may say, and doubtless some of you now are saying inwardly, that his remanding us to sensation in this wise is only a regress, a return to that ultra-crude empiricism which your own idealists since Green have buried ten times over. I confess that it is indeed a return to empiricism, but I think that the return in such accomplished shape only proves the latter's immortal truth. What won't stay buried must have some genuine life. *_Am anfang war die tat_*; fact is a *_first_*; to which all our conceptual handling comes as an inadequate second, never its full equivalent. When I read recent transcendentalist literature--I must partly except my colleague Royce!--I get nothing but a sort of marking of time, champing of jaws, pawing of the ground, and resettling into the same attitude, like a weary horse in a stall with an empty manger. It is but turning over the same few threadbare categories, bringing the same objections, and urging the same answers and solutions, with never a new fact or a new horizon coming into sight. But open Bergson, and new horizons loom on every page you read. It is like the breath of the morning and the song of birds. It tells of reality itself, instead of merely reiterating what dusty-minded professors have written about what other previous professors have thought. Nothing in Bergson is shop-worn or at second hand.

That he gives us no closed-in system will of course be fatal to him in intellectualist eyes. He only evokes and invites; but he first annuls the intellectualist veto, so that we now join step with reality with a philosophical conscience never quite set free before. As a french disciple of his well expresses it: 'Bergson claims of us first of all a certain inner catastrophe, and not every one is capable of such a logical revolution. But those who have once found themselves flexible enough for the execution of such a psychological change of front, discover somehow that they can never return again to their ancient attitude of mind. They are now Bergsonians ... and possess the principal thoughts of the master all at once. They have understood in the fashion in which one loves, they have caught the whole melody and can thereafter admire at their leisure the originality, the fecundity, and the imaginative genius with which its author develops, transposes, and varies in a thousand ways by the orchestration of his style and dialectic, the original theme.' [2]

This, scant as it is, is all I have to say about Bergson on this occasion--I hope it may send some of you to his original text. I must now turn back to the point where I found it advisable to appeal to his ideas. You remember my own intellectualist difficulties in the last lecture, about how a lot of separate consciousnesses can at the same time be one collective thing. How, I asked, can one and the same identical content of experience, of which on idealist principles the *esse* is to be felt, be felt so diversely if itself be the only feeler? The usual way of escape by 'quatenus' or 'as such' won't help us here if we are radical intellectualists, I said, for appearance-together is as such *not* appearance-apart, the world _quâ_ many is not the world _quâ_ one, as absolutism claims. If we hold to Hume's maxim, which later intellectualism uses so well, that whatever things are distinguished are as separate as if there were no manner of connexion between them, there seemed no way out of the difficulty save by stepping outside of experience altogether and invoking different spiritual agents, selves or souls, to realize the diversity required. But this rescue by 'scholastic entities' I was unwilling to accept any more than pantheistic idealists accept it.

Yet, to quote Fechner's phrase again, 'nichts wirkliches kann unmöglich sein,' the actual cannot be impossible, and what *is* actual at every moment of our lives is the sort of thing which I now proceed to remind you of. You can hear the vibration of an electric contact-maker, smell the ozone, see the sparks, and feel the thrill, co-consciously as it were or in one field of experience. But you can also isolate any one of these sensations by shutting out the rest. If you close your eyes, hold your nose, and remove your hand, you can get the sensation of sound alone, but it seems still the same sensation that it was; and if you restore the action of the other organs, the sound coalesces with the feeling, the sight, and the smell sensations again. Now the natural way of talking of all this^[3] is to say that certain sensations are experienced, now singly, and now together with other sensations, in a common conscious field. Fluctuations of attention give analogous results. We let a sensation in or keep it out by changing our attention; and similarly we let an item of memory in or drop it out. [Please don't raise the question here of how these changes *come to pass*. The immediate condition is probably cerebral in every instance, but it would be irrelevant now to consider it, for now we are thinking only of results, and I repeat that the natural way of thinking of them is that which intellectualist criticism finds so absurd.]

The absurdity charged is that the self-same should function so differently, now with and now without something else. But this it sensibly seems to do. This very desk which I strike with my hand strikes in turn your eyes. It functions at once as a physical object in the outer world and as a mental object in our sundry mental worlds. The very body of mine that *my* thought actuates is the body whose gestures are *your* visual object and to which you give my name. The very log which John helped to carry is the log now borne by James. The very girl you love is simultaneously entangled elsewhere. The very place behind me is in front of you. Look where you will, you gather only examples of the same amid the different, and of different relations existing as it were in solution in the same thing. _Quâ_ this an experience is not the same as it is _quâ_ that, truly enough; but the _quâs_ are conceptual shots of ours at its post-mortem remains, and in its sensational immediacy everything is all at once whatever different things it is at once at all. It is before C and after A, far from you and near to me, without this associate and with that one, active and passive, physical and mental, a whole of parts and part of a higher whole, all simultaneously and without interference or need of doubling-up its being, so long as we keep to what I call the 'immediate' point of view, the point of view in which we follow our sensational life's continuity, and to which all living language conforms. It is only when you try--to continue using the hegelian vocabulary--to 'mediate' the immediate, or to substitute concepts for sensational life, that intellectualism celebrates its triumph and the immanent-self-contradictoriness of all this smooth-running finite experience gets proved.

Of the oddity of inventing as a remedy for the inconveniences resulting from this situation a supernumerary conceptual object called an absolute, into which you pack the self-same contradictions unreduced, I will say something in the next lecture. The absolute is said to perform its feats by taking up its other into itself. But that is exactly what is done when every individual morsel of the sensational stream takes up the adjacent morsels by coalescing with them. This is just what we mean by the stream's sensible continuity. No element *there* cuts itself off from any other element, as concepts cut themselves from concepts. No part *there* is so small as not to be a place of conflux. No part there is not really *next* its neighbors; which means that there is

literally nothing between; which means again that no part goes exactly so far and no farther; that no part absolutely excludes another, but that they compenetrates and are cohesive; that if you tear out one, its roots bring out more with them; that whatever is real is telescoped and diffused into other reals; that, in short, every minutest thing is already its hegelian 'own other,' in the fullest sense of the term.

Of course this *sounds* self-contradictory, but as the immediate facts don't sound at all, but simply *are*, until we conceptualize and name them vocally, the contradiction results only from the conceptual or discursive form being substituted for the real form. But if, as Bergson shows, that form is superimposed for practical ends only, in order to let us jump about over life instead of wading through it; and if it cannot even pretend to reveal anything of what life's inner nature is or ought to be; why then we can turn a deaf ear to its accusations. The resolve to turn the deaf ear is the inner crisis or 'catastrophe' of which M. Bergson's disciple whom I lately quoted spoke. We are so subject to the philosophic tradition which treats *logos* or discursive thought generally as the sole avenue to truth, that to fall back on raw unverballed life as more of a revealer, and to think of concepts as the merely practical things which Bergson calls them, comes very hard. It is putting off our proud maturity of mind and becoming again as foolish little children in the eyes of reason. But difficult as such a revolution is, there is no other way, I believe, to the possession of reality, and I permit myself to hope that some of you may share my opinion after you have heard my next lecture.

LECTURE VII

THE CONTINUITY OF EXPERIENCE

I fear that few of you will have been able to obey Bergson's call upon you to look towards the sensational life for the fuller knowledge of reality, or to sympathize with his attempt to limit the divine right of concepts to rule our mind absolutely. It is too much like looking downward and not up. Philosophy, you will say, doesn't lie flat on its belly in the middle of experience, in the very thick of its sand and gravel, as this Bergsonism does, never getting a peep at anything from above. Philosophy is essentially the vision of things from above. It doesn't simply feel the detail of things, it comprehends their intelligible plan, sees their forms and principles, their categories and rules, their order and necessity. It takes the superior point of view of the architect. Is it conceivable that it should ever forsake that point of view and abandon itself to a slovenly life of immediate feeling? To say nothing of your traditional Oxford devotion to Aristotle and Plato, the leaven of T.H. Green probably works still too strongly here for his anti-sensationalism to be outgrown quickly. Green more than any one realized that knowledge *about* things was knowledge of their relations; but nothing could persuade him that our sensational life could contain any relational element. He followed the strict intellectualist method with sensations. What they were not expressly defined as including, they must exclude. Sensations are not defined as relations, so in the end Green thought that they could get related together only by the action on them from above of a 'self-distinguishing' absolute and eternal mind, present to that which is related, but not related itself. 'A relation,' he said, 'is not contingent with the contingency of feeling. It is permanent with the permanence of the combining and comparing thought which alone constitutes it.' [1] In other words, relations are purely conceptual objects, and the sensational life as such cannot relate itself together. Sensation in itself, Green wrote, is fleeting, momentary, unnameable (because, while we name it, it has become another), and for the same reason unknowable, the very negation of knowability. Were there no permanent objects of conception for our sensations to be 'referred to,' there would be no significant names, but only noises, and a consistent sensationalism must be speechless. [2] Green's intellectualism was so earnest that it produced a natural and an inevitable effect. But the atomistic and unrelated sensations which he had in mind were purely fictitious products of his rationalist fancy. The psychology of our own day disavows them utterly. [3] and Green's laborious belaboring of poor old Locke for not having first seen that his ideas of sensation were just that impracticable sort of thing, and then fled to transcendental idealism as a remedy,--his belaboring of poor old Locke for this, I say, is pathetic. Every examiner of the sensible life *in concreto* must see that relations of every sort, of time, space, difference, likeness, change, rate, cause, or what not, are just as integral members of the sensational flux as terms are, and that conjunctive relations are just as true members of the flux as disjunctive relations are. [4] This is what in some recent writings of mine I have called the 'radically empiricist'