

Social Ethics 20a: Fundamentals Underlying the Social Sciences, fall semester 1926

Monday, 18 October 1926

Stenographer's notes¹

[1] DR. CABOT: I do not know anybody that I would rather hear than Professor Whitehead. As I read in his books, the thing that strikes me is that whereas most of us come to any subject with a certain body of knowledge on one side of human life and study, he comes with a fund of knowledge from so many sides. I said two weeks ago that I thought one of the necessities for anyone who tried to approach the social sciences was to be interested in all the different sides of life of a human being, in the side that deals with beauty, in the side that works in science, in the side that reflects philosophically, in the side that is interested in the state. As we know from Prof. Whitehead's writings, he has distinguished himself not only in mathematics and the natural sciences, but of late years in philosophy (blank). Most philosophers are a little shy about physical sciences, and most men who know physical science are distinctly shy about philosophy. But Prof. Whitehead, like our own Prof. Lawrence Henderson, is one of the few people perfectly at home on each side of that unfortunate division. I am sure he feels it as much as anyone would an unfortunate division, this one of the philosophers and the men of science.

PROF. WHITEHEAD: I should like to start by disclaiming the impertinence of thinking that one could come to a seminary in a department that is concerned with social ethics and with social sciences, as a special department of thought, and contribute anything on that specialized side, which wants not only study, but which also requires that expert formation by years of quiet prosecution of that study. I have not the slightest belief that I am qualified in any way to give advice or any suggestions. I hope nothing that I say will be construed in that sense.

But of course there are general relations which are in philosophy and all other regions of systematic thought, and that general type of relation, though it varies in emphasis and aims in regard to its various sides, yet has a common aspect for all [2] sides, all topics of thought. But in addition there are certain more special relations I think between philosophy and social ethics. But in dealing with the fundamentals, which is, I see, the topic we are to discuss, I do not conceive them as the fundamentals as they look from the point of view of this department,² but the fundamentals as they look from the point of view of

1. The notes presented here are those of a stenographer, though Cabot took his own notes as well. See the Introduction for a detailed discussion of each note-taker and their notes.

2. That is, the Department of Social Ethics, which was housed on the *second* floor of Emerson Hall. It was established thanks to the gifts of a private donor, Alfred T. White, and began offering courses beginning in 1905 with the opening of Emerson Hall. Cabot took over the chair of the department in 1919. See Harvard Alumni Association, 'Social ethics', and Cabot, 'A. T. White and the Department of Social Ethics'.

the department on the first floor of Emerson Hall.¹ And just to give the point which I shall work up to first, so that it will be thoroughly understood, the two allied formulations that I want to work up to are:

(1) I think that Social Ethics is founded on two great doctrines, one the doctrine of original sin, and the other the correlative doctrine of original virtue, both in the theological sense.

(2) Then there is another two aphorisms, both of which I think are partly true and both of them partly false, and they are antagonistic aphorisms in a way, yet they have to be conciliated: one is the commandment "Thou shalt not steal", which is the great proclamation of individualism, and the other is the statement that "property is robbery". And I think they are equally true and equally false, and that the conciliation between them is where law and the lawyers and social ethics and social sciences meet.

Now I have gone to the middle of my talk that it will be seen how I am gradually working up to the sort of light that philosophy has to bestow. In talking of philosophy one must be a little careful because everybody knows that philosophy is the one subject in which there is no authoritative (blank) The voice of philosophy is the voice (blank) but every philosopher has his own voice. So I do not put it down as the statement of philosophy, but what appears to me to be a natural and true outcome of philosophy in this statement.

What is the scope of philosophy? It deals with the generic concepts of the widest scope, those concepts which have universal application; and then it endeavors to elucidate thought in every particular science, in every region of thought, by the [3] production of a harmonious, logical scheme of such wide generic concepts. So that the special notions, the special concepts of each special topic of human thought, can be expressed in terms of specializations of these generic concepts, so that philosophy is what we may term the discovery of the ultimate meanings, seeing what we can say ultimately, and in terms of which all special meanings find their place.

It follows from this view that philosophy should start, is really a survey of human interests, just as the physicist has all the nice little elements in bottles all around the laboratory, so philosophy must start by a survey of human interests, and its accrued data are the formulations of belief which are found and held to in respect to these topics of interest. Then having got hold of them, its next pursuit is imaginatively to formulate a scheme of generic concepts which performs the function which I have described above, of enabling the beliefs, the formulations, the special formulations of the special interests, to find their meanings in terms of these broader concepts.

So the tests which philosophy applies should be in the first place, the clear definition of its ideas, and that definition is promoted by their mutual interconnection and then also it appeals to their obvious exemplification as an interpretation of the immediate experience apart from the (blank) by this scheme. Again there is the logical coherence of the scheme and there are logical

1. Whitehead is of course referring to the Philosophy Department.

deductions which are also applied. And finally, having had all this, it then proceeds to conceive, to go back to its source in a more particular comparison with the accepted principles of the various systematic sciences. I think it gets its starting ground from one or more of these sciences. Usually when we speak of any particular philosophy it is to repudiate (blank) but I think then we have to consider whether we can interpret under this common system of ideas or accepted principles. Then we never get perfect success, and any such scheme will suggest some paradoxes, and the conclusion is that either the philosophic scheme of thought requires modification or the principles of the special science in question require modification – probably both.

So I look on philosophy as endeavoring to get a general notion of universal [4] applicability, by generalizing from special sciences, by modifying it so as to suit all the special sciences, and then having their special notions in that way. In the first place it is a critic of the notions of any one science, by pointing out where its special ideas fail to fit into what seems to be the best generalization. But it is not only a critic. It is also a stimulus to the imagination, because the special ideas of any one science will turn out to be a certain specialization of these philosophic generic notions, and philosophy would provide also the vision of possible alternative modes of specialization. So philosophy should not only be a critic, but an aid to the imagination. It should act really as a stimulus, what we may term the (poetry)¹ of thought in that way. It is not a neat little cast-iron view, but a view of general potentialities which are suggested by ideas common and generalized from all the special sciences. And then finally, there is the final and supreme test for all philosophic thought, of adequacy; namely, are there whole regions of immediate experience which escape from any exemplification, whatever of our philosophic scheme?

Now when we appeal to practice as Hume does, for Hume has in a sense demolished causation – he says practically what the gentleman did in the eighteenth century, “I am not such a fool as to think that nothing follows from anything – that unless you think there are fixed and definite consequences, you will be knocked down before you live many hours.” Now the appeal to practice, to what we believe in practice is supplementary philosophy, as supplementing philosophy is nothing but a confession of the inadequacy of your philosophic ideas, because whatever you believe ought to find its place as interpreting, as a specialization of these general notions. Practice ought to exemplify these principles and not to supplement them. Now practice as distinct from the special formulations of special sciences, practice is the ocean of immediate experience which lies outside the petty canals which are the various sciences. (blank) is not really countenanced by any of the great leaders.

Newton’s statement that we are like a child picking up shells by the ocean.²
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1. The stenographer left a blank here, but Cabot’s own notes have ‘Stimulus to poetry of thought’ (p. 2).
 2. This quote appears in the first American edition of Newton’s *Principia* (1846), in a section on the life of Newton by N. W. Chittenden: ‘I do not know what I may appear to the world, but to myself I seem to have been only like a boy playing on the sea-shore, and diverting myself in now and then finding a smoother pebble or a prettier shell than ordinary, whilst the great ocean of truth lay all

The importance of philosophy to any particular science varies. When a set of principles [5] have been elaborated for a particular science which are working well, which are finding their exemplification in all the topics of the special science, and whose consequences require further elaboration and further concentration of experience, the job of scientists (is) to stick to those principles and work them out. They may be adequate or they may not be adequate. But you cannot move a step until you work out and see how far those principles will apply, and where they begin to break down. And that is only found by scientists sticking to those principles and elaborating them. And when a science, as it often does, gets into that state, it may say goodbye to philosophy, at least its particular workers need not bother about philosophy during their lifetime.

For example, when Galileo had adopted the Copernican hypothesis and had got his telescope and observed how it simplified the orbits of the planets, and looked at the planets and saw the mountains of the moon and the moons of Jupiter and the horns of Venus and all that, he did not want to be looking to the right or to the left. It was perfectly obvious that the Copernican hypothesis was the job of scientists. Astronomy was (blank) It so happened that the Copernican hypothesis in the sense of Galileo was just as wrong as the (heliocentric)¹ hypothesis. The physicists said that the earth was at rest and Galileo said that the sun was at rest. Both in our modern sense had as much right to say so, and yet (blank). But there was not the slightest doubt as to what was the way of looking at things which was going to elicit progress. Then we got the next great formulation, which turned out to be the Newtonian materialistic mechanism.² That in a sense formulates to perfection certain aspects of the universe which (blank). As a matter of fact – and how often this is so – for a couple of centuries or more it was the job of scientists to stick to it. Then we got Darwin's theory of natural selection. The way in which all biologists until quite recently raged against the inheritance of acquired characteristics was a perfectly legitimate characteristic, namely how far natural selection and the theory of evolution based on the idea of natural selection would be carried, how far the facts would be truthfully interpreted [6] in that way. And we could not know whether that point was inadequate until about two generations of scientists had worked on it from that point of view.

Then we come to a more definite social science. The economic man was a godsend to political economy, because we wanted to know what would happen insofar as mankind was simply and absolutely swayed by the economic motive. And until you had worked that out theoretically and compared it with practice, you do not know, have no way of knowing, how far the economic motive was dominant, how greatly important, or whether it was simply absent. And there again when you have once got the economic man, the economists had to live with him for about a couple of generations, and then he becomes

undiscovered before me' (p. 58). See Newton, *Newton's Principia*, available at <<https://archive.org/details/newtonspmathema00newtrich>>.

1. The original has 'idiocentric' but, from context, Whitehead must have said 'heliocentric', which seems to have been a word with which the stenographer was unfamiliar.
2. Cabot's notes have 'mechanistic materialism' (p. 2).

a fearful nuisance. But scientists – I am using science in a general sense in which philosophy is a science – I think if you look at the history of science it is practically the mistakes made by the scientists as to what is their immediate job, how almost naked they are. But they are always and habitually overstating the scope or the validity of the line of thought in which they are engaged.¹ I think the history of science is really a most melancholy example of the overstatements of mankind. Why people cannot moderate their statements according to the evidence – if people would only stick to that idea of what may be perfectly sound (methodological)² device is not thereby a final and adequate principle –

Now as soon as you have come in a science to the limit of some very fruitful principles, or if you are dissatisfied with the scope of the work which your existing principles suggested, philosophy provides the imaginative background for the reformulations of general principles, and it is a point that cannot be too often brought home – I am always repeating it, that whosoever goes out to despise metaphysics always ends by adopting the metaphysical nostrums that were prevalent in his nursery. And they had often very good metaphysical nostrums in the nursery. But the point is, in all that they have an imaginative idea of the general principles (?) which you are seeking. The specialization due to your particular science is really congruous to metaphysics, and the beauty of metaphysics is that it should stimulate imagination over the whole realm of physical science. If it does not do that it is not doing its job – and I think very often it is not doing its job. It has shrunken into a pitiful science which has no interest beyond itself.

Now so far as social science is concerned, its principles will always reflect and in turn influence philosophy in a peculiarly intimate way. I think it is peculiarly intimate because our conceptions of social ethics necessarily depend upon the conceptions of ethics generally and our conception of the end towards which the organization of society is to be directed. And you cannot discuss ends without asking yourself, what is the world anyway? We have to come down to a general metaphysical question.

At this point I (most)³ specialize in dealing with philosophy, and I am interested in that type of philosophy which is peculiarly a continuation of the physical sciences. These great adaptations of philosophical ideas to the physical sciences were made by Descartes, and though nobody says they are Cartesians now, everybody who is both a physicist and a philosopher is much more a Cartesian than they like to admit. I shall start from Descartes. I think he has many merits. He is extraordinarily clear because he is French, and he is short. He has not that appalling volubility of some philosophers. He is short and clear and definite and has the supreme merit that where he is wrong, he is clearly wrong. And so, provided we dare to differ from Descartes, I shall start with him.

1. Cf. Cabot's notes: 'Scientist nearly infallible as to their immediate job, but habitually overstate the scope of the validity of their method' (Cabot, p. 2).

2. The original has 'mythological'; 'methodological' seems more likely.

3. The stenographer has 'must' here, but that seems likely to have been an error.

He commenced by asking what we have to say about the substances composing the world. Now a substance to Descartes – not to the antecedent scholastics – means the entities (blank) which in the fullest, simplest sense are the real, actual things which compose, by reason of their own reality and actuality, the real world. What are the things whose reality is the reality of the real world. Then there are the other entities in terms of which substances must be described. They are not real in the same sense as a substance is. There are various ways of talking about them. They are called attributes, forms, qualities.¹ Each word we use has a long history which usually suggests a philosophy which you want to repudiate. For that reason I have called them eternal objects. But anyhow, however we call these attributes, such entities express [8] the how and the what of the diversities of the identities which are involved in the (blank) of the real entity. Thus they are essentially inherent in the real entities and cannot be conceived without reference to them. It is for that reason that in my own works I have said that it is in their nature that they have ingression to the real entities. Descartes takes as the distinguishing mark of the substance the fact that in some sense or other the substance – I use here the slang phrase – is “on its own”. The real entity is something of its own, it is individual, has its own spirit and independence. It is real on its own account, and for Descartes the world is composed of a multiplicity of substances of various kinds, and each substance is an individual with its own independence. Each one of us – I am in a certain sense just what I am. In fact he had three kinds of substances, God, Mind, Bodies, and so far I think any realistic philosophy must agree with him there. But now, and this is the important point for science in general and for social ethics in particular, he formulates more particularly what he means by the independence of each individual substance. He says in the first book of his *Principles of Philosophy*, in Principle 51 we find this statement: “And when we conceive of substance we merely conceive an existent thing which requires nothing but itself in order to exist.”²

That is the great program of individualism and substantivism. I think it is in that a substance is merely, insofar as it is real entity, an existent thing which requires nothing but itself in order to exist. There are two points to notice:

- (1) That it requires nothing but itself in order to exist.
- (2) That its substantial character is merely that.

I think this view of substance is absolutely fatal to any adequate understanding of the world, and of thinking of it. Embodying that view of substance in a philosophic scheme means an inadequacy which I think really embodies all the divisions. I put it here under (Protestant civilization)³ and in the Ten Commandments, namely all the individualism which is destroyed by sound ethics. It is fatal to those two twin doctrines which I wish to impress, namely, the doctrines of original sin and of original [9] virtue, which I look on

1. Cabot adds ‘predicates’ (Cabot, p. 3).

2. This principle appears on pp. 239–40 of the Haldane and Ross translation, which is what Whitehead assigned to his Philosophy 3b students. See Descartes, *Philosophical Works, Vol. I*, available at <<https://archive.org/details/philosophicalwor01desc>>.

3. The original has ‘(blank) specialization’, while Cabot has ‘Protestant civilization’ (p. 3).

as the foundation stones: namely, the doctrine that whatever you are infects the world, so that the world derives from you an original sin and an original virtue, because whatever you are infects the world. Now that is exactly what is denied by Descartes, because he says each real agency requires nothing but itself in order to exist.

Still, as I read Descartes I feel what an admirably clear way that is, the idea that the real being is in some sense on its own. You then go and over-emphasize it, put it in an unbalanced way as a philosophic principle, and you thereby rule out its correlative supplementary truth. You manage to rule that out, and instead of making it antithetical, you make it ⟨blank⟩. And when you have done that you very often, in that small divergence, ruin a whole century of effort.

Now this Cartesian view, remembering what Descartes means by substance, namely that he means the real entity, has haunted modern philosophy ever since, including those philosophers who are explicitly anti-Cartesian. For example, I think it is responsible for ⟨blank⟩¹ looking for something that requires nothing but itself in order to exist, and it is fatal to ethics for two reasons. If you look at various real things as requiring nothing but themselves in order to exist:

(1) Whatever requires nothing but itself in order to exist has a private property in its own life, to please itself. You thus get privacy of what you are ⟨blank⟩ I look on as social ethics as a conciliation of the two diverse expressions by the statement “Thou shalt not steal”, which is the assertion of a measured privacy, and “property is robbery”, which is an assertion of the complete socialism. And both law and social ethics are engaged in conciliating these opposed statements. They are considering what principles there can be which should regulate society, in which there can be a fulfilment of private ends which do not constitute robbery. How you can have private ends in a society without robbery is really, I hold, the topic of social ethics.

[10] (2) Where I think that this formulation of Descartes is fatal to ethics is that according to it any reference to an end is made to be irrelevant to real existence. The only thing is that it requires nothing but itself in order to exist. It is a universe in which morals are meaningless. Its conceivable ends, according to this the attainment to ends are intruders in what would be adequate apart from them. We all know in saying this I am only pointing out that Descartes was merely emphasizing as an absolute philosophical principle the great method of logical discovery of the natural science of his time, namely that final ends are a nuisance in the discoveries of physical law.

Aristotle constructed his ethical science on the basis of explaining it by the final end, and Galileo and the whole of the modern scientists of the 16th and 17th centuries extruded the final ends from physics. And the result is you get a definition of what it is to be real in terms by which final ends are extruded. Philosophy was made to conform to the methodology of physics, and in doing so it parted company I think with morals and ethics. So morals in that point of view are imposed on an alien universe by the crude device of the will of

1. Cabot has two names here: ‘Spencer’s unknowable. Hegel’s absolute’ (Cabot, p. 3).

God. Now of course it is a crude device, because you see, if morals simply arise from the universe and the will of God, you are precluded (blank). You first have to know God before you get your morals. You can't go the other way round. And you cut off your main source (of) getting your notion of God. And we all know that Descartes came down extrinsically on the (ontological)¹ view, which neo-scholastic theology rejects. And this development of (blank) in a universe without any did not remain a curious possibility, but it was the idea that was actually worked out by Newton's successors, and its responsibility to a conscienceless, meaningless nature, a nature without conscience,² engaged in moving itself about. And the Cartesian God is a frail bulwark against it since it depends on (ontological) truth, which is a tour de force. It is manifestly inadequate by reason of the inadequacy of its analysis of our immediate experience.

[11] I am discussing the relationship of philosophy to what I conceive to be social ethics, and I have pointed out how a philosophy which has exclusively taken its starting point from science in one of its phases has had a (blank). The difficulty is that it has created for all the other great topics of man's thought (blank). I conceive the alternative to Cartesian doctrine, if you are to put it on realistic lines and on Cartesian lines at that, to be that to say what an actual entity is we require four headings:

- (a) It requires all other entities, all other actual agencies, in order to exist. It is exactly the opposite of what Descartes says, the assertion of solidarity.
- (b) It is an end in itself, for itself. I think that is a characteristic of being actual, that it is an end in itself for itself, namely every actual entity is an achievement for itself. It has an inside to it.
- (c) It is a process terminating in itself as the result, and
- (d) It is also a character testing for processes which terminate in other actual entities beyond itself and other than itself.

So here we have a notion of value and of process and of sociability, society, essential to the actuality of an entity. So the specific value of the individual occasion arises from the ends attained, and also from the ends beyond itself which are attainable by reason of itself. It arises from the ends antecedently attained by the other processes and the ends beyond itself which are attainable by reason of the character which it is imposing on what we may term the creative process. So an actual entity is an attainment for itself, individualized attainment, not only by reason of its own originality, but by reason of what it inherits or makes possible beyond itself. For you cannot dissociate the actual entity even on the side of its own individual attainments to the total society. And this is the doctrine of social solidarity which I express by the two doctrines of original virtue and original sin. The value of any one is infectious throughout

1. The original has 'entological', which makes no sense here, and is contradicted by Cabot's 'ontological' (p. 4). Again, it seems clear that the stenographer did not have any advanced training in philosophy, making the recording of technical terms challenging.

2. Cabot (p. 4) has 'without consciousness'.

the universe. An actual occasion thus is a concrescence. [12] It is an attained individual value and also a qualification and concrescence beyond itself. It has a four-fold (blank): it grasps other occasions into itself, and the how of its grasping is determined by the eternal objects, and an occasion as grasped into another one is what we may call objectified. Thus "property is robbery" asserts the essential solidarity of individual values. "Thou shalt not steal" asserts the individual value of each occasion over its own. So right to existence is the ultimate right that there can be, the ultimate foundation of all rights, provided that in this specific embodiment (blank) also the intensity of attainment in the universe, including its own intensity of attainment.

And then it can be further held as the foundation of morals. So that there may be a mutual aid, a mutual intensification throughout the universe as equivalent to the intensity of attainment in the individual parts that it leads thereby. It includes therefore the summation into each entity of a harmonious past and in particular the particularization of this harmonious past. It leads to historical (routes)¹ of successive occasions, all in that harmony with each other and each summing up all its with a particular (blank) What we call an individual object, a human being, an electron, from its life to its death is such a historically (routed) occasion. Each as it stands in its immediate presence is a summation (blank) of the past by reason of the peculiar harmony, its peculiar reproduction of the character of its antecedents. So that the particular occasion of its past is the dominant element in its own presence. But in principle every being, an electron or a man, inherits from the whole world not his immediate presence, but it inherits its own past as that past in the world of which in a peculiarly intensive sense it is the summation, and that is the doctrine of what I call original sin and of original virtue.

DR. CABOT: Will you say a little more about original sin?

PROF. WHITEHEAD: Sin is the worst part of it. The point being that I conceive evil not as something negative but as something destructive. Insofar as it is productive of intense self-satisfaction, in its own immediate occasion, insofar as it has a measure of self-satisfaction, in that respect it is a good. But that peculiar, that [13] special actual entity attaining that particular end may be attaining a less formal self-satisfaction than was open to it for itself; or what is even still worse, may be by its qualification of the entities that succeed, may be (blank) to the world in general of a more intense actuality, a more intense self-realization which would otherwise be open to it, and that is evil. So evil is really plunging the world in the direction of nothingness. It is tending to destroy it by destroying the order. I hold that the order in the world – that there is an actual world of some peculiar intensity because there is a remarkable order, and if there was no order there would be the cross-purposes which would be wiping out the world. It would be sinking to a pit of empty space – it would be sinking to a ripple of non-entity.

And I hold that the intensity of realization depends on the favorable environment and on the order, and insofar as there is order, there is both in

1. The original has 'roots'. We have also made this substitution in several places later on.

order, there is both in reality. And evil is that which is destructive of order and is destructive of reality. So far as it ministers to immediate intensity it is so far good. And the world being not wholly a good world, and owing to the fact of original sin, even the best that is open, the ideal, has also always its side of destructiveness. And insofar as it is destructive, insofar it has been put to do the work of evil. But insofar as it tends towards the greatest reality which is open from the standpoint of the present, insofar as it is that, it is good.

The pain in the world I hold in every sense, mental and physical, insofar as it is rightly used, is the destruction of the incongruous element on behalf of the wider order.

And of course the doctrine of original virtue is just the opposite of that, namely, that the virtue has exactly the opposite effect.

DR. CABOT: What becomes of causation?

PROF. WHITEHEAD: Causation is memory. There is no distinction. The past is in you as a formative element, is in an electron as a formative element. And the memory is perceptive. It is the past and the present as conforming to the aspect of [14] the past which is objectified. And this doctrine takes fundamental perceptivity out of the mental sphere and puts it into the physical sphere, because the fundamental relationship on the physical side is the taking account of the past, and there it is fundamental as you term blind perceptivity. It is not reflective, but it is the unthoughtful achievement, the self-satisfaction when (blank) ideas have sunk below . . . the sheer self-satisfaction arising from this concretion of the past.

I hold that when Hume asked where was causation he ought to have been told to look at memory. Then I hold that that mentality $\forall V$ is the analysis, is a further development in the immediate occasion in which it is, a partial analytic by means of concepts of the same eternal objects which function in determining the objective occasion, the physical objectification of the antecedent occasions. These same eternal objects function as concepts, and that the concept is analytic and correlative, thereby disclosing the identity of the eternal object in the (blank) with the identical object on the objective concrescences of the external world. And the end attained there is the satisfaction arising from knowledge, from the agreement or disagreement of a concept with the analysis of the particular occasion of the external world in the given occasion. So perceptivity is properly physical perceptivity and it is in causation and the certain eternally systematic characters of this objectification of the rest of the world in our immediate physical occasion are the characters, the (spatial-)temporal¹ relations, and the change of the temporal relations which are investigated in physical science. We know (blank). Other sides are definitely new to us. We know in the past, and the general sense of power, and see the world around us – all that is our knowledge of the objectification of the world in us.

DR. CABOT: What did the Newtonian physics do with time?

1. The original has 'special temporal'.

PROF. WHITEHEAD: The Newtonian physics took time as a going concern. It testified to the formal relations that it gains by time and said, there are the successive relations which we call time relations, which we are going to examine. But time did not enter really very fundamentally in, though it is very convenient to us, a very clear and beautiful machinery. The point is that there is no actual occasion. Any [15] actual occasion is essentially a transitional process. It is arising as a concretion, and in being what it is, it thereby becomes the character of a concretion beyond itself. It passes itself on and remains a character and a concretion beyond itself. So any actual entity can be looked on as complete. You then have the world as collection of complete entities. Then you have no use for time. Then the next step you take is to say that time is a (blank). Then our whole world is essentially transitional. Then you get the whole world of appearance as illusionary and having a lower reality, that is something behind the veil, and then you have recourse to the Absolute. If you are to have a reality of time, you must take hold of the actual process, which is not stopped by the occasion, but passes beyond it. It seems to me you have to preserve for the actual occasion its own individuality. It must be something in itself, however trivial. If you take an immediate occasion, one immediate occasion of an electron trivial as you like though it has its importance in the whole scheme of things, but as a thing in itself trivial. But when you get to the deeper realities like the people here, then you get a certain intensity of importance.

DR. CABOT: Would you apply the fundamentals that you have been stating to particular classes of the social sciences, such as education? What difference would be made in the way that education should be formed if one thought as you do rather than as Descartes did?

PROF. WHITEHEAD: I hold that knowledge, for example, and character arises in the process. The enduring object is the historical (route), the idea of man as enduring, that the concrete idea is myself, now, as a summation of antecedent occasions which have a practical congruity to each other, harmony, and therefore in a peculiar way we enforce each other and produce an intensity of actuality by reason of their derivation. And the conclusion from that is that if you (blank) has implanted a static character, the static entity is arising in the occasion, in the transition of a process from occasion to occasion, so as to strengthen and intensify the achievements, to intensify the reality of the succeeding occasions. And thus I hold that all knowledge does not arise primarily from a static entity surveying the world, but that it is [16] an outcome, that knowledge always grows in this way, in a race or in a man or out of any small occasions there is always the cycle, action, emotion, belief, rationalization. That you always have that cycle. That there is the entity in its transition, gaining in its emotional value, generating beliefs and attaining to a deeper morality in which there is a purging of belief. And that, I think, can be applied to the whole stretch of human history or to the human being, or as I say to any particular situation. Each day we go through little cycles.

And I hold that education, when you come to it in this way, there is the first discipline to very early stages of action and emotion which have to be got to

harmony. Then you get detached beliefs. That I call, taking it up at that last point, where you have action and emotion and belief in the young child, there is a stage I call the stage of romance, and that in dealing with any topic at first there is always the stage of romance, when you are trying to see what it means. You have your detached beliefs, your actions and emotions in regard to it. And that the mistake of the older type of the 17th, 18th and 19th century education, was that it entirely forgot that stage, and looked on education purely from its later age. Then when you got to romance – and I believe for a child there is a great epoch of romance extending more or less to somewhere between ten and thirteen, and is particularly vivid, (it varies with different children – I should have thought it was somewhere between eight and twelve when it was in its height) and then it is rapidly going off in a desire to clear its ideas. We get the age of precision, when we learn things clearly, and I think that with a properly taught child there is real love in knowing things exactly. And I think very often, especially in the newer education which has in the most praiseworthy way emphasized the necessity of romance, I think very often they have forgotten that romance is only one stage, and keep the child in the romantic stage when it really would welcome the discipline of precision, and what is more, it won't be able to face life until it has it. Luckily nature provides a child of any ability with a real desire to know exactly what it is. And when you have romance and precision you get your further rationalization, namely, you get really that stage of disciplined [17] experimentation and a disciplined power of yourself forming general ideas, testing them, and that is the stage of what I term rational power. There is that other stage in which the young man can think for himself and has his reason and his precision and his knowledge, and I think that it is a great mistake to think that all subjects run through those epochs, those various stages, together. Of course it differs in different children, but some subjects starting when other beliefs are well on towards the rational or have some glimmer of the last stage. And I hold that that point of view has arisen out of the idea of the essential process of development from entity to entity along the historical (route) of transition.

DR. CABOT: Do you care to take the questions suggested for discussion?¹

PROF. WHITEHEAD: To tell you the truth, I should think it rather impertinent to answer those. They are just the questions I should ask you rather than to state myself.

1. Cabot is referring to a list of six questions listed in his syllabus, which Whitehead had presumably seen before he gave his lecture:

- (a) What are the fundamentals of the social sciences, in your view and from the standpoint of the body of knowledge which you represent?
- (b) Define: power, authority, responsibility, loyalty, equality, freedom, representation, conflict.
- (c) What is the central word around which your views arrange themselves?
- (d) In view of your theory, how do you deal with the problem of evil?
- (e) From the point of view of your philosophy of the social sciences, what should be the reconstruction of Harvard University and the education it offers [or some other educational experiment]?
- (f) What change should be made in our criminal law and in our treatment of offenders?

PROF. YOUNG:¹ There is one very obvious application of the present philosophical attitude, and that is some of the old problems of sociology, such difficulties as that of universal society, the reality of the state, the institutional society. Those things seem to be resolved by some such scheme of relation.

PROF. WHITEHEAD: Of course I want to free that general scheme more as an actual relation. What I would suggest is that it is a philosophical point of view which makes solution in the hands of experts possible, whereas to my mind the Cartesians would throw it up at once. It is by the nature of the case impossible, unless you start with some view of the inherent solidarity. That is the line I should take. I should not claim that anything I had said thereby finished up the problem. I should only say that it made the solution possible.

PROF. YOUNG: The lines on which it does make the solution possible suggest themselves.

PROF. HOOTEN:² The question I have in mind is perhaps off the main point, but I wonder what you think are the limits of achievement of the social sciences?

[18] PROF. WHITEHEAD: I am rather shy of putting any limits to them. I do not think, to speak frankly, that they have got very far yet. I do not know whether that is a heresy. But I do think that they are enormously important. I think all those have been thought of for over 2000 years, and probably entered into Egyptian speculation. But the fact that they have not got far is no reason why they should not quite surely make good progress. Because nothing to my mind is more fallacious than the idea that some particular difficulty has beaten mankind for a long time that it finally won't be resolved. In the history of mathematics, so many perplexities which were perplexities from the beginning, during the 19th century, from 1850 onwards, were in the most extraordinary way cleared up. When mathematicians finally got their principles up to the mark, suddenly a whole lot of things became perfectly easy. And in the realm of practice, take the problem of flying. It started with the (blank). Of course they had the birds to show them it was possible, but nobody solved it. It wanted just the general discovery of engine and motor power, then the petrol, then the internal combustion engines, then the enormous amount of experimentation, and finally a convergence of ideas from all sorts of places comes in, the thing is done. By the time you get it, it is done in a very short time. And the problems which revolve about astronomy. Mankind had made very little progress from the earliest Mesopotamians to the time of Galileo; Galileo died as Newton was born, and in about two generations. . . . So I do not see why the slight progress which has been made – now that the psychologist has come on the scene (and he is apt to be a little hasty in his applications) and now that we know so much more about physics – I do not see why social science should not make really rapid progress. I am sure that in one social science – that is education – I am sure there is more to be learned in education than ever has been found out, and that we are on the eve of learning it, because we have just begun to think about it from the point of view of psychology, etc.

1. Allyn Abbott Young (1876–1929) was an American economist.

2. Earnest Hooton (1887–1954) was an American anthropologist.

PROF. FORD:¹ I wish Prof. Whitehead would explain somewhat more his statement that an entity is an end in itself. Just what does that mean?

PROF. WHITEHEAD: What I mean is, there is a measure of self-satisfaction or [19] self-dissatisfaction, and that that, insofar as there is no reflective memory gained of it, no knowledge – that is perhaps a very minor thing that is something – it gets highly intensified in particular entities like ourselves. It is a joy to be alive, and that is so even when there is no reflection. It is creative fact that the self-satisfaction when it is positive passes into a character of reproduction in the next occasion; the superseding occasion when it is self-dissatisfaction it passes into an occasion when it is a measure of avoidance of what is past. And if it is purely dissatisfaction that is a plunge towards nonentity. It has really got self confidence before it and that arising out of the elements. What the world is for that entity is represented in that entity; what the world is arises out of the conditions. Usually it arises out of the environment, out of its inheritance of the whole world, its creative formation, unity of individuals arising out of how the past is for it, and also characterized by the fact that in being itself it is also in character what is going before. That is also an element in it. If it has its dissatisfaction, its inception of avoidance is an element in its dissatisfaction, you see. I do not think you can separate the various functions. There is the one entity which in being one side of itself is also the other side of itself. It must pass on because it is a passing on, and I think that it is pragmatically creative action, and I think the pragmatists are so far right, but wrong in not making everything an end in itself, because if you have really a passing on there is no test of whether a thing is working or not. It is the ends which are the test.

DR. HEXTER:² (blank)

PROF. WHITEHEAD: I look on that as first arising from the concept of “Thou shalt not steal”, the concept that every entity has a right is defeated and thereby there is loss in the world, unless it has an environment and an inheritance generally which, if the environment is such as to defeat the inheritance which it has from its own historical past. I look on the antecedent of an entity, of an enduring entity – I am thinking of a somewhat developed entity, the antecedents of which have divided into two parts, the inheritance from its own past (blank) [20] what would be taking the enduring entity as summed up in the existing one. And the existing entity has its earning just as capital does. But it also on exactly the same principle has the great universe behind it as a background for various intensity of objectification. That is, its environment and insofar as the environment is unfavorable and checks the achievement it might have from its own historical (route), it is being robbed. Insofar as the environment enables it – in a favorable environment – insofar as the entity checks the development of the environment, it is robbing it. An entity may itself

1. James Ford (1885–1944) was an associate professor in Harvard's Department of Social Ethics. During this semester, he was also teaching a course entitled 'Social Problems and Social Policy: Treatment and Prevention of Poverty, Defectiveness and Crime' (Social Ethics 1a).

2. Maurice Beck Hexter (1891–1990) was a professor in Harvard's Department of Social Ethics. During this semester, he was also teaching a course entitled 'Unemployment and Other Interruptions of Working-Class Income' (Social Ethics 6).

be destroyed, but after it the deluge. And I can see that the primary doctrine of social ethics is the question of environment as predominantly due to the society of social entities in which any one entity is (blank).

And I hold that the laws of nature are really the laws of the (blank) which dominate the environment, because a domination (blank) of entities of the same kind, all with historical (routes) succeeding each other, thereby typifying themselves in a congruous way in every occasion of the environment, and thus every occasion of the environment takes a definite congruity because of the congruity of all these antecedent occasions. And the enduring organisms and that congruity is really the laws of nature. . . . And then the Creator put in electrons! But it is the development of electrons, their gradual development, developing an environment which bears the character of an electro-mechanic (blank).

The environment grows with society, and that a society has to be a society of like entities which create an environment favorable to each other, and there you get a stable and successful society. And you may have a society of dissimilar entities which you get favorable to each other.

The electrons and the protons are most elemental (blank) which exist in such throngs that there are no entities of the same aboriginal type other than those, and we are living in an electronic, protonic stage as it were. And it is exactly true that we create environments favorable to each other, and also we see to it that the associating organisms are favorable to us, and we have the sense to build the world and to bring up domestic animals which are favorable to us, and we have the sense [21] to be favorable to them. I simply take the obvious facts of the social sciences and generalize. And why indeed that is that the bigger organisms are the organisms we can observe and the smaller organisms which we cannot observe individually have as a matter of fact exactly the same attributes or existing in throngs with allied species, and in a general environment formed by (blank) just as the American nation. It is exactly the same principle.

DR. CABOT: The animals form a society and each gives a favorable environment to the rest?

PROF. WHITEHEAD: Yes. And now we have the theory of the electron (blank). The sun radiates its messages. A certain number of them go to pieces.

DR. CABOT: Is that original sin in the (blank).

PROF. WHITEHEAD: I do not know. I think that the world is going on to a very different state of affairs, so far as I know immortality, prolonged existence. Some animals may be transforming themselves to a higher side, to a side which has a (blank) from the lower side. I do not think that philosophic doctrine and the pointing out that possibility has anything to say for or against. You cannot expect it to because some organisms go to pieces, some live a very long time, and some develop into higher forms. That is the general theory of organisms. We cannot decide on those subjects. General philosophy can have no opinion whatever.

DR. CABOT: I should like to know what would constitute the authority of the State.

PROF. WHITEHEAD: The social authority, you mean, the justification for it?

DR. CABOT: Yes. The State orders me to go to war, and I do not believe in war. What am I to think of it?¹

PROF. WHITEHEAD: I think you have to obey your conscience. If you think war is wrong and the state tells you to do it, I think you have to obey your conscience. On the other hand, I think you have to have a certain modesty in regard to the authority of your fellow countrymen influencing the state. But if after having given all the weight you can to the necessity of maintaining the state and the evil therefore of resisting it, and as to whether that is not a greater evil than participation in war – [22] having given all authority to that, if still you think that you are right, I think you have to resist. I may say that in entering this great country I had to strain my conscience to sign a statement. The statement of belief that I had to sign justified George III, and made the fathers of the American Constitution robbers. But I strained my conscience.

DR. CABOT: I want to get at the idea whether the larger entities, the larger organisms like the state, had by virtue of their larger bulk any authority over the smaller organisms?

PROF. WHITEHEAD: No, I do not think so. I think by virtue of asserting integration of thought, I think there is a necessity of maintaining a general organization, a harmoniously organized group. Man is essentially social, and therefore a primary duty is to maintain society, and I think you have to weigh that. You are ultimately brought back to the individual conscience. It may be wrong, but you have to do it. But I think the other people gain in feeling that society has to be maintained. I do not think a nation ought to go to war ever unless it thinks that the crisis is sufficiently great to justify itself in restraining forcibly if necessary those of its citizens who believe that they ought not to go to war. I believe that is one of the evils of going to war. To go to war for frivolous reasons comes to mean logically that you shall be prepared to do that, and if you are not prepared, what are you to do? I do not think you should do it merely because there is a man living there who says you ought to. But if you go to men in the army and ask them to mutiny, I think the state has (blank) just as I think the state ought not to go to war unless conscription would be necessary. It is reason not to go to war unless the evil to be averted is greater than that evil. You might say no evil can be greater than that.

DR. GLUECK:² I was wondering what some of the criteria would be whereby the state could fix responsibility in case of any particular act of any of these

1. This question would have had a particular resonance for Whitehead, whose son, Eric, died in 1918 in action in the First World War, while his close friend Bertrand Russell would protest against the war and conscription. A letter from Whitehead to Russell dated 16 April 1916 makes clear his contempt for conscripted men who 'produce their conscientious objections *ad hoc* . . . I am not greatly impressed by men who ask me to be shocked that they are going to prison, while ten thousand men are daily being carried to field hospitals, women and children have been raped and mutilated, and whole populations are living in agony' (Whitehead, 'Letter to Bertrand Russell, 16 April 1916').

2. Sheldon Glueck (1896–1980) was an American criminologist and a professor in Harvard's Department of Social Ethics. During this semester, he was teaching a course entitled 'Criminology and Penology' (Social Ethics 3).

entities called human beings, as a practical problem, take the case of the violation of (blank).

PROF. WHITEHEAD: I think that is a special problem of social science and of the lawyers. I think it is where you meet the lawyers, and both have something to say. [23] But I am afraid I have not thought out anything of that. I do not think either it could be got without the appeal to further principles than any that I have stated, the principles that I have stated have been so general. I think they are principles which would come in, but would require to be enforced by more special principles applicable to the especial type of society.