## Gentleman: —

I begin herewith a course of lectures on metaphysics. In our preliminary meeting we outlined for ourselves the purely practical aspect of the undertaking, — the text-books to be used, the sort of work expected of the individual student. Upon this occasion we begin the proper task of our course.

Metaphysics forms a branch of Philosophy. I may presuppose a certain general acquaintance, on the part of [2] all of you with the nature of philosophical study. But a brief summary of what is meant by philosophy is useful and at the outset of our tasks.

Philosophy is an effort to get a reasoned solution of the ultimate problems of human life. We all know how full of problems our life [is]. Some of these problems are relatively superficial. They arise one day, to be forgotten by the next day. How shall I find my way home? asks the wanderer, during a walk, a bicycle trip, or any other excursion. The question possibly little survives, but it need not last long. A certain amount of care solves it, then the affair is over. Such problems belong to the passing hour. They are therefore not fundamental. What is the meaning [3] of this bit of news? The exciting story of the latest daily mystery, — the dark tale of a murder, the report of some political intrigue, — such a matter of mere gossip, viewed as a problem, attracts attention for a time, becomes the topic of a nine days wonder; and then, whether solved or unsolved, the problem thus presented passes from notice, and is forgotten. Who inquires any longer into many newspaper mysteries which may have seemed important during the early part of the last Presidential year, or in the midst of the last dull season, when the newspapers, in default [4] of other matters, amused their readers with diffusely underrated details of manifold domestic gossip, with disappearances, with odd suicides, and the type. Such problems, then, may seem at the moment trivial or tragic, wearisome or intensely engrossing; they may be solved, or may remain uncomprehended. But they show that they are in truth superficial problems by the very fact that they are soon forgotten. We turn from them to other problems. As soon as they have had their day, they come, as we say, to lack actuality.

Much deeper, [illegible] are other problems, — the far more permanent human problems that concern the destiny of nations, the social welfare of masses of men, the course of history. What is to be the future of [5] the British Empire, or of popular governance in our own country, or of the principal Asiatic nations? Is Russia the great power of the future? Is the coming form of government destined to be Socialistic? These are problems not of today or of tomorrow, but of centuries. They are problems whose human and practical importance, during certain very long periods of time that are now before us, cannot easily be overestimated. But still even are these not in any sense ultimate problems? For a glance at history shows us how all things human pass away, and how the most tre-[6] mendous of political and social issues, viewed merely in their external and historical aspect, belong to some one time and region, and are of small

moment after a long enough series of centuries has passed. Humanity lives through them, and outlives them. Beneath the ruins of Assyrian cities the modern archaeologists dig out for us the remains of still earlier cities. There was a king, they tell us, one Sargon, who ruled in the valley of the Euphrates and the Tigris about 3000 B.C. In his day, and in those regions, there was, as the discovered remnants already prove, a high civilization existent. That civilization then, must have had its social, its religious, its national problems. [7] And no doubt, since it was a civilization, it had its own [illegible] of what these problems were. Absorbed in its own present, unconscious that it belonged to any remote or primitive ages, that civilization no doubt looked back upon its own legendary antiquities, eagerly considered its questions of higher politics, dreamed of its future, and then sank, in time, beneath its ruins. But what practical moment, in our eyes, are the most fundamental social and practical issues of the reign of Sargon unless indeed we are students of ancient history. These issues are precisely in so far as they were the historical issues of that civilization. Our problems indeed resemble theirs, but are not the same. It follows, then, that the problems of any age of history, viewed simply as the issues presented by and in the external social life and destiny of any one group of nations, are not problems of the most fundamental [8] sort. For with the lapse of ages, those problems lapse also, and a new humanity faces new issues. To be sure, beneath the transient there is even here, the eternal. The ethical problems of the age of Sargon are in many respects our own. But the politics of Sargon's reign [illegible].

Yet in another direction one can look for fundamental problems if one turns from the world of mere happenings to the world of the laws of nature, — from annals to natural science. At first sight it would seem as if the problems that any progressive natural science investigates are more fundamental, at least in one sense, than are the problems of history, viewed merely in their character as problems regarding the external [9] life and fortune of any nation or group of nations. Some natural sciences, such for instance as geology, are largely concerned past events, namely with the events that constitute the history of earth's crust. But in every natural science, precisely in so far as it is a science, the central interest lies in discovering laws, and laws that are as permanent as possible, and the problem: What are the permanent laws which get expressed in nature's process? is therefore not a problem that appears to belong to any one moment, or day, or age. In so far as, with any plausibility, we solve [10] such a problem, we seem to ourselves to be approaching very fundamental truth. For there could be no time when any interest in the permanent laws of nature could be said to become out of date, or when the problem as to what such laws are could be properly said to lapse, unless precisely in so far as it had been solved. And even when solved, such a problem would still retain its permanent interest as something which had to be taught afresh to each new generation of men. The very definition of the problem would secure, then, its lasting significance.

Yet these problems of natural science, fundamental as, relatively [11] speaking, they appear to be, are not yet the most fundamental of human problems. And they are not the most fundamental for reasons,

which will introduce us to other criteria of the fundamental character of any given problem. For the first, any one of these problems always presupposes and implies certain still deeper questions. In the second place, when taken together, these problems must lead, as science grows, to constantly new problems of generalization, and of a coordination of the results of science, and these resulting problems of generalized or unified science at once go beyond the more special problems and concern still more significant and central issues.

I repeat, (1) That the problems of natural science presuppose and imply certain still deeper questions. This is [12] true because every scientific induction rests upon certain presupposed principles of Logic, of the theory of knowledge, and of the metaphysical theory of Reality. Three presuppositions no special science, in its own researches, makes a topic of inquiry. Yet every such presupposition involves problems that lie deeper than any special problems of natural science. We shall soon have occasion to consider this matter more in detail, and I need not here further develope the thought. Our whole metaphysical inquiry will show how profound are the problems that underlie every [13] special problem of natural science, without themselves receiving direct treatment within the limits of any such science. A single illustration may serve to remind us of the matters to which reference is here made. When a man learns about the law of gravitation, every study of the law presupposes a certain knowledge of what is meant by space, by matter, by motion, by time, and by quantity in general. For the law of gravitation is a certain assertion about measurable movements, that occur in time, or tend to occur. These [14] movements involve masses of matter, and take place in space. In order to understand fully all that the law implies, one would have to answer all those deeper problems: What is time? What is space? What is matter, motion, &c., &c.? And these questions no special science answers. These problems then are implied by the assertion of the individual law, and they lie deeper than the problem which the law itself answers.

But I have said (2), That the problems of special science not only imply, when they are taken singly, problems which lie deeper than themselves, but also [15] lead, when taken together, to wider problems of generalization, and of a certain coordination of the results of science. I have said that these resulting problems of generalized or unified science at once go beyond the more special problems, and concern still more significant and central issues. It is easy to illustrate this aspect of the study of science, and to show that it involves problems deeper than those of any special science. There is a series of modern discussions familiar to all readers of general theories regarding life and the universe. I refer to the discussion that centre about the term Evolution. A great number of [16] more special scientific generalizations have gradually grouped themselves into the very far reaching doctrine that the whole natural world, as we at present know it, is the outcome of a continuous evolutionary process, whereby purely physical agencies have so wrought that, as a result, the varied and significant features of our present world of life, of humanity, and of worth have been produced, without a break, from a world where once none of this present life and worth existed,

but where its place was occupied by what we call inorganic matter. Now the problem, how all [17] this evolutionary unity of nature, how all this growing of the higher from the lower, how all this derivation of life, of humanity, and of worth, from the apparently lifeless, the apparently inhuman, the apparently insignificant, — how all this, I say, can have taken place, and how it is to be understood, this is a problem at once far more extensive and far deeper than any question which a special science tries to answer.

So far I have tried to illustrate in what way, for just our present purpose, some problems may be regarded as deeper than other, and in doing so I have tried [18] to lead your attention from the problems of the passing moment, viewed merely as transient problems, to problems that are out and out problems of philosophy proper. To sum up: A problem that rationally has only a transient interest, is not so deep as is a problem that has a decidedly more permanent interest. If problems can be found whose rational interest is not a matter of one moment or of another, of today or of yesterday, but of all time, such bid fair, by virtue of the very timelessness of the matters concerned to be deeper than others. Yet this is not the only criterion in terms of which [19] the relatively fundamental character of a problem is to be estimated. Another, and still more valuable criterion is this: — When the solution of a given problem logically presupposes conceptions and doctrines whose validity is assumed in this solution, then the question as to the meaning and truth of these presupposed conceptions and doctrines lies deeper than the first problem itself, and constitutes a still more fundamental issue. Thus the physical [20] problem which is solved by the theory of gravitation is not so fundamental as are the problems about the nature of space, of time, of matter. For the theory of gravitation logically presupposes the conception of precisely these objects of thought. Finally, it appears that more universal problems, such as those about Evolution, are more fundamental than the special problems of this or that branch of science.

To return now to the general definition of Philosophy. Philosophy is an effort to get a reasoned solution of the most fundamental, that is, of the ultimate problems of human life. And Metaphysics is a branch of Philosophy. [21] We have next to define what branch of Philosophy has been thus named.

The problems of human life, whatever their grade of depth, are of two familiar classes: they are either theoretical or practical problems. They are questions about what can be known, or they are questions about what ought to be done. Accordingly, Philosophy is usually divided into Theoretical and Practical Philosophy. Practical Philosophy, or Ethics, is concerned with the ultimate problems as to conduct, or in other words with the ultimate question as to what ought to be done, and as to the nature [22] of the concepts of Good and Evil, of Right and Wrong and of Duty. Theoretical Philosophy is concerned with the ultimate problems as to what can be known. Now Metaphysics is a branch, and in fact the principal branch, of theoretical philosophy. And the business of Metaphysics is the discussion of the ultimate questions as to what the Real World is.

To state the matter more technically, Metaphysics is that doctrine which undertakes to answer, as well as may be, two questions: — (1) What is meant by the term [23] Reality, or by the adjective Real, as applied to the whole world, or to any being in the world? (2) What an be known about the true nature of the world, and of the beings in the world, — in other words what can be known about the objects to which we apply the term Reality, and the adjective Real?

Introductions to a doctrine are tedious, and I dislike to spend any very long time in explaining to you, in a merely preliminary fashion, the reasons why a doctrine dealing with reality in general is a desirable undertaking. But [24] some preparations for our later work are still necessary. Let me then next try to show you a little more clearly the scope of the inquiry which the foregoing definition assigns to metaphysics.

What is Reality? With this question, according to our definition, the work of metaphysical discussion begins. And the question, in its first form, concerns, not yet directly the problems as to the nature of the universe, but the meaning of a very familiar term, of use in daily life. When [illegible] we call the things met with in our dreams *unreal*. When our hopes are defeated, we say that there was something *unreal* about the objects or the bases of these hopes. On the other hand, we call the solid earth beneath our feet *real*. And we say that our friends, in whom we thoroughly trust, are [25] real friends. In a similar way, when one, recalling or narrating his former experience, remembers past events, or seems to himself to remember them, the question may arise as to whether what he reports *really* was as he reports it, or whether his apparent memories stand for *real* past events. Men have believed, in the course of ages, in all manner of supernatural beings, — ghosts, witches, angels, demons, fairies, gods. Were such beings, all or any of them, *real* beings, or were they delusions, unrealities? Geometers define ideal figures, such as circles, ellipses, parabolas. As defined, these ideal figures have certain absolutely exact characters. [26] But, technically regarded, the manufacture of physical objects that precisely conform to these mathematical ideals proves to be impossible. The question arises: Are the circles, or other curves of the geometer, *realities* at all, anywhere in the universe, or are they *mere* mathematical ideals?

These illustrations begin to make clear that the adjective *real*, the noun *reality*, and the corresponding negative words *unreal* and *unreality*, have meanings which are indeed pretty fundamental importance, but which are also somewhat complex and obscure. Just what have past [27] events, and present perceptions, permanent physical things, and passing states of our own minds, just what, I say, have all these in common that makes us call them *real*. What again is the sort of reproach, as it were, obviously conveyed in speaking of dreams, and false shows of friendship, as unreal? What is it to be unreal? How can we men recognize the unreality of any object? Or, to pass to another case, how is the word *real* related to that other word *ideal* which we just used in referring to the mathematical figures. If one says that the fake friend's show of friendship was unreal, one [28] seems to convey a sense, as I just said, of reproach, or of contempt. The unreal is, as such, vain, unimportant, to be neglected. The unreal terrors of our dreams are to be despised

when we are awake. The unreal displays of friendship by the false friend, once detected, are to be henceforth ignored. On the other hand, however, the objects called *ideal*, whether in the realm of mathematics, of morals, or of art, have a different and curious relation to the objects called real and unreal. The term ideal is in fact a very puzzling and important one, in all its various meanings; and its relations to the [29] term real form one of the most profound of metaphysical issues. The terms real and ideal have, in fact, a great tendency to interchange places in our thought and in our expressions. We talk of real life, and mean perhaps at first the mass of commonplace or of painful happenings of which so much of human existence is made up. In real life the cities overcrowded with poor people, whose children multiply, are squalid, and have a high death rate. In real life there are loathsome diseases, [30] greedy wealth-seekers, disappointments, partings, funerals, crimes. In real life nobody does in manhood what he hoped to do when he was young. Hunger and love appear to rule the real human world. The struggle for existence is everywhere. That is one view. But over against all this realm of passion and of distress one sees, in mind, another realm, — a realm of ideals. Love can be ideal; it need not be mere brute passion. There might be devotion, charity, loyalty, brotherhood. These are ideals of what is possible. But is a life of such virtues ever real? [31] Yes, in a measure; for there are good people. The dark world of so called real life, in all its squalor and baseness, is lit up with some glimpses of what conforms to ideals. But then is this partial realization of the ideal all? No, there are moods which lead us to look upon the whole of human life otherwise. In such moods we say that it is the ordinary everyday life which is more or less the illusion, and it is the ideal side of life which is the only real aspect. I need hardly dwell upon the motives that lead to such a transformation. I am not yet [32] teaching doctrine, but am only illustrating views and problems. Every man in youth, if not later, knows some happy moments when he says: "The ideal is the only true reality; the rest is but froth and fragment." A moment of enthusiasm comes, as it came to the young men of the days of the civil war. At such times one says: "What it our so called real life, that we should think so much of its problems, of its pangs, and of its hopes? There is another life, — the life of devotion to a great cause. That life alone faces the deepest realities. Duty is such a reality. [33] The service of one's country, loyalty to one's trust, faith and honor and the love of one's woman, — these are the realities in the light of which one can try to live. And if one so lives, what matters is just what happens from day to day, or who lives or dies." Such a mood, I say, is possible, whatever its justification. It is a mood which once for all identifies the real with that which has been called the ideal. It seeks a city out of sight, cares little for the fortunes of the moment, and calls that most real which the every day consciousness least verifies. [34]

Whatever one may think of such views, nobody can doubt that they have played a great part in human history. Believing in ideals as being somehow more real than the visible facts are, has been a prime factor in human civilization. The Roman Empire was once a visible reality. The barbarians overthrew what had been its outward show of power; but the Roman Empire still lived on, in various changed forms, because

it was an ideal, so fixed in the minds even of the very barbarians themselves, that they could not let it die. This is only one instance where a faith in ideals has proved [35] more potent than the most elemental passions of man in determining the course of history. Other instances there are in great numbers.

Yet it is not fair to this tendency to treat the so called ideal as real if we thus mention only the cases where romantic or moral devotion treats the ideal as real. In a wholly different realm a similar problem meet us. Every student of mathematics will have felt the force of the problem of which I spoke a few moments ago, namely the problem whether the constructions of geometrical science are themselves realities, or are [36] what one usually means by the *mere ideals*. Is there such a thing as a real circle? In the physical sense of the word real, we can be for well known reasons, fairly certain that we are unacquainted with any real material bodies whose sections or surfaces present to us perfectly circle forms. If there were any such physical bodies, we can well say that it would be impossible for us, with any instrument at our disposal, to assure ourselves of their perfectly circular character. So far does the mathematical ideal transcend our physical experience. On the other [37] hand, we certainly very well know what a circle is. That remarkable quantity  $\pi$ , the ratio of circumference and diameter, has a value that has been compared to many hundreds of decimal places, far far beyond the reach of the most careful possible physical verification, even were a perfect physical circle of very vast dimensions presented to us for study and even were our present powers of accurate physical measurement increased a billion fold. And now does that quantity  $\pi$ stand for any fact that is real outside of the minds of geometers. If it does, then there is some peculiar sense in [38] which certain ideal constructions of the geometers possess a reality which no physical experience can verify. But if this is not so, if the geometer's ideals are merely ideals, then just what is their relation to reality. For there can be no doubt that our success and assurance in applying geometry to physics indicates some deep relation between the constructions of mathematical science, and the realities called physical.

I have thus endeavored to illustrate something of the nature of those problems which can occur concerning the meaning of [39] such familiar words as *real*, *unreal*, and *ideal*. Well, problems like these are the elementary problems of the doctrine called Metaphysics. You see, I presume, that the problems are somewhat familiar. I may venture to hope that you already also see that these problems are not only familiar, but fundamental, and important.

Now the purpose of Metaphysics is, first, to undertake to deal with the problem as to the meaning of the words *real*, *reality*, *ideal*, *unreal*, and related words. Such related words are the terms *being*, *existence*, *actuality*, and other synonyms [40] of the term *reality*, synonyms to which, in certain cases, somewhat contrasting special meanings have been given. The relation of these words to such terms as *truth* and *falsity* will also belong to our task. In another direction such as adjectives as *possible*, *necessary*, and the like, will give us much ground for inquiry. What do we mean by calling a given object not real, but *possible*, or as we sometimes say, *actually possible*. What is a possibility? Is a possibility a reality, or not?

Such, and numerous other problems of the meaning of familiar terms of this sort, will [41] come to our notice. It will be our purpose to treat these problems in a thoroughgoing fashion, not as merely verbal problems, but as inquiries into fundamental matters. For all such terms are mere efforts to fix ideas of the profoundest moment for our whole view of our relations to the world.