## LECTURE XXIII.

## ESSAY, THEORY OF JUDGMENT.\*

Examination of the Fourth Book of the Essay on the Human Understanding continued.—Of knowledge. Its different modes. Omission of inductive knowledge.—Its degrees. False distinction of Locke between knowing and judging.—That Locke's theory of knowledge and of judgment is resolved into that of the perception of a relation of agreement or of disagreement between ideas. Detailed examination of this theory.—That it is applied to abstract judgments and in nowise to primitive judgments, which imply existence.—Analysis of this judgment: I exist. Three objections to the theory of Locke: 1st, impossibility of arriving at real existence, by the abstraction of existence; 2d, that to begin by abstraction is contrary to the true process of the human mind; 3d, that the theory of Locke contains a paralogism.—Analysis of the judgments: I think, This body exists, This body is colored, God exists, &c.—Analysis of the judgments upon which arithmetic and geometry rest.

WE have stopped some time at the beginning of the fourth book of the Essay on the Human Understanding: we will now enter farther into it.

The fourth book of the Essay on the Human Understanding treats of knowledge in general, of its different modes, of its different degrees, of its extent, and of its limits, with some applications: this is, properly speaking, logic with a little ontology. The principle of this logic rests on the theory which we have examined, that of the representative idea. We have seen that the condition of all legitimate knowledge, for Locke, is the conformity of the idea to the object; and we have in every way shown this conformity to be a mere chimera. We have then overturned in advance the general theory of knowledge; but we have overturned it in its principle only. It is in some sort a

<sup>\*</sup> On the true theory of judgment, see 1st Series, Vol. 4, Lecture 20, p 870-876, Lecture 21, p. 414, and Lecture 22, p. 464-477.

prejudicial question, an exception which we have raised against this theory; it is necessary now to examine it in itself, independently of the principle of the representative idea, to follow it in the development which is proper to it, and in the consequences which belong to it.

Whether the idea represents or does not represent, in the system of Locke, we always find that the understanding begins with things only by ideas; that ideas are the only objects of the understanding, and consequently the only foundations of knowledge. Now, if all knowledge necessarily rests upon ideas, where there is no idea there can be no knowledge, and wherever there is knowledge, there has necessarily been an idea. But the reciprocal is not true; and wherever there is an idea, it does not follow that there is knowledge. For example, in order that you should have a profound knowledge of God, it is first necessary that you should have some idea of God; but because you have some idea of him, it does not follow that you have a true or sufficient knowledge of him. Thus knowledge is limited by ideas, but it does not go as far as ideas go.

Book IV. Chap. III. § 1. "We can have knowledge no farther than we have ideas." Ibid., § 6. "Our knowledge is narrower than our ideas."

If knowledge never surpasses the ideas, and sometimes fails of coming up to them, and if all knowledge turns only on ideas, it is clear that knowledge cannot be any thing more than the relation of one idea with another idea, and that the process of the human mind in knowledge is simply the perception of some relation between ideas.

Book IV. Chap. I. § 1. "Since the mind, in all its thoughts and reasonings, hath no other immediate object but its own ideas, which it alone does, or can contemplate, it is evident, that our knowledge is only conversant about them."

§ 2. "Knowledge then seems to me to be nothing but the perception of the connection or agreement, or disagreement and repugnancy of any of our ideas. In this alone it consists.

Where this perception is, there is knowledge: and where it is not, there, though we may fancy, guess, or believe, yet we always come short of knowledge."

Thence follow different modes and different degrees of knowledge in the system of Locke. We simply know whether we perceive a relation of agreement or disagreement between two ideas. Now we can perceive this relation in two ways: either we perceive it immediately, and then knowledge is intuitive, or we do not perceive it immediately, and it is necessary that we should have recourse to another idea or to several other ideas, which we place between the two ideas whose relation cannot be perceived, so that by means of this new idea or of these new ideas we may seize the relation which escapes us. Knowledge in this case is called demonstrative knowledge. Book IV. Chap. II. § 1. Ibid., § 2.

Here Locke makes an excellent remark, which I ought not to omit, and of which it is just to give him the honor. Doubtless we are often compelled to recur to demonstration, to the intermediation of one idea or of several other ideas, in order to perceive the hidden relation of two ideas; but this new idea which we, in some way, interpose between the two others, it is necessary that we should see its relation with both. Now if the perception of this relation between this idea and the two others was not intuitive, if it were not demonstrative, it would be necessary to have recourse to the intermediation of a new idea. But if between this idea and the anterior ideas the perception of relation were not intuitive, but demonstrative, it would still be necessary to have recourse to a new idea, and so on without end. The perception of the relation between the middle idea and the extreme terms must then be intuitive, and thus it must be in all the degrees of deduction, so that demonstrative evidence is founded on intuitive evidence and constantly supposes it. Book IV. Chap. II. § 7: "Each step must have intuitive evidence.—Now in every step reason makes in demonstrative knowledge, there is an intuitive knowledge of that agreement or disagreement it seeks with the

next intermediate idea, which it uses as a proof: for if it were not so, that yet would need a proof; since without the perception of such agreement or disagreement, there is no knowledge produced. If it be perceived by itself, it is intuitive knowledge: if it cannot be perceived by itself, there is need of some intervening idea, as a common measure to show their agreement or disagreement. By which it is plain, that every step in reasoning that produces knowledge has intuitive certainty; which when the mind perceives, there is no more required, but to remember it, to make the agreement or disagreement of the ideas, concerning which we inquire, visible and certain. So that to make any thing a demonstration, it is necessary to perceive the immediate agreement of the intervening ideas, whereby the agreement or disagreement of the two ideas under examination (whereof the one is always the first, and the other the last in the account) is found. This intuitive perception of the agreement or disagreement of the intermediate ideas, in each step and progression of the demonstration, must also be carried exactly in the mind, and a man must be sure that no part is left out."

This intuition and demonstration are the different modes of knowledge according to Locke. But are there no others? Is there no knowledge which we acquire except by intuition or by demonstration? How do we acquire knowledge of the laws of exterior nature? Take what you please, gravitation, for example. Certainly here is not simple intuition and immediate evidence; for experiments multiplied and combined are necessary for the 'east law, and still, alone, they would not be sufficient, the least law surpassing the number, whatever it may be, of particular experiments drawn from it. There must then be an intervention of some other operation of the mind besides intuition. Is it demonstration? This is impossible. What in fact is demonstration? It is the perception of a relation between two ideas by means of a third, but on the condition that the third be more general than the other two, in order to embrace them and bind them. To demonstrate is in the last analysis to draw the par-

ticular from the general. But what physical law is more general than that of gravitation, and from what is it deduced? The knowledge of gravitation is not deduced from any other knowledge anterior to it and which contains it. How then have we obtained this knowledge which we certainly have, and how in general have we obtained the knowledge of physical laws? A phenomenon having been presented to us with such a character, in such circumstances we have judged that if this phenomenon should present itself anew in analogous circumstances, it would have the same character; that is, we have at first generalized the particular character of this phenomenon: instead of descending from the general to the particular, we have risen from the particular to the general. This general character is what is called law; we have not deduced this law from a more general law or character; we have drawn it from particular experiments, in order to transfer it beyond; there is here neither simple intuition nor demonstration; it is what is called induction.\* It is to induction that we owe all our conquests over nature, all our discoveries of the laws of the world. Natural philosophers, for a long time, contented themselves either with immediate observations, which resulted in nothing of importance, or with reasonings which simply gave hypotheses. For a long time induction was merely a natural process of the human mind, of which all men made use in order to acquire the knowledge of which they had need relatively to the exterior world, without accounting for it or without its passing from practice into science. It is especially to Bacon that we owe, not the discovery, but the exposition and greatest use of this process. It is strange that Locke, the compatriot of Bacon, and who belongs to his school, should, in his classification of the modes of knowledge, have suffered to escape the very one which Bacon has rendered most celebrated and placed in the clearest light. It is strange that the whole sensual-

<sup>\*</sup> On induction, see Lecture 13 of this Series, and 1st Series, Vol. 4, Lectures 20 and 22.

istic school, which pretends to be the legitimate offspring of Bacon, should, after the example of Locke, have almost forgotten the evidence of induction, among the different species of evidence, and that, contrary to what an experimental school should have done, it should have neglected induction to plunge into demonstration. Such is the reason of this singular but incontestable phenomenon, that in the eighteenth century the logic of the sensualistic school was little else than a reflection of the peripatetic scholasticism of the middle age, of that scholasticism which admitted no other processes in knowledge than intuition and demonstration.

Let us now see what, according to Locke, are the different degrees of knowledge.

We know sometimes in so positive a manner that no doubt whatever is mingled with our knowledge. Often instead of a positive knowledge, we have simply a probable knowledge. Probability itself has many degrees, and it has particular foundations. Locke treats fully of this subject. I entreat you to read with care the chapters not very profound, but sufficiently exact, in which he treats of the different degrees of knowledge. I cannot enter into all these details, and content myself with pointing out to you chapters XIV. XV. and XVI. of the fourth book. I shall dwell on but one distinction to which Locke attaches the greatest importance, and which, in my opinion, has no foundation.

We either know in a certain and absolute manner, or we know only in a more or less probable manner. Locke wishes that the expression knowledge should be exclusively applied to knowledge absolute, placed above all probability, and he uses the term judgment for knowledge which is wanting in certainty, simple conjecture, presumption more or less probable. Book IV. Chap. XIV. § 4: "The mind has two faculties conversant about truth and falsehood. First knowledge, whereby it certainly perceives and is undoubtedly satisfied of the agreement and disagreement of any ideas. Secondly judgment, which is the putting ideas together, or separating them from one another in the mind, when their certain agreement or disagreement is not perceived, but

presumed to be so; which is as the word imports, taken to be so, before it certainly appears."

But the general usage of all languages is contrary to so limited an employment of the word to know. A certain knowledge, or a probable, or even a conjectural knowledge, is always knowledge in different degrees. It is the same with judgment. As languages have not confined the term knowledge to absolute knowledge, so they have not confined the term judgment to knowledge simply probable. In certain cases we pass certain judgments; in other cases we pass judgments which are only probable, or merely conjectural. In a word, judgments are either infallible, or doubtful, to such or such a degree: but doubtful or infallible, they are still judgments; and this distinction between knowledge as being exclusively infallible, and judgment as being exclusively probable, doubtful, or conjectural, is a verbal distinction entirely arbitrary and sterile. Time has done justice to it; but it seems to have respected the theory which is at the basis of this distinction, a theory which makes knowledge and judgment consist in the perception of a relation of agreement between these two ideas. All verbal distinction aside, to judge or to know, to know or to judge, is for Locke simply to perceive, whether intuitively or demonstratively, a relation of agreement or of disagreement, certain or probable, between two ideas: such is Locke's theory of knowledge and of judgment reduced to its most simple expression; it is from Locke that it passed into the sensualistic school, where it still enjoys undisputed authority and forms the settled theory of judgment: it therefore claims and ments a scrupulous examination.

Let us at first ascertain the extent of this theory: it not only pretends that there are judgments which are nothing else than perceptions of the relation of agreement or disagreement between two ideas; it pretends that every judgment is subject to this condition: this is what it concerns us to verify.

Let us take any knowledge whatever, any judgment whatever. I propose the following judgment: two and three make five;

this is not a chimera; it is clearly a knowledge, it is clearly a judgment and a certain judgment. How do we acquire this knowledge, what are the conditions of this judgment?

The theomy of Locke supposes three: 1st, that there are here two ideas before the understanding, known anterior to the perception of the relation; 2d, that there is a comparison between these two ideas; 3d, that succeeding this comparison there is a perception of some relation between these two ideas. Two ideas, a comparison between them, a perception of relation derived from this comparison: such are the conditions of the theory of Locke.

Let us resume: two and three make five. Where are the two ideas? two and three, and five. Suppose that I had not these two ideas, these two terms, on the one hand two and three, and on the other five: could I never perceive that there is between them a relation of equality or of inequality, of identity or of diversity? no. And if, having these two terms, I did not compare them, would I never perceive their relation? not at all. And if comparing them, notwithstanding all my efforts, their relation escaped my understanding, would I never arrive at this result, that two and three make five? in nowise. On the contrary, these three conditions being fulfilled, is not this result infallibly obtained? Without doubt, and I do not see that ar y thing is wanting. Thus, to this point the theory of Locke seems very good. Shall I take another arithmetical example? but arithmetical examples have this peculiarity, that they all seen alike. What, in fact, are arithmetical truths except the relations of numbers? Arithmetical truths are nothing else; therefore arithmetical truths enter into Locke's general theory of knowledge; and arithmetical judgment, if we may so express it, is nothing else than a perception of the relation of numbers: thus far, again, the theory of Locke is perfectly justified.

Shall we take geometry? But if geometrical truths are only relations of magnitude, it is clear that no geometrical truth can be obtained except on condition of previously having two ideas of

magnitude, then of comparing them, then of drawing from them a relation of agreement or of disagreement. And as all mathematics are, according to Newton, only a universal arithmetic, it must be granted that the mathematical judgment is only a perception of relations.

Let us take still other examples a little at random. I wish to know whether Alexander was a truly great man: it is a question frequently agitated. It is evident that if, on one hand, I had no idea of Alexander, and if, on the other, I formed no idea of a truly great man, if I did not compare these two ideas, if I did not perceive between them any relation of agreement or of disagreement, I could not decide that Alexander was a great man, or that he was not. Here again, we have, and must necessarily have, two ideas, the one particular, that of Alexander, the other general, that of the great man, and we compare these two ideas, in order to know whether they agree or disagree with each other, whether the predicate can be affirmed of the subject, whether the subject comes within the predicate, etc.

I wish to know whether God is good. At first, I must have the idea of the existence of God, the idea of God in so far as existing; then I must have the idea of goodness, a more or less extended, more or less complete idea of goodness, so as to be able to affirm, after comparison of the one idea with the other, that these two ideas have a relation of agreement between them.

These are clearly the conditions of knowledge, the conditions of judgment in these different cases. But let us account for the nature of these different cases. Let us examine the mathematical truths which so easily lend themselves to the theory of Locke. Do arithmetical truths, for example, exist in nature? no. And why do they not exist in nature? because these relations, which are called arithmetical truths, have for terms not concrete quantities, that is, real, but discrete quantities, that is, abstract. One, two, three, four, five, all this does not exist in nature; consequently the relations between these abstract and not real quanti-

ties have no more existence than their terms: arithmetical truths are mere abstractions. And then, the human mind operates at first on concrete quantities, and it is only at a later period that it ascends from the concrete to the conception of these general re lations, which are arithmetical truths properly so called. They have two characters: 1st, they are abstract; 2d, they are not primitive; they suppose anterior concrete judgments, in the midst of which they rest, until abstraction draws them therefrom, and elevates them to the height of universal truths. I may say as much of the truths of geometry. The magnitudes with which geometry is occupied are not concrete magnitudes, they are abstract magnitudes, which do not exist in nature; for imperfect figures alone exist in nature, and the condition of geometry is to operate upon perfect figures, on the perfect triangle, the perfect circle, etc., that is, on figures which have no real existence, and which are pure conceptions of the mind. The relations of abstractions can therefore be nothing more than abstractions. Besides, the human mind did no more begin by conceiving perfect figures, than it began by conceiving the abstract relations of numbers; it first conceived the concrete, the imperfect triangle, the imperfect circle, from which it afterwards drew, by an abstraction, rapid, it is true, the triangle and the perfect circle of geometry: the truths of geometry are not, therefore, primitive truths in the human understanding. The other examples which we have taken, to wit, that Alexander is a great man, that God is good, are characterized by being problems instituted by a tardy reflection and a learned curiosity. In a word, we have thus far only verified the theory of Locke as regards abstract judgments and judgments which are not primitive: let us take judgments marked by other characters.

Behold another knowledge, another judgment which I propose for your examination: I exist. You no more doubt the certainty of this knowledge, than you do that of the first knowledge which I cited to you. Two and three make five: you would even sooner doubt the first than the second. Well, let us submit this

certain knowledge, this certain judgment, I exist,\* to the conditions of Locke's general theory of knowledge and of judgment.

I will remind you of the conditions of this theory: 1st, two ideas; 2d, comparison between these two ideas; 3d, perception of some relation of agreement or disagreement.

What are the two ideas which should be the two terms of this relation and the bases of the comparison? It is the idea of I or me, and the idea of existence, between which it concerns us to find a relation of agreement or disagreement.

Let us be careful as to what we are about doing. It is not the idea of our existence which will be one of the ideas upon which the comparison will be made; for what are we seeking? our existence. If we have it we should not seek it: we must not take for granted that which is a matter of question, our own existence; therefore the idea of existence which must here be one of the two terms of the comparison, is the idea of existence in general, and not the particular idea of our own existence: this is the rigorous condition of the problem. And what is the other idea, the second term of the comparison? the idea of the me. But what are we seeking? the existing me. Let us not therefore suppose it, for we should take for granted that which is in question. It is not therefore the existing me which will be the second term of the comparison, but a me which must be necessarily conceived as distinct from the idea with which it concerns us to compare it, to wit, the idea of existence, a me which must consequently be conceived as not possessing existence, that is, an abstract me, a general me.

The idea of an abstract me, and the idea of abstract existence, are then the two ideas upon which we must make the comparison from which the judgment is to proceed. Think of it, I pray you. What are you seeking? your personal existence. Do not suppose it, since you are seeking it; do not place it in either of the

<sup>\*</sup> We have several times taken this example against the theory of representative ideas, and that of comparative judgment, 1st Series, Vol. 1, Lecture 8, p. 87, and Vol. 4, Lecture 20, p. 371, and Lecture 22, p. 474.