## New Essays on Human Understanding

## Gottfried Wilhelm Leibnitz

Locke was answered in 1696 by the German philosopher and mathematician Gottfried Wilhelm Leibnitz (1646-1716). There were innate ideas, Leibnitz insisted, and our senses were not the sole source of knowledge.

I find so many marks of unusual penetration in what Mr. Locke has given us on the Human Understanding and on Education, and I consider the matter so important, that I have thought I should not employ the time to no purpose which I should give to such profitable reading; so much the more as I have myself meditated deeply upon the subject of the foundations of our knowledge. This is my reason for putting upon this sheet some of the reflections which have occurred to me while reading his Essay on the Understanding.

Of all researches, there is none of greater importance, since it is the key to all others. The first book considers chiefly the principles said to be born with us. Mr. Locke does not admit them, any more than he admits innate ideas. He has doubtless had good reasons for opposing himself on this point to ordinary prejudices, for the name of ideas and principles is greatly abused. Common philosophers manufacture for themselves principles according to their fancy; and the Cartesians, who profess greater accuracy, do not cease to intrench themselves behind so-called ideas of extension, of matter, and of the soul, desiring to avoid thereby the necessity of proving what they advance, on the pretext that those who will meditate on these ideas will discover in them the same thing as they; that is to say, that those who will accustom themselves to their jargon and mode of thought will have the same prepossessions, which is very true.

My view, then, is that nothing should be taken as first principles but experiences and the axiom of identity or (what is the same thing) contradiction, which is primitive, since otherwise there would be no difference between truth and falsehood; and all investigation would cease at once, if to say yes or no were a matter of indifference. We cannot, then, prevent ourselves from assuming this principle as soon as we wish to reason. All other truths are demonstrable, and I value very highly the method of Euclid, who, without stopping at what would be supposed to be sufficiently proved by the so-called ideas, has demonstrated (for instance) that in a triangle one side is always less than the sum of the other two. Yet Euclid was right in taking some axioms for granted, not as if they were truly primitive and indemonstrable, but because he would have come to a standstill if he had wished to reach his conclusions only after an exact discussion of principles.

Thus he judged it proper to content himself with having pushed the proofs up to this small number of propositions, so that it may be said that if they are true, all that he says is also true. He has left to others the task of demonstrating further these principles themselves, which besides are already justified by experience; but with this we are not satisfied in these matters. This is why Apollonius, Proclus, and others have taken the pains to demonstrate some of Euclid's axioms. Philosophers should imitate this method of procedure in order finally to attain some fixed principles, even though they be only provisional, after the way I have just mentioned.

As for ideas, I have given some explanation of them in a brief essay printed in the *Actes des Sçavans* of Leipzig for November, 1684, which is entitled "Meditationes de Cognitione, Veritate, et Ideis"; and I could have wished that Mr. Locke had seen and examined it; for I am one of the most docile of men, and nothing is better suited to advance our thought than the considerations and remarks of clever persons, when they are made with attention and sincerity. I shall only say here, that true or real ideas are those whose execution we are assured is possible; the others are doubtful, or (in case of proved impossibility) chimerical. Now the possibility of ideas is proved as much a priori by demonstrations, by making use of the possibility of other more simple ideas, as a *posteriori* by experience; for what exists cannot fail to be possible. But primitive ideas are those whose possibility is indemonstrable, and which are in truth nothing else than the attributes of God.

I do not find it absolutely essential for the beginning or for the practice of the art of thinking to decide the question whether there are ideas and truths born with us; whether they all come to us from without or from ourselves; we will reason correctly provided we observe what I have said above, and proceed in an orderly way and without prejudice.

The question of the origin of our ideas and of our maxims is not preliminary in Philosophy, and we must have made great progress in order to solve it successfully. I think, however, that I can say that our ideas, even those of sensible things, come from within our own soul, of which view you can the better judge by what I have published upon the nature and connection of substances and what is called the union of the soul with the body. For I have found that these things had not been well understood. I am nowise in favor of Aristotle's tabula rasa; and there is something substantial in what Plato called reminiscence. There is even something more; for we not only have a reminiscence of all our past thoughts, but also a presentiment of all our future thoughts. It is true that this is confused, and fails to distinguish them, in much the same way as when I hear the noise of the sea I hear that of all the particular waves which make up the noise as a whole, though without discerning one wave from another. Thus it is true in a certain sense, as I have explained, that not only our ideas, but also our sensations, spring from within our own soul, and that the soul is more independent than is thought, although it is always true that nothing takes place in it which is not determined, and nothing is found in creatures that God does

not continually create.