First, then, let me remind you that *the absolute is useless for deductive purposes*. It gives us absolute safety if you will, but it is compatible with every relative danger. You cannot enter the phenomenal world with the notion of it in your grasp, and name beforehand any detail which you are likely to meet there. Whatever the details of experience may prove to be, *after the fact of them* the absolute will adopt them. It is an hypothesis that functions retrospectively only, not prospectively. *That*, whatever it may be, will have been in point of fact the sort of world which the absolute was pleased to offer to itself as a spectacle.

Again, the absolute is always represented idealistically, as the all-knower. Thinking this view consistently out leads one to frame an almost ridiculous conception of the absolute mind, owing to the enormous mass of unprofitable information which it would then seem obliged to carry. One of the many *reductiones ad absurdum* of pluralism by which idealism thinks it proves the absolute One is as follows: Let there be many facts; but since on idealist principles facts exist only by being known, the many facts will therefore mean many knowers. But that there are so many knowers is itself a fact, which in turn requires *its* knower, so the one absolute knower has eventually to be brought in. *All* facts lead to him. If it be a fact that this table is not a chair, not a rhinoceros, not a logarithm, not a mile away from the door, not worth five hundred pounds sterling, not a thousand centuries old, the absolute must even now be articulately aware of all these negations. Along with what everything is it must also be conscious of everything which it is not. This infinite atmosphere of explicit negativity—observe that it has to be explicit—around everything seems to us so useless an encumbrance as to make the absolute still more foreign to our sympathy. Furthermore, if it be a fact that certain ideas are silly, the absolute has to have already thought the silly ideas to establish them in silliness. The rubbish in its mind would thus appear easily to outweigh in amount the more desirable material. One would expect it fairly to burst with such an obesity, plethora, and superfocation of useless information.[15]

I will spare you further objections. The sum of it all is that the absolute is not forced on our belief by logic, that it involves features of irrationality peculiar to itself, and that a thinker to whom it does not come as an 'immediate certainty' (to use Mr. Joachim's words), is in no way bound to treat it as anything but an emotionally rather sublime hypothesis. As such, it might, with all its defects, be, on account of its peace-conferring power and its formal grandeur, more rational than anything else in the field. But meanwhile the strung-along unfinished world in time is its rival: _reality MAY exist in distributive form, in the shape not of an all but of a set of caches, just as it seems to_--this is the anti-absolutist hypothesis. *Prima facie* there is this in favor of the caches, that they are at any rate real enough to have made themselves at least *appear* to every one, whereas the absolute has as yet appeared immediately to only a few mystics, and indeed to them very ambiguously. The advocates of the absolute assure us that any distributive form of being is infected and undermined by self-contradiction. If we are unable to assimilate their arguments, and we have been unable, the only course we can take, it seems to me, is to let the absolute bury the absolute, and to seek reality in more promising directions, even among the details of the finite and the immediately given.

If these words of mine sound in bad taste to some of you, or even sacrilegious, I am sorry. Perhaps the impression may be mitigated by what I have to say in later lectures.

LECTURE IV

CONCERNING FECHNER

The prestige of the absolute has rather crumbled in our hands. The logical proofs of it miss fire; the portraits which its best court-painters show of it are featureless and foggy in the extreme; and, apart from the cold comfort of assuring us that with *it* all is well, and that to see that all is well with us also we need only rise to its eternal point of view, it yields us no relief whatever. It introduces, on the contrary, into philosophy and theology certain poisonous difficulties of which but for its intrusion we never should have heard.

But if we drop the absolute out of the world, must we then conclude that the world contains nothing better in the way of consciousness than our consciousness? Is our whole instinctive belief in higher presences, our

persistent inner turning towards divine companionship, to count for nothing? Is it but the pathetic illusion of beings with incorrigibly social and imaginative minds?

Such a negative conclusion would, I believe, be desperately hasty, a sort of pouring out of the child with the bath. Logically it is possible to believe in superhuman beings without identifying them with the absolute at all. The treaty of offensive and defensive alliance which certain groups of the Christian clergy have recently made with our transcendentalist philosophers seems to me to be based on a well-meaning but baleful mistake. Neither the Jehovah of the old testament nor the heavenly father of the new has anything in common with the absolute except that they are all three greater than man; and if you say that the notion of the absolute is what the gods of Abraham, of David, and of Jesus, after first developing into each other, were inevitably destined to develop into in more reflective and modern minds, I reply that although in certain specifically philosophical minds this may have been the case, in minds more properly to be termed religious the development has followed quite another path. The whole history of evangelical Christianity is there to prove it. I propose in these lectures to plead for that other line of development. To set the doctrine of the absolute in its proper framework, so that it shall not fill the whole welkin and exclude all alternative possibilities of higher thought--as it seems to do for many students who approach it with a limited previous acquaintance with philosophy--I will contrast it with a system which, abstractly considered, seems at first to have much in common with absolutism, but which, when taken concretely and temperamentally, really stands at the opposite pole. I refer to the philosophy of Gustav Theodor Fechner, a writer but little known as yet to English readers, but destined, I am persuaded, to wield more and more influence as time goes on.

It is the intense concreteness of Fechner, his fertility of detail, which fills me with an admiration which I should like to make this audience share. Among the philosophic cranks of my acquaintance in the past was a lady all the tenets of whose system I have forgotten except one. Had she been born in the Ionian Archipelago some three thousand years ago, that one doctrine would probably have made her name sure of a place in every university curriculum and examination paper. The world, she said, is composed of only two elements, the Thick, namely, and the Thin. No one can deny the truth of this analysis, as far as it goes (though in the light of our contemporary knowledge of nature it has itself a rather 'thin' sound), and it is nowhere truer than in that part of the world called philosophy. I am sure, for example, that many of you, listening to what poor account I have been able to give of transcendental idealism, have received an impression of its arguments being strangely thin, and of the terms it leaves us with being shiveringly thin wrappings for so thick and burly a world as this. Some of you of course will charge the thinness to my exposition; but thin as that has been, I believe the doctrines reported on to have been thinner. From Green to Haldane the absolute proposed to us to straighten out the confusions of the thicket of experience in which our life is passed remains a pure abstraction which hardly any one tries to make a whit concreter. If we open Green, we get nothing but the transcendental ego of apperception (Kant's name for the fact that to be counted in experience a thing has to be witnessed), blown up into a sort of timeless soap-bubble large enough to mirror the whole universe. Nature, Green keeps insisting, consists only in relations, and these imply the action of a mind that is eternal; a self-distinguishing consciousness which itself escapes from the relations by which it determines other things. Present to whatever is in succession, it is not in succession itself. If we take the Cairds, they tell us little more of the principle of the universe--it is always a return into the identity of the self from the difference of its objects. It separates itself from them and so becomes conscious of them in their separation from one another, while at the same time it binds them together as elements in one higher self-consciousness.

This seems the very quintessence of thinness; and the matter hardly grows thicker when we gather, after enormous amounts of reading, that the great enveloping self in question is absolute reason as such, and that as such it is characterized by the habit of using certain jejune 'categories' with which to perform its eminent relating work. The whole active material of natural fact is tried out, and only the barest intellectualistic formalism remains.

Hegel tried, as we saw, to make the system concreter by making the relations between things 'dialectic,' but if we turn to those who use his name most worshipfully, we find them giving up all the particulars of his

attempt, and simply praising his intention--much as in our manner we have praised it ourselves. Mr. Haldane, for example, in his wonderfully clever Gifford lectures, praises Hegel to the skies, but what he tells of him amounts to little more than this, that 'the categories in which the mind arranges its experiences, and gives meaning to them, the universals in which the particulars are grasped in the individual, are a logical chain, in which the first presupposes the last, and the last is its presupposition and its truth.' He hardly tries at all to thicken this thin logical scheme. He says indeed that absolute mind in itself, and absolute mind in its hetereity or otherness, under the distinction which it sets up of itself from itself, have as their real *prius* absolute mind in synthesis; and, this being absolute mind's true nature, its dialectic character must show itself in such concrete forms as Goethe's and Wordsworth's poetry, as well as in religious forms. 'The nature of God, the nature of absolute mind, is to exhibit the triple movement of dialectic, and so the nature of God as presented in religion must be a triplicity, a trinity.' But beyond thus naming Goethe and Wordsworth and establishing the trinity, Mr. Haldane's Hegelianism carries us hardly an inch into the concrete detail of the world we actually inhabit.

Equally thin is Mr. Taylor, both in his principles and in their results. Following Mr. Bradley, he starts by assuring us that reality cannot be self-contradictory, but to be related to anything really outside of one's self is to be self-contradictory, so the ultimate reality must be a single all-inclusive systematic whole. Yet all he can say of this whole at the end of his excellently written book is that the notion of it 'can make no addition to our information and can of itself supply no motives for practical endeavor.'

Mr. McTaggart treats us to almost as thin a fare. 'The main practical interest of Hegel's philosophy,' he says, 'is to be found in the abstract certainty which the logic gives us that all reality is rational and righteous, even when we cannot see in the least how it is so.... Not that it shows us how the facts around us are good, not that it shows us how we can make them better, but that it proves that they, like other reality, are *sub specie eternitatis*, perfectly good, and *sub specie temporis*, destined to become perfectly good.'

Here again, no detail whatever, only the abstract certainty that whatever the detail may prove to be, it will be good. Common non-dialectical men have already this certainty as a result of the generous vital enthusiasm about the universe with which they are born. The peculiarity of transcendental philosophy is its sovereign contempt for merely vital functions like enthusiasm, and its pretension to turn our simple and immediate trusts and faiths into the form of logically mediated certainties, to question which would be absurd. But the whole basis on which Mr. McTaggart's own certainty so solidly rests, settles down into the one nutshell of an assertion into which he puts Hegel's gospel, namely, that in every bit of experience and thought, however finite, the whole of reality (the absolute idea, as Hegel calls it) is 'implicitly present.'

This indeed is Hegel's vision, and Hegel thought that the details of his dialectic proved its truth. But disciples who treat the details of the proof as unsatisfactory and yet cling to the vision, are surely, in spite of their pretension to a more rational consciousness, no better than common men with their enthusiasms or deliberately adopted faiths. We have ourselves seen some of the weakness of the monistic proofs. Mr. McTaggart picks plenty of holes of his own in Hegel's logic, and finally concludes that 'all true philosophy must be mystical, not indeed in its methods but in its final conclusions,' which is as much as to say that the rationalistic methods leave us in the lurch, in spite of all their superiority, and that in the end vision and faith must eke them out. But how abstract and thin is here the vision, to say nothing of the faith! The whole of reality, explicitly absent from our finite experiences, must nevertheless be present in them all implicitly, altho no one of us can ever see how--the bare word 'implicit' here bearing the whole pyramid of the monistic system on its slender point. Mr. Joachim's monistic system of truth rests on an even slenderer point.--I have never doubted,' he says, 'that universal and timeless truth is a single content or significance, one and whole and complete,' and he candidly confesses the failure of rationalistic attempts 'to raise this immediate certainty' to the level of reflective knowledge. There is, in short, no mediation for him between the Truth in capital letters and all the little 'lower-case' truths--and errors--which life presents. The psychological fact that he never has 'doubted' is enough.

The whole monistic pyramid, resting on points as thin as these, seems to me to be a *machtspruch*, a product of will far more than one of reason. Unity is good, therefore things *shall* cohere; they *shall* be one; there *shall* be categories to make them one, no matter what empirical disjunctions may appear. In Hegel's own writings, the _shall-be_ temper is ubiquitous and towering; it overrides verbal and logical resistances alike. Hegel's error, as Professor Royce so well says, 'lay not in introducing logic into passion,' as some people charge, 'but in conceiving the logic of passion as the only logic.... He is [thus] suggestive,' Royce says, 'but never final. His system as a system has crumbled, but his vital comprehension of our life remains forever.'[1]

That vital comprehension we have already seen. It is that there is a sense in which real things are not merely their own bare selves, but may vaguely be treated as also their own others, and that ordinary logic, since it denies this, must be overcome. Ordinary logic denies this because it substitutes concepts for real things, and concepts *are* their own bare selves and nothing else. What Royce calls Hegel's 'system' was Hegel's attempt to make us believe that he was working by concepts and grinding out a higher style of logic, when in reality sensible experiences, hypotheses, and passion furnished him with all his results.

What I myself may mean by things being their own others, we shall see in a later lecture. It is now time to take our look at Fechner, whose thickness is a refreshing contrast to the thin, abstract, indigent, and threadbare appearance, the starving, school-room aspect, which the speculations of most of our absolutist philosophers present.

There is something really weird and uncanny in the contrast between the abstract pretensions of rationalism and what rationalistic methods concretely can do. If the 'logical prius' of our mind were really the 'implicit presence' of the whole 'concrete universal,' the whole of reason, or reality, or spirit, or the absolute idea, or whatever it may be called, in all our finite thinking, and if this reason worked (for example) by the dialectical method, doesn't it seem odd that in the greatest instance of rationalization mankind has known, in 'science,' namely, the dialectical method should never once have been tried? Not a solitary instance of the use of it in science occurs to my mind. Hypotheses, and deductions from these, controlled by sense-observations and analogies with what we know elsewhere, are to be thanked for all of science's results.

Fechner used no methods but these latter ones in arguing for his metaphysical conclusions about reality--but let me first rehearse a few of the facts about his life.

Born in 1801, the son of a poor country pastor in Saxony, he lived from 1817 to 1887, when he died, seventy years therefore, at Leipzig, a typical *gelehrter* of the old-fashioned german stripe. His means were always scanty, so his only extravagances could be in the way of thought, but these were gorgeous ones. He passed his medical examinations at Leipzig University at the age of twenty-one, but decided, instead of becoming a doctor, to devote himself to physical science. It was ten years before he was made professor of physics, although he soon was authorized to lecture. Meanwhile, he had to make both ends meet, and this he did by voluminous literary labors. He translated, for example, the four volumes of Biot's treatise on physics, and the six of Thénard's work on chemistry, and took care of their enlarged editions later. He edited repertories of chemistry and physics, a pharmaceutical journal, and an encyclopaedia in eight volumes, of which he wrote about one third. He published physical treatises and experimental investigations of his own, especially in electricity. Electrical measurements, as you know, are the basis of electrical science, and Fechner's measurements in galvanism, performed with the simplest self-made apparatus, are classic to this day. During this time he also published a number of half-philosophical, half-humorous writings, which have gone through several editions, under the name of Dr. Mises, besides poems, literary and artistic essays, and other occasional articles.

But overwork, poverty, and an eye-trouble produced by his observations on after-images in the retina (also a classic piece of investigation) produced in Fechner, then about thirty-eight years old, a terrific attack of nervous prostration with painful hyperaesthesia of all the functions, from which he suffered three years, cut off entirely from active life. Present-day medicine would have classed poor Fechner's malady quickly enough,

as partly a habit-neurosis, but its severity was such that in his day it was treated as a visitation incomprehensible in its malignity; and when he suddenly began to get well, both Fechner and others treated the recovery as a sort of divine miracle. This illness, bringing Fechner face to face with inner desperation, made a great crisis in his life. 'Had I not then clung to the faith,' he writes, 'that clinging to faith would somehow or other work its reward, _so hätte ich jene zeit nicht ausgehalten_.' His religious and cosmological faiths saved him--thenceforward one great aim with him was to work out and communicate these faiths to the world. He did so on the largest scale; but he did many other things too ere he died.

A book on the atomic theory, classic also; four elaborate mathematical and experimental volumes on what he called psychophysics--many persons consider Fechner to have practically founded scientific psychology in the first of these books; a volume on organic evolution, and two works on experimental aesthetics, in which again Fechner is considered by some judges to have laid the foundations of a new science, must be included among these other performances. Of the more religious and philosophical works, I shall immediately give a further account.

All Leipzig mourned him when he died, for he was the pattern of the ideal german scholar, as daringly original in his thought as he was homely in his life, a modest, genial, laborious slave to truth and learning, and withal the owner of an admirable literary style of the vernacular sort. The materialistic generation, that in the fifties and sixties called his speculations fantastic, had been replaced by one with greater liberty of imagination, and a Preyer, a Wundt, a Paulsen, and a Lasswitz could now speak of Fechner as their master.

His mind was indeed one of those multitudinously organized cross-roads of truth which are occupied only at rare intervals by children of men, and from which nothing is either too far or too near to be seen in due perspective. Patientest observation, exactest mathematics, shrewdest discrimination, humanest feeling, flourished in him on the largest scale, with no apparent detriment to one another. He was in fact a philosopher in the 'great' sense, altho he cared so much less than most philosophers care for abstractions of the 'thin' order. For him the abstract lived in the concrete, and the hidden motive of all he did was to bring what he called the daylight view of the world into ever greater evidence, that daylight view being this, that the whole universe in its different spans and wave-lengths, exclusions and envelopments, is everywhere alive and conscious. It has taken fifty years for his chief book, 'Zend-avesta,' to pass into a second edition (1901). 'One swallow,' he cheerfully writes, 'does not make a summer. But the first swallow would not come unless the summer were coming; and for me that summer means my daylight view some time prevailing.'

The original sin, according to Fechner, of both our popular and our scientific thinking, is our inveterate habit of regarding the spiritual not as the rule but as an exception in the midst of nature. Instead of believing our life to be fed at the breasts of the greater life, our individuality to be sustained by the greater individuality, which must necessarily have more consciousness and more independence than all that it brings forth, we habitually treat whatever lies outside of our life as so much slag and ashes of life only; or if we believe in a Divine Spirit, we fancy him on the one side as bodiless, and nature as soulless on the other. What comfort, or peace, Fechner asks, can come from such a doctrine? The flowers wither at its breath, the stars turn into stone; our own body grows unworthy of our spirit and sinks to a tenement for carnal senses only. The book of nature turns into a volume on mechanics, in which whatever has life is treated as a sort of anomaly; a great chasm of separation yawns between us and all that is higher than ourselves; and God becomes a thin nest of abstractions.

Fechner's great instrument for vivifying the daylight view is analogy; not a rationalistic argument is to be found in all his many pages--only reasonings like those which men continually use in practical life. For example: My house is built by some one, the world too is built by some one. The world is greater than my house, it must be a greater some one who built the world. My body moves by the influence of my feeling and will; the sun, moon, sea, and wind, being themselves more powerful, move by the influence of some more powerful feeling and will. I live now, and change from one day to another; I shall live hereafter, and change still more, etc.

Bain defines genius as the power of seeing analogies. The number that Fechner could perceive was prodigious; but he insisted on the differences as well. Neglect to make allowance for these, he said, is the common fallacy in analogical reasoning. Most of us, for example, reasoning justly that, since all the minds we know are connected with bodies, therefore God's mind should be connected with a body, proceed to suppose that that body must be just an animal body over again, and paint an altogether human picture of God. But all that the analogy comports is *a* body--the particular features of *our* body are adaptations to a habitat so different from God's that if God have a physical body at all, it must be utterly different from ours in structure. Throughout his writings Fechner makes difference and analogy walk abreast, and by his extraordinary power of noticing both, he converts what would ordinarily pass for objections to his conclusions into factors of their support.

The vaster orders of mind go with the vaster orders of body. The entire earth on which we live must have, according to Fechner, its own collective consciousness. So must each sun, moon, and planet; so must the whole solar system have its own wider consciousness, in which the consciousness of our earth plays one part. So has the entire starry system as such its consciousness; and if that starry system be not the sum of all that *is*, materially considered, then that whole system, along with whatever else may be, is the body of that absolutely totalized consciousness of the universe to which men give the name of God.

Speculatively Fechner is thus a monist in his theology; but there is room in his universe for every grade of spiritual being between man and the final all-inclusive God; and in suggesting what the positive content of all this super-humanity may be, he hardly lets his imagination fly beyond simple spirits of the planetary order. The earth-soul he passionately believes in; he treats the earth as our special human guardian angel; we can pray to the earth as men pray to their saints; but I think that in his system, as in so many of the actual historic theologies, the supreme God marks only a sort of limit of enclosure of the worlds above man. He is left thin and abstract in his majesty, men preferring to carry on their personal transactions with the many less remote and abstract messengers and mediators whom the divine order provides.

I shall ask later whether the abstractly monistic turn which Fechner's speculations took was necessitated by logic. I believe it not to have been required. Meanwhile let me lead you a little more into the detail of his thought. Inevitably one does him miserable injustice by summarizing and abridging him. For althouthe type of reasoning he employs is almost childlike for simplicity, and his bare conclusions can be written on a single page, the *power* of the man is due altogether to the profuseness of his concrete imagination, to the multitude of the points which he considers successively, to the cumulative effect of his learning, of his thoroughness, and of the ingenuity of his detail, to his admirably homely style, to the sincerity with which his pages glow, and finally to the impression he gives of a man who doesn't live at second-hand, but who *sees*, who in fact speaks as one having authority, and not as if he were one of the common herd of professorial philosophic scribes.

Abstractly set down, his most important conclusion for my purpose in these lectures is that the constitution of the world is identical throughout. In ourselves, visual consciousness goes with our eyes, tactile consciousness with our skin. But altho neither skin nor eye knows aught of the sensations of the other, they come together and figure in some sort of relation and combination in the more inclusive consciousness which each of us names his *self*. Quite similarly, then, says Fechner, we must suppose that my consciousness of myself and yours of yourself, altho in their immediacy they keep separate and know nothing of each other, are yet known and used together in a higher consciousness, that of the human race, say, into which they enter as constituent parts. Similarly, the whole human and animal kingdoms come together as conditions of a consciousness of still wider scope. This combines in the soul of the earth with the consciousness of the vegetable kingdom, which in turn contributes its share of experience to that of the whole solar system, and so on from synthesis to synthesis and height to height, till an absolutely universal consciousness is reached.

A vast analogical series, in which the basis of the analogy consists of facts directly observable in ourselves.

The supposition of an earth-consciousness meets a strong instinctive prejudice which Fechner ingeniously tries to overcome. Man's mind is the highest consciousness upon the earth, we think--the earth itself being in all ways man's inferior. How should its consciousness, if it have one, be superior to his?

What are the marks of superiority which we are tempted to use here? If we look more carefully into them, Fechner points out that the earth possesses each and all of them more perfectly than we. He considers in detail the points of difference between us, and shows them all to make for the earth's higher rank. I will touch on only a few of these points.

One of them of course is independence of other external beings. External to the earth are only the other heavenly bodies. All the things on which we externally depend for life--air, water, plant and animal food, fellow men, etc.--are included in her as her constituent parts. She is self-sufficing in a million respects in which we are not so. We depend on her for almost everything, she on us for but a small portion of her history. She swings us in her orbit from winter to summer and revolves us from day into night and from night into day.

Complexity in unity is another sign of superiority. The total earth's complexity far exceeds that of any organism, for she includes all our organisms in herself, along with an infinite number of things that our organisms fail to include. Yet how simple and massive are the phases of her own proper life! As the total bearing of any animal is sedate and tranquil compared with the agitation of its blood corpuscles, so is the earth a sedate and tranquil being compared with the animals whom she supports.

To develop from within, instead of being fashioned from without, is also counted as something superior in men's eyes. An egg is a higher style of being than a piece of clay which an external modeler makes into the image of a bird. Well, the earth's history develops from within. It is like that of a wonderful egg which the sun's heat, like that of a mother-hen, has stimulated to its cycles of evolutionary change.

Individuality of type, and difference from other beings of its type, is another mark of rank. The earth differs from every other planet, and as a class planetary beings are extraordinarily distinct from other beings.

Long ago the earth was called an animal; but a planet is a higher class of being than either man or animal; not only quantitatively greater, like a vaster and more awkward whale or elephant, but a being whose enormous size requires an altogether different plan of life. Our animal organization comes from our inferiority. Our need of moving to and fro, of stretching our limbs and bending our bodies, shows only our defect. What are our legs but crutches, by means of which, with restless efforts, we go hunting after the things we have not inside of ourselves. But the earth is no such cripple; why should she who already possesses within herself the things we so painfully pursue, have limbs analogous to ours? Shall she mimic a small part of herself? What need has she of arms, with nothing to reach for? of a neck, with no head to carry? of eyes or nose when she finds her way through space without either, and has the millions of eyes of all her animals to guide their movements on her surface, and all their noses to smell the flowers that grow? For, as we are ourselves a part of the earth, so our organs are her organs. She is, as it were, eye and ear over her whole extent--all that we see and hear in separation she sees and hears at once. She brings forth living beings of countless kinds upon her surface, and their multitudinous conscious relations with each other she takes up into her higher and more general conscious life.

Most of us, considering the theory that the whole terrestrial mass is animated as our bodies are, make the mistake of working the analogy too literally, and allowing for no differences. If the earth be a sentient organism, we say, where are her brain and nerves? What corresponds to her heart and lungs? In other words, we expect functions which she already performs through us, to be performed outside of us again, and in just the same way. But we see perfectly well how the earth performs some of these functions in a way unlike our way. If you speak of circulation, what need has she of a heart when the sun keeps all the showers of rain that fall upon her and all the springs and brooks and rivers that irrigate her, going? What need has she of internal

lungs, when her whole sensitive surface is in living commerce with the atmosphere that clings to it?

The organ that gives us most trouble is the brain. All the consciousness we directly know seems tied to brains.--Can there be consciousness, we ask, where there is no brain? But our brain, which primarily serves to correlate our muscular reactions with the external objects on which we depend, performs a function which the earth performs in an entirely different way. She has no proper muscles or limbs of her own, and the only objects external to her are the other stars. To these her whole mass reacts by most exquisite alterations in its total gait, and by still more exquisite vibratory responses in its substance. Her ocean reflects the lights of heaven as in a mighty mirror, her atmosphere refracts them like a monstrous lens, the clouds and snow-fields combine them into white, the woods and flowers disperse them into colors. Polarization, interference, absorption, awaken sensibilities in matter of which our senses are too coarse to take any note.

For these cosmic relations of hers, then, she no more needs a special brain than she needs eyes or ears. *Our* brains do indeed unify and correlate innumerable functions. Our eyes know nothing of sound, our ears nothing of light, but, having brains, we can feel sound and light together, and compare them. We account for this by the fibres which in the brain connect the optical with the acoustic centre, but just how these fibres bring together not only the sensations, but the centres, we fail to see. But if fibres are indeed all that is needed to do that trick, has not the earth pathways, by which you and I are physically continuous, more than enough to do for our two minds what the brain-fibres do for the sounds and sights in a single mind? Must every higher means of unification between things be a literal _brain_-fibre, and go by that name? Cannot the earth-mind know otherwise the contents of our minds together?

Fechner's imagination, insisting on the differences as well as on the resemblances, thus tries to make our picture of the whole earth's life more concrete. He revels in the thought of its perfections. To carry her precious freight through the hours and seasons what form could be more excellent than hers--being as it is horse, wheels, and wagon all in one. Think of her beauty--a shining ball, sky-blue and sun-lit over one half, the other bathed in starry night, reflecting the heavens from all her waters, myriads of lights and shadows in the folds of her mountains and windings of her valleys, she would be a spectacle of rainbow glory, could one only see her from afar as we see parts of her from her own mountain-tops. Every quality of landscape that has a name would then be visible in her at once--all that is delicate or graceful, all that is quiet, or wild, or romantic, or desolate, or cheerful, or luxuriant, or fresh. That landscape is her face--a peopled landscape, too, for men's eyes would appear in it like diamonds among the dew-drops. Green would be the dominant color, but the blue atmosphere and the clouds would enfold her as a bride is shrouded in her veil--a veil the vapory transparent folds of which the earth, through her ministers the winds, never tires of laying and folding about herself anew.

Every element has its own living denizens. Can the celestial ocean of ether, whose waves are light, in which the earth herself floats, not have hers, higher by as much as their element is higher, swimming without fins, flying without wings, moving, immense and tranquil, as by a half-spiritual force through the half-spiritual sea which they inhabit, rejoicing in the exchange of luminous influence with one another, following the slightest pull of one another's attraction, and harboring, each of them, an inexhaustible inward wealth?

Men have always made fables about angels, dwelling in the light, needing no earthly food or drink, messengers between ourselves and God. Here are actually existent beings, dwelling in the light and moving through the sky, needing neither food nor drink, intermediaries between God and us, obeying his commands. So, if the heavens really are the home of angels, the heavenly bodies must be those very angels, for other creatures *there* are none. Yes! the earth is our great common guardian angel, who watches over all our interests combined.

In a striking page Fechner relates one of his moments of direct vision of this truth.

'On a certain spring morning I went out to walk. The fields were green, the birds sang, the dew glistened, the

smoke was rising, here and there a man appeared; a light as of transfiguration lay on all things. It was only a little bit of the earth; it was only one moment of her existence; and yet as my look embraced her more and more it seemed to me not only so beautiful an idea, but so true and clear a fact, that she is an angel, an angel so rich and fresh and flower-like, and yet going her round in the skies so firmly and so at one with herself, turning her whole living face to Heaven, and carrying me along with her into that Heaven, that I asked myself how the opinions of men could ever have so spun themselves away from life so far as to deem the earth only a dry clod, and to seek for angels above it or about it in the emptiness of the sky,--only to find them nowhere.... But such an experience as this passes for fantastic. The earth is a globular body, and what more she may be, one can find in mineralogical cabinets.'[2]

Where there is no vision the people perish. Few professorial philosophers have any vision. Fechner had vision, and that is why one can read him over and over again, and each time bring away a fresh sense of reality.

His earliest book was a vision of what the inner life of plants may be like. He called it 'Nanna.' In the development of animals the nervous system is the central fact. Plants develop centrifugally, spread their organs abroad. For that reason people suppose that they can have no consciousness, for they lack the unity which the central nervous system provides. But the plant's consciousness may be of another type, being connected with other structures. Violins and pianos give out sounds because they have strings. Does it follow that nothing but strings can give out sound? How then about flutes and organ-pipes? Of course their sounds are of a different quality, and so may the consciousness of plants be of a quality correlated exclusively with the kind of organization that I they possess. Nutrition, respiration, propagation take place in them without nerves. In us these functions are conscious only in unusual states, normally their consciousness is eclipsed by that which goes with the brain. No such eclipse occurs in plants, and their lower consciousness may therefore be all the more lively. With nothing to do but to drink the light and air with their leaves, to let their cells proliferate, to feel their rootlets draw the sap, is it conceivable that they should not consciously suffer if water, light, and air are suddenly withdrawn? or that when the flowering and fertilization which are the culmination of their life take place, they should not feel their own existence more intensely and enjoy something like what we call pleasure in ourselves? Does the water-lily, rocking in her triple bath of water, air, and light, relish in no wise her own beauty? When the plant in our room turns to the light, closes her blossoms in the dark, responds to our watering or pruning by increase of size or change of shape and bloom, who has the right to say she does not feel, or that she plays a purely passive part? Truly plants can foresee nothing, neither the scythe of the mower, nor the hand extended to pluck their flowers. They can neither run away nor cry out. But this only proves how different their modes of feeling life must be from those of animals that live by eyes and ears and locomotive organs, it does not prove that they have no mode of feeling life at all.

How scanty and scattered would sensation be on our globe, if the feeling-life of plants were blotted from existence. Solitary would consciousness move through the woods in the shape of some deer or other quadruped, or fly about the flowers in that of some insect, but can we really suppose that the Nature through which God's breath blows is such a barren wilderness as this?

I have probably by this time said enough to acquaint those of you who have never seen these metaphysical writings of Fechner with their more general characteristics, and I hope that some of you may now feel like reading them yourselves.[3] The special thought of Fechner's with which in these lectures I have most practical concern, is his belief that the more inclusive forms of consciousness are in part *constituted* by the more limited forms. Not that they are the mere sum of the more limited forms. As our mind is not the bare sum of our sights plus our sounds plus our pains, but in adding these terms together also finds relations among them and weaves them into schemes and forms and objects of which no one sense in its separate estate knows anything, so the earth-soul traces relations between the contents of my mind and the contents of yours of which neither of our separate minds is conscious. It has schemes, forms, and objects proportionate to its wider field, which our mental fields are far too narrow to cognize. By ourselves we are simply out of relation with each other, for it we are both of us there, and *different* from each other, which is a positive relation. What we

are without knowing, it knows that we are. We are closed against its world, but that world is not closed against us. It is as if the total universe of inner life had a sort of grain or direction, a sort of valvular structure, permitting knowledge to flow in one way only, so that the wider might always have the narrower under observation, but never the narrower the wider.

Fechner's great analogy here is the relation of the senses to our individual minds. When our eyes are open their sensations enter into our general mental life, which grows incessantly by the addition of what they see. Close the eyes, however, and the visual additions stop, nothing but thoughts and memories of the past visual experiences remain--in combination of course with the enormous stock of other thoughts and memories, and with the data coming in from the senses not yet closed. Our eye-sensations of themselves know nothing of this enormous life into which they fall. Fechner thinks, as any common man would think, that they are taken into it directly when they occur, and form part of it just as they are. They don't stay outside and get represented inside by their copies. It is only the memories and concepts of them that are copies; the sensible perceptions themselves are taken in or walled out in their own proper persons according as the eyes are open or shut.

Fechner likens our individual persons on the earth unto so many sense-organs of the earth's soul. We add to its perceptive life so long as our own life lasts. It absorbs our perceptions, just as they occur, into its larger sphere of knowledge, and combines them with the other data there. When one of us dies, it is as if an eye of the world were closed, for all *perceptive* contributions from that particular quarter cease. But the memories and conceptual relations that have spun themselves round the perceptions of that person remain in the larger earth-life as distinct as ever, and form new relations and grow and develop throughout all the future, in the same way in which our own distinct objects of thought, once stored in memory, form new relations and develop throughout our whole finite life. This is Fechner's theory of immortality, first published in the little 'Büchlein des lebens nach dem tode,' in 1836, and re-edited in greatly improved shape in the last volume of his 'Zend-avesta.'

We rise upon the earth as wavelets rise upon the ocean. We grow out of her soil as leaves grow from a tree. The wavelets catch the sunbeams separately, the leaves stir when the branches do not move. They realize their own events apart, just as in our own consciousness, when anything becomes emphatic, the background fades from observation. Yet the event works back upon the background, as the wavelet works upon the waves, or as the leaf's movements work upon the sap inside the branch. The whole sea and the whole tree are registers of what has happened, and are different for the wave's and the leaf's action having occurred. A grafted twig may modify its stock to the roots:--so our outlived private experiences, impressed on the whole earth-mind as memories, lead the immortal life of ideas there, and become parts of the great system, fully distinguished from one another, just as we ourselves when alive were distinct, realizing themselves no longer isolatedly, but along with one another as so many partial systems, entering thus into new combinations, being affected by the perceptive experiences of those living then, and affecting the living in their turn--altho they are so seldom recognized by living men to do so.

If you imagine that this entrance after the death of the body into a common life of higher type means a merging and loss of our distinct personality, Fechner asks you whether a visual sensation of our own exists in any sense *less for itself* or *less distinctly*, when it enters into our higher relational consciousness and is there distinguished and defined.

--But here I must stop my reporting and send you to his volumes. Thus is the universe alive, according to this philosopher! I think you will admit that he makes it more *thickly* alive than do the other philosophers who, following rationalistic methods solely, gain the same results, but only in the thinnest outlines. Both Fechner and Professor Royce, for example, believe ultimately in one all-inclusive mind. Both believe that we, just as we stand here, are constituent parts of that mind. No other *content* has it than us, with all the other creatures like or unlike us, and the relations which it finds between us. Our eaches, collected into one, are substantively identical with its all, tho the all is perfect while no each is perfect, so that we have to admit that new qualities as well as unperceived relations accrue from the collective form. It is thus superior to the distributive form.

But having reached this result, Royce (tho his treatment of the subject on its moral side seems to me infinitely richer and thicker than that of any other contemporary idealistic philosopher) leaves us very much to our own devices. Fechner, on the contrary, tries to trace the superiorities due to the more collective form in as much detail as he can. He marks the various intermediary stages and halting places of collectivity,--as we are to our separate senses, so is the earth to us, so is the solar system to the earth, etc.,--and if, in order to escape an infinitely long summation, he posits a complete God as the all-container and leaves him about as indefinite in feature as the idealists leave their absolute, he yet provides us with a very definite gate of approach to him in the shape of the earth-soul, through which in the nature of things we must first make connexion with all the more enveloping superhuman realms, and with which our more immediate religious commerce at any rate has to be carried on.

Ordinary monistic idealism leaves everything intermediary out. It recognizes only the extremes, as if, after the first rude face of the phenomenal world in all its particularity, nothing but the supreme in all its perfection could be found. First, you and I, just as we are in this room; and the moment we get below that surface, the unutterable absolute itself! Doesn't this show a singularly indigent imagination? Isn't this brave universe made on a richer pattern, with room in it for a long hierarchy of beings? Materialistic science makes it infinitely richer in terms, with its molecules, and ether, and electrons, and what not. Absolute idealism, thinking of reality only under intellectual forms, knows not what to do with *bodies* of any grade, and can make no use of any psychophysical analogy or correspondence. The resultant thinness is startling when compared with the thickness and articulation of such a universe as Fechner paints. May not satisfaction with the rationalistic absolute as the alpha and omega, and treatment of it in all its abstraction as an adequate religious object, argue a certain native poverty of mental demand? Things reveal themselves soonest to those who most passionately want them, for our need sharpens our wit. To a mind content with little, the much in the universe may always remain hid.

To be candid, one of my reasons for saying so much about Fechner has been to make the thinness of our current transcendentalism appear more evident by an effect of contrast. Scholasticism ran thick; Hegel himself ran thick; but english and american transcendentalisms run thin. If philosophy is more a matter of passionate vision than of logic,--and I believe it is, logic only finding reasons for the vision afterwards,--must not such thinness come either from the vision being defective in the disciples, or from their passion, matched with Fechner's or with Hegel's own passion, being as moonlight unto sunlight or as water unto wine?[4]

But I have also a much deeper reason for making Fechner a part of my text. His *assumption that conscious experiences freely compound and separate themselves*, the same assumption by which absolutism explains the relation of our minds to the eternal mind, and the same by which empiricism explains the composition of the human mind out of subordinate mental elements, is not one which we ought to let pass without scrutiny. I shall scrutinize it in the next lecture.

LECTURE V

THE COMPOUNDING OF CONSCIOUSNESS

In my last lecture I gave a miserably scanty outline of the way of thinking of a philosopher remarkable for the almost unexampled richness of his imagination of details. I owe to Fechner's shade an apology for presenting him in a manner so unfair to the most essential quality of his genius; but the time allotted is too short to say more about the particulars of his work, so I proceed to the programme I suggested at the end of our last hour. I wish to discuss the assumption that states of consciousness, so-called, can separate and combine themselves freely, and keep their own identity unchanged while forming parts of simultaneous fields of experience of wider scope.

Let me first explain just what I mean by this. While you listen to my voice, for example, you are perhaps inattentive to some bodily sensation due to your clothing or your posture. Yet that sensation would seem