

MEDITATIONS ON KNOWLEDGE, TRUTH, AND IDEAS

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Leibniz's first published paper on philosophical issues (in the mature period of his thought) is the result of his criticism of Descartes's incomplete conception of truth and was clearly occasioned by the appearance of Arnauld's attack on Malebranche's theory of knowledge in the Des vraies et des fausses idées, though Leibniz did not study the controversy in detail until later.¹ That he regarded this essay as definitive for his own conception of knowledge is shown by his frequent reference to it in his later works.

[G., IV, 422-26]

Since distinguished men are today engaged in controversies about true and false ideas, a matter of great importance for understanding the truth and one to which even Descartes did not entirely do justice, I should like briefly to explain what I think may be established about the different kinds and the criteria of ideas and of knowledge. Knowledge is either obscure or *clear*; clear knowledge is either confused or *distinct*; distinct knowledge is either inadequate or *adequate*, and also either symbolic or *intuitive*. The most perfect knowledge is that which is both adequate and intuitive.

A concept is obscure which does not suffice for recognizing the thing represented, as when I merely remember some flower or animal which I have once seen but not well enough to recognize it when it is placed before me and to distinguish it from similar ones; or when I consider some term which the Scholastics had defined poorly, such as Aristotle's *entelechy*, or cause as a common term for material, formal, efficient, and final cause, or other such terms of which we have no sure definition. A proposition also becomes obscure when it contains such a concept.

Knowledge is *clear*, therefore, when it makes it possible for me to recognize the thing represented. Clear knowledge, in turn, is either confused or distinct. It is *confused* when I cannot enumerate one by one the marks which are sufficient to distinguish the thing from others, even though the thing may in truth have such marks and constituents into which its concept can be resolved. Thus we know colors, odors, flavors, and other particular objects of the senses clearly enough and discern them from each other but only by the simple evidence of the senses and not by marks that can be expressed. So we cannot explain to a blind man what red is, nor can we explain such a quality to others except by bringing them into the presence of the thing and making them see, smell, or taste it, or at least by reminding them of some similar perception they have had in the past. Yet it is certain that the concepts of these qualities are composite and can be resolved, for they certainly have their causes. Likewise we sometimes see painters and other artists correctly judge what has been done well or done badly; yet they are often unable to give a reason for their judgment but tell the inquirer that the work which displeases them lacks 'something, I know not what'.

A *distinct* concept, however, is the kind of notion which assayers have of gold; one, namely, which enables them to distinguish gold from all other bodies by sufficient marks and observations. We usually have such concepts about objects common to many senses², such as number, magnitude, and figure, and also about many affections of the mind such as hope and fear; in a word, about all concepts of which we have a *nominal definition*, which is nothing but the enumeration of sufficient marks. We may also have distinct knowledge of an indefinable concept, however, when this concept is *primitive* or is the mark of itself, that is, when it is irreducible and to be understood only through itself and therefore lacks requisite marks. But in composite concepts the single component marks are indeed sometimes known clearly but nevertheless confusedly, such as heaviness, color, aqua fortis, and others which are some of the marks of gold. Such knowledge of gold may therefore be distinct, but it is nonetheless *inadequate*. But when every ingredient that enters into a distinct concept is itself known distinctly, or when analysis is carried through to the end, knowledge is adequate. I am not sure that a perfect example of this can be given by man, but our concept of numbers approaches it closely. Yet for the most part, especially in a longer analysis, we do not intuit the entire nature of the subject matter at once but make use of signs instead of things, though we usually omit the explanation of these signs in any actually present thought for the sake of brevity, knowing or believing that we have the power to do it. Thus when I think of a chiliogon, or a polygon of a thousand equal sides, I do not always consider the nature of a side and of equality and of a thousand (or the cube of ten), but I use these words, whose meaning appears obscurely and imperfectly to the mind, in place of the ideas which I have of them, because I remember that I know the meaning of the words but that their interpretation is not necessary for the present judgment. Such thinking I usually call *blind* or *symbolic*; we use it in algebra and in arithmetic, and indeed almost everywhere. When a concept is very complex, we certainly cannot think simultaneously of all the concepts which compose it. But when this is possible, or at least insofar as it is possible, I call the knowledge *intuitive*. There is no other knowledge than intuitive of a distinct primitive concept, while for the most part we have only symbolic thought of composites.

This already shows that we do not perceive the ideas even of those things which we know distinctly, except insofar as we use intuitive thought. It often happens that we falsely believe ourselves to have ideas of things in our mind, when we assume wrongly that we have already explained certain terms which we are using. It is not true, or at least it is ambiguous, to say, as some do, that we cannot speak of anything and understand what we say without having an idea of it. For often we understand after a fashion each single word or remember to have understood it earlier; yet because we are content with this blind thinking and do not sufficiently press the analysis of the concepts, we overlook a contradiction which the composite concept may involve. I was led to examine this point more distinctly by an argument which was famous among the Scholastics long ago and was revived by Descartes. It is an argument for the existence of God and is stated as follows. Whatever follows from the idea or definition of a thing can be predicated of the thing itself. Existence follows from the idea of God, or the most perfect being, or that than which no greater can be thought. For a most perfect being involves all perfections, among which existence is one. Therefore existence can be predicated of God.

It should be noticed however, that the most you can draw out of this argument is

that if God is possible, it follows that he exists; for we cannot safely infer from definitions until we know that they are real or that they involve no contradiction. The reason for this is that from concepts which involve a contradiction, contradictory conclusions can be drawn simultaneously, and this is absurd. To explain this I usually make use of the example of the most rapid motion, which involves an absurdity. Suppose that a wheel turns at a most rapid rate. Then anyone can see that if a spoke of the wheel is extended beyond its rim, its extremity will move more rapidly than will a nail in the rim itself. The motion of the nail is therefore not the most rapid, contrary to hypothesis. Yet at first glance we may seem to have a idea of the most rapid motion, for we understand perfectly what we are saying. But we cannot have any idea of the impossible. Likewise it is not enough to think of a most perfect being in order to assert that we have an idea of it, and in the demonstration which I referred to above we must either prove or assume the possibility of a most perfect being in order to reason rightly. However, there is nothing truer than that we have an idea of God and that the most perfect being is possible and indeed necessary. But the above argument is not conclusive and has already been rejected by Thomas Aquinas.

This gives us, too, a means of distinguishing between *nominal definitions*, which contain only marks for discerning one thing from others, and *real definitions*, through which the possibility of the thing is ascertained. In this way we can meet the view of Hobbes, who held truths to be arbitrary because they depend on nominal definitions, not considering that the reality of the definition does not depend upon our free choice and that not all concepts can be combined with each other.³ *Nominal definitions* do not suffice for perfect knowledge unless it has been established by other means that the defined thing is possible.

Thus the difference between a *true* and a *false idea* also becomes clear. An idea is true when the concept is possible; it is false when it implies a contradiction. Now we know the *possibility* of a thing either a priori or a posteriori. We know it a priori when we resolve the concept into its necessary elements or into other concepts whose possibility is known, and we know that there is nothing incompatible in them. This happens, for instance, when we understand the method by which the thing can be produced; hence *causal definitions* are more useful than others. We know an idea a posteriori when we experience the actual existence of the thing, for what actually exists or has existed is in any case possible. Whenever our knowledge is adequate, we have a priori knowledge of a possibility, for if we have carried out the analysis to the end and no contradiction has appeared, the concept is obviously possible. Whether men will ever be able to carry out a perfect analysis of concepts, that is, to reduce their thoughts to the *first possibles* or to irreducible concepts, or (what is the same thing) to the absolute attributes of God themselves or the first causes and the final end of things, I shall not now venture to decide.⁴ For the most part we are content to learn the reality of certain concepts by experience and then to compose other concepts from them after the pattern of nature.

From this therefore I believe we can understand that it is not always safe to appeal to ideas and that many thinkers have abused this deceptive word to establish some of their own fancies. That we do not always at once have an idea of a thing of which we are conscious of thinking, the example of most rapid motion has shown. Nor is it less deceptive, I think, when men today advance the famous principle that *whatever I perceive clearly and distinctly in some thing is true, or may be predicated of it*. For what seems clear and distinct to men when they judge rashly is frequently obscure and

confused. This axiom is thus useless unless the criteria of clearness and distinctness which we have proposed are applied and unless the truth of the ideas is established. For the rest, the *rules of common logic*, of which also the geometers make use, are not to be despised as criteria of the truth of judgments; so, for example, the rule that nothing is to be admitted for certain unless it has been proved by careful experience or by sound demonstration. A demonstration is sound when it observes the form prescribed in logic, although it need not always follow the form of syllogisms arranged in the Scholastic manner (such as Christian Herlinus and Conrad Dasypodius applied to the first six books of Euclid)⁵; it is merely necessary that the argument be conclusive by virtue of its form. As an example of such argumentation carried through in proper form one could also quote any valid calculation. Thus no necessary premise is to be omitted, and all premises must be proved in advance, or at least admitted to be hypotheses, in which case the conclusion, too, is hypothetical. Whoever obeys these rules carefully will easily protect himself against deceptive ideas. That brilliant genius Pascal agrees entirely with these principles when he says, in his famous dissertation on the geometrical spirit, a fragment of which is preserved in the outstanding book of the celebrated Antoine Arnauld on the *Art of Thinking*⁶, that it is the task of the geometer to define all terms though ever so little obscure and to prove all truths though little doubtful. I only wish that he had defined the limits beyond which any concept or judgment is no longer even a little obscure or doubtful. But the necessary conditions for this can be learned from a careful study of what we have just said; we must now strive to be brief.

As to the controversy whether we see all things in God (an old opinion which, properly understood, is not entirely to be rejected) or whether we have some ideas of our own⁷, it must be understood that even if we saw all things in God, it would still be necessary to have our own ideas also, not in the sense of some kind of little copies, but as affections or modifications of our mind corresponding to the very object we perceive in God. For whenever thoughts succeed each other, some change occurs in our mind. There are also ideas in our mind of things of which we are not actually thinking, as the figure of Hercules is in the rough marble. But in God there must actually be the ideas not only of absolute and infinite extension but also of every figure, since figure is nothing but a modification of absolute extension.⁸ Moreover, when we perceive colors or odors, we are having nothing but a perception of figures and motions, but of figures and motions so complex and minute that our mind in its present state is incapable of observing each distinctly and therefore fails to notice that its perception is compounded of single perceptions of exceedingly small figures and motions. So when we mix yellow and blue powders and perceive a green color, we are in fact sensing nothing but yellow and blue thoroughly mixed; but we do not notice this and so assume some new nature instead.

REFERENCES

¹ See p. 276, note 13.

² In the *New Essays*, II, 5 (G., V, 116), Leibniz assigns these concepts (called by Locke simple ideas which come from several senses) to the common sense (Aristotle *De anima* ii. 6) but identifies the common sense with "the mind itself, for they are ideas of the pure understanding, which relate to the external world and which we perceive through the senses".

³ See p.185, note 3.

⁴ On Leibniz's identification of simple concepts with the perfections of God see the Introduction, Sec. V; see also Nos. 14 and 16, and p. 169, note 2.

⁵ On this effort to reduce Euclid to syllogistic form see Cantor, *op. cit.*, II, 553.

⁶ *Art de penser*, Part IV, chaps. IX and X. Leibniz had read Pascal's *De l'esprit géométrique* in Paris (Cout. OF., p. 181).

⁷ This is another allusion to the Arnauld-Malebranche controversy. Arnauld had attacked Malebranche's view that we see objects by means of ideas in God's mind and had asserted that perception is essentially a modification of our own soul. See also p. 271, note 8.

⁸ This comment refers to Malebranche's theory of an intelligible extension in God, to which Leibniz here gives qualified approval, though he insists that this does not absolve God from particular knowledge, as Malebranche had held. Cf. Leibniz's theory of the *immensum* during the Paris period (No. 12).