proper power of reason, the usurpation of reason over experience, the destruction or forgetfulness of the chronological and experimental condition of knowledge, in the excessive preoccupation of its logical and rational principles.

Locke introduced and accredited empiricism in the philosophy of the eighteenth century. He plainly saw that we could have no idea of space, if we had not some idea of body. Body is not space, but it is body which fills or which measures space; if then space is not body, we can know nothing of space except what body gives us. Locke saw this; and this is his merit. His fault is: 1st, in having confounded what fills and measures space and reveals it to us, with the idea itself of space; 2d, and this second fault is much more general and more comprehensive than the first, in having confounded the chronological condition of ideas with their logical condition, experimental data, external or internal, on condition of which the understanding conceives certain ideas, with these ideas themselves.

This is the most general critical point of view which rules all the metaphysics of Locke. I deduce it from the examination to which I have just submitted his theory of the idea of space; I may apply it and I shall apply it in the next lectures to his theory of the idea of the infinite, of time, and of other ideas which Locke has boasted, as you know, of easily deducing from experience, from sensation, or from reflection.

LECTURE XVIII.

ESSAY. SECOND BOOK. TIME. INFINITY. ILENTITY. SUBSTANCE.

Continuation of the examination of the Second Book of the Essay on the Human Understanding. Of the idea of time.—Of the idea of the infinite.—Of the idea of personal identity.—Of the idea of substance.

I shall commence by exhibiting to you the results which the last lecture has given us; the question was concerning space.

A sound philosophy should not, without doubt, retrench or destroy the ontological questions concerning the nature of space in itself, whether it is material or spiritual, whether it is a substance or an attribute, whether it is independent of God or is related to God; for all these questions are in the human mind; but it should adjourn them until psychological observations, correctly made and skilfully combined, shall permit us to resolve them; it will then first of all occupy itself with the psychological question of the idea of space.

It is sufficient to interrogate the human understanding as it now exists in all men, in order to recognize in it the idea of space with these three distinguishing characters: 1st, space is given us as necessary, whilst body is given us as being able to exist or not to exist; 2d, space is given us as without limits, body is given us as limited on all sides; 3d, the idea of space is entirely rational, that of body is accompanied by a sensible representation.

The preliminary question concerning the actual characters of the idea of space being thus resolved, we can, without danger, approach the quite as difficult and obscure question of the origin of the idea of space. Here, we have carefully distinguished two points of view intimately connected together, but which analysis ought to separate, the logical order of ideas and their chronological order. To the eyes of reason and logic, body presupposes space; for what is body? The juxtaposition, the coexistence of resisting points, that is, solids: but where could the juxtaposition and the coexistence be produced, if not in a continuity, in space? On the other hand, if in the order of reason and nature body presupposes space, it is necessary to recognize that in the chronological order there is a contemporaneousness between the idea of body and the idea of space, since we cannot have the idea of body without that of space, nor that of space without that of body. And if, in this contemporaneousness, we can distinguish an antecedent, it is not the idea of space which is anterior to that of body, it is that of body which is anterior to that of space: it is not by the idea of space that we start; and if sensibility, if touch did not take the lead and suggest to us the idea of resistance, of solid, of body, we should never have the idea of space. Doubtless the idea of solid and body cannot be formed in the mind, unless we already have the idea of space; but it is not produced first in the mind; it precedes, in some degree, the idea of space, which follows it immediately.

Here then are two orders perfectly distinct from each other. In the order of nature and reason, body presupposes space. In the order of the acquisition of knowledge, it is, on the contrary, the idea of solid and body which is the condition of the idea of space. Now, the idea of body is acquired by the perception of touch, aided by sight; it is therefore an acquisition of experience; hence it is correct to say that, in the chronological order, experience and a certain development of the senses are the condition of the acquisition of the idea of space; and at the same time, as body presupposes space, and as the idea of space is given us by reason, and not by the senses and experience, it is logically correct to say that the idea of space and a certain exercise of the reason render all experience possible.

From this point of view we discover the real character, the merit and the defects of Locke's theory. What has Locke done? I believe that he has destroyed the ontological questions of

he nature of space, instead of contenting himself with adjourning them: but in fine he has had the wisdom to put the psychological question of the idea of space in the first rank. He should have dwelt longer on the actual characters of this idea, and it was in him a grave fault to throw himself first into the question of its origin. His general system on the origin of ideas being that all our ideas are derived from two sources, reflection or consciousness and sensation; as the idea of space cannot come from consciousness, it was necessary that it should come from sensation; and to draw the idea of space from sensation, it was necessary to reduce it to the idea of body. This is what Locke has done in the systematic parts of his work, though contradicting himself more than once, for often he speaks of space as wholly distinct from solidity. But when his system comes up, when the necessity of drawing the idea of space from sensation comes up, then he affirms that the idea of space is acquired by sight and touch; and as touch, aided by sight, gives us only body and not space, for this reason alone Locke reduces space to body; he does this explicitly when he says that to ask whether this universe exists somewhere, is to ask whether the universe exists. The confusion of the existence of space and the existence of the universe is the confusion of the idea of space and the idea of body; and this confusion was necessary that the system might be, at least in appearance, rigorous. But the universal belief of the human race declares that body is one thing, and the space which contains it is another thing; that the world, and all possible worlds are one thing, and the infinite and unlimited space which embraces them, is another thing. Bodies measure space, and do not constitute it. The idea of body is indeed antecedent to that of space, but it is not this idea itself.

Behold where we now are: let us advance; let us successively interrogate the second book of the Essay on the Human Understanding, on the origin of the most important ideas, and we shall see that Locke continually confounds the order of the acquisition of our knowledge with its logical order, and the necessary ante-

cedent of an idea with this idea. I propose to examine at the present in the system of Locke the idea of time, the idea of the infinite, the idea of personal identity, the idea of substance. I commence, like Locke, with the idea of time.*

Here, the first rule, you know, is to neglect the question of the nature of time, and to seek solely what is the idea of time in the human understanding, whether it is there, and with what characters is it there. It is unquestionably there. There is no one, as soon as he has before his eyes, or presents to himself in imagination any event whatever, who does not conceive that this event has passed, or is passing in a certain time. I ask you whether you can suppose an event of which you are not forced to conceive that it has taken place at such an hour, such a day, such a week, such a year, such a century? You can suppose even the abolition of every event, but you cannot suppose the abolition of time. Before a horologe we can, indeed, make the supposition that from hour to hour no event has happened; notwithstanding you are none the less convinced that time has passed away, even when no event has marked its course. The idea of time is, therefore, a necessary idea, like the idea of space. I add that, like space, time is unlimited. The divisions of time, like those of space, are purely artificial, and suppose a unity, an absolute continuity of time. Take millions of events, do with these millions of events what you did with bodies, multiply them indefinitely, and they will not equal the time which precedes them and which follows them. Before all finite periods, and beyond all finite periods, there is still time unlimited, infinite, inexhaustible. Finally, like the idea of unlimited and necessary space, the idea of necessary and unlimited time is a pure idea of reason, which escapes all representation, and all the efforts of the imagination and the sensibility.

It is with the origin of the idea of time as with the origin of the idea of space. You are still to distinguish between the order of the acquisition of our ideas and their logical order. In the logical order of ideas, the idea of any succession of events presupposes that of time; there can be succession only on condition of a continuous duration, to the different points of which the different members of the succession may be attached. Take away the continuity of time, and you take away the possibility of the succession of events; as, the continuity of space being taken away, the possibility of the juxtaposition and the coexistence of bodies is destroyed. But, in the chronological order, it is, on the contrary, the idea of the succession of events which precedes the idea of the time which includes them. I do not mean, in regard to time as well in regard to space, that we have a clear and complete idea of a succession, and that, in course, there arrives in the understanding the idea of a time which includes this succession: I only say that we must first have the perception of some events, in order to conceive that these events are in time. Time is tl c place of events, as space is that of bodies: whoever has not the idea of an event, cannot have the idea of time. If, therefore, tle logical condition of the idea of succession is in the idea of time, the chronological condition of the idea of time is in the idea of succession.

You see we have been conducted to the result, that the idea of succession is the occasion, the chronological antecedent of the necessary succession of time. But every idea of succession is an acquisition of experience; it remains to see of what experience. Is it the experience of the senses or that of the operations of the mind? Is the first succession given us in the spectacle of exterior events, or in the consciousness of events that pass within us?

Take a succession of exterior events: in order that these events may succeed each other, there must be a first, a second, a third event, etc. But if, when you see the second event, you do not remember the first, there would be no second, there would be no

^{*} On the idea of time, see 1st Series, Vol. 1, Lectures 25 and 26; Vol. 3, 1st Lecture, opinion of Locke, p. 56, 3d Lecture, opinion of Condillac, p. 181; Vol. 4, opinion of Reid, Lecture 21, p. 443; and Vol. 5, opinion of Kaut, Lecture 4, p. 88.

succession for you; you would always be fixed at a first, which would not have the character of first, since there would be no second. The intervention of memory is therefore necessary, in order to conceive of any succession whatever. Now, the memory has for its direct object nothing external; it is not immediately related to things, but to us. When we say, we remember a person, we remember a place, this means nothing else than that we remember to have been seeing such a place, seeing or hearing such a person. We have memory only of ourselves, for there is memory only on condition that there has been consciousness. If, then, consciousness is the condition of memory, as memory is the condition of the idea of succession, it follows that the first succession is given us in ourselves, in consciousness, in the proper objects and phenomena of consciousness, in our thoughts, in our ideas. But if the first succession which is given us is that of our ideas, as to all succession is necessarily attached the conception of time, it follows again that the first idea which we have of time is that of the time in which we are; and as the first succession is for us the succession of our ideas, so the first duration for us is our own duration; the succession of exterior events, and the duration in which these events are accomplished, are only known to us afterwards. I do not say that the succession of exterior events is only an induction from the succession of our ideas, neither do I say that exterior duration is only an induction from our personal duration; but I say that we can have an idea either of exterior succession or of exterior duration, only after having had the consciousness and the memory of some interior phenomena, and, consequently, the conception of our own duration. Thus, summarily, the first duration which is given us is our own, because the first succession which is given us is the succession of our own ideas.

A profound analysis can go farther still; there is a crowd of ideas, of phenomena, under the eye of consciousness: to seek what is the first succession which is given us, is to seek what are our first ideas, the first phenomena which fall under conscious.

ness, and form the first succession. But it is evident, in regard to our sensations, that they are phenomena of consciousness only on condition that we pay attention to them. Thousands and thousands of impressions may assail my sensibility; if I do not give them my attention, I have no consciousness of them. It is the same in regard to many of my thoughts which, if my attention is directed elsewhere, do not come to my consciousness, and vanish in reveries. The essential condition of consciousness is attention; the phenomenon most intimately connected with consciousness is, therefore, attention, and the series of the acts of attention is necessarily the first succession which is given us. But what is attention?* It is nothing less than the will itself; for no one is attentive who does not wish to be so. The first succession is, therefore, that of our voluntary acts. Now, succession measures time, as body measures space; whence it follows that, the first succession being that of voluntary acts, the will is the primitive measure of time; and this measure has the excellence of being equal to itself; for every thing differs in the consciousness, sensations, and thoughts, whilst the acts of the attention, being eminently simple, are essentially similar.

Such is the theory of the primitive and equal measure of time, which we owe to M. de Biran; and you may see it expressed with a perfect originality of analysis and style in the lectures of M. Royer-Collard. M. de Biran continually repeats that the element of duration is the will; and in order to pass from our duration to exterior duration, from the succession of our acts to the succession of events, from the primitive and equal measure of time for us, to the ulterior and more or less uniform measure of time without us, M. de Biran relied upon a double phenomenon of the will, which regards both the interior world and the exterior world. According to M. de Biran, the type of the sentiment of

† Works of Reid, Vol. iv. pp. 394-411; and 1st Series, Vol. 1, p. 210.

^{* 1}st Series, passim, and particularly Vol. 3, Lecture 3, p. 115, and Vol. 4,

the will is in the sentiment of effort.* I make an effort to move my arm, and I move it; I make an effort to walk, and I walk. The effort is a relation to two terms. One is internal, to wit, the will, the act of will; the other external, to wit, the movement of the arm, or the step which I have made, which has its cause and its measure in the internal movement of the will. The determination is nothing else than the most simple act of the will. It is, at first, entirely interior; then it passes without, in the movement produced by the nisus or the effort, a movement which reflects that of the will, and becomes the measure of all subsequent exterior movements, as the will is the primitive and indecomposable measure of the first movement which it produces.

Without taking upon myself either the honor or the responsibility of all the parts of this theory, I hasten to arrive at that of Locke. The merit of Locke is to have established that the idea of time, of duration, of eternity, is suggested to us by the idea of some succession of events, and that this succession is not taken in the exterior world, but in the world of consciousness. See Book II. Chapters XIV. XV. XVI. For example, Chap. XIV. § 4: "Men derive their ideas of duration from their reflection on the trains of the ideas they observe to succeed one another in their own understandings." Ibid., § 6: "The idea of succession is not from motion." And § 12: "The constant and regular succession of ideas is the measure and standard of all other successions." The analysis of Locke does not go far enough; it does not determine in what particular succession of ideas the first succession, the first duration, is given us. When it is said that Locke, in deriving the idea of duration from reflection, derives it consequently from the sentiment of the operations of the soul, as, according to Locke, the operations of the soul are not all active and voluntary, his theory is still very far from that which we have exhibited. Herein is the merit of Locke's theory; its vice is

more considerable; but it is closely connected with the merit. Locke saw that the idea of time is given us in succession, and that the first succession for us is necessarily the succession of our ideas. Thus far Locke merits only praise, for he gives the succession of our ideas only as the condition of the acquisition of the idea of time; but the condition of a thing is easily taken for the thing itself, and Locke, after having taken the idea of body, the mere condition of the idea of space, for the idea of space, takes also the condition of the idea of time for the idea itself; he confounds succession with time; he no longer simply says: The succession of our ideas is the condition of the conception of time; but he says: Time is nothing else than the succession of our ideas. Book II. Chap. XIV. § 4: "That we have our notion of succession and duration from this original, viz., from reflection on the train of ideas which we find to appear one after another in our own minds, seems plain to me, in that we have no perception of duration, but by considering the train of ideas that take their turns in our understandings. When that succession of ideas ceases, our perception of duration ceases with it; which every one clearly experiments in himself, whilst he sleeps soundly, whether an hour or a day, a month or a year; of which duration of things, while he sleeps or thinks not, he has no perception at all, but it is quite lost to him; and the moment wherein he leaves off to think, till the moment he begins to think again, seems to him to have no distance. And so I doubt not it would be to a waking man, if it were possible for him to keep only one idea in his mind, without variation and the succession of others."

In this whole passage there is:

1st, A confusion of two very distinct ideas, duration and succession;

2d, An evident paralogism, for in it duration is explained by succession, which is explicable only by duration. In fact, where would the elements of succession succeed each other, unless in some duration? Where could there be succession, that is, dis-

^{*} Works of M. de Biran, Vol. i., Introduction of the Editor; for the appreciation of the theory of M. de Biran, see Lecture 25 of this volume.

tance between ideas, unless in the space of ideas and of minds, that is, in time?

3d, Moreover, see to what results the theory of Locke conducts. If succession is no longer simply the measure of time, but time itself; if the succession of ideas is no longer simply the condition of the conception of time, but this conception itself, time is nothing else than what the succession of our ideas makes it. The succession of our ideas is more or less rapid; therefore time is more or less short, not in appearance, but in reality: in absolute sleep, in lethargy, all succession of ideas, all thought, ceases; therefore at that time we do not endure, and not only we do not endure, but nothing has endured, for not only our time, but time in itself is only the succession of our ideas. Ideas exist only under the eye of consciousness; now, there is no consciousness in lethargy, in sleep; consequently during sleep and lethargy there has been no time; the horologe has vainly moved on, the horologe has been wrong; and the sun, like the horologe, should have stopped. These are the very extravagant results, and yet the necessary results of the confusion of the idea of succession with that of time; and this confusion is itself necessary in the general system of Locke, which derives all our ideas from sensation and reflection. Sensation had given space, reflection gives time; but reflection, that is, consciousness with memory, attains only the succession of our ideas, of our voluntary acts, a finite and contingent succession, and not the necessary and unlimited time in which this succession is carried on: experience, whether external or internal, attains only the measure of time, not time itself. Now, Locke was forbidden every other source of knowledge than sensation and reflection; it was therefore necessary that he should make it explicable by the one or the other: he very clearly saw that it was not explicable by sensation; and it could not be by reflection except on the condition of being reduced to the measure of time, to succession. It is true that Incke thus destroyed time, but he saved his system: it is at the same price that he will save it again in regard to the idea of the infinite.*

The character of time and space is, that they are unlimited and infinite. Without doubt the idea of the infinite is applied to something else than time and space; but since we hitherto have treated only of time and space, we will refer the idea of the infinite only to time and space, as Locke gives us the example.

Space and time are infinite; now the idea of the infinite may be detached from the ideas of time and space, and considered in itself, provided the subject from which it is borrowed be always kept in mind. The idea of the infinite incontestably exists in the human understanding, since there incontestably is in the understanding the idea of infinite time and space. The infinite is distinct from the finite, and consequently from the multiplication of the finite by itself, that is, from the indefinite. That which is not infinite, added as many times as you please to itself, will not become infinite. You no more draw the infinite from the finite, than you have been able to draw space from body, time from succession.

As to the origin of the idea of the infinite, recollect that if you had not had the idea of any body and any succession, you would neither have had the idea of time nor that of space, and that at the same time you cannot have the idea of body and succession, without having the idea of space and time. Body and succession are the finite, space and time are the infinite. Therefore, without the finite, there is for you no infinite; but, at the same time, as soon as you have the idea of the finite, you cannot avoid having the idea of the infinite. Recollect again the difference between the order of the acquisition of our ideas and their logical order. In the logical order, the finite supposes the infinite, as its necessary foundation; but, in the chronological order, it is the idea of the infinite which is the necessary condition of the acquisition of the idea of the infinite.

^{*} On the idea of the infinite, see First Series, Vol. 8, Lect. 1, p. 58, Lect. 8, p. 134; Vol. 4, Lect. 12, p. 64 and p. 74; Vol. 5, Lect. 6, p. 218, etc.