

TRANSLATION

Preface to Leibniz's
New Essays on Human Understanding
and Other Works

(1764)

Abraham Gotthelf Kästner

R.E. Raspe and A.G. Kästner had enjoyed several years of joint examination of Leibniz's manuscripts when, in 1762, Raspe announced the impending publication of a volume of these heretofore suppressed works. The volume was dedicated to Baron Gerlach Adolf von Münchhausen.

Kästner's Preface succinctly propounds the merit of Leibniz's scientific method. In particular, Kästner took pains to address the thuggish assault on science by Leonhard Euler, which he had fought for two decades. In 1761, in his "Letters to a German Princess," Euler had bragged about the 1747 "victory" over Leibniz's Monads.

This is the first English translation of Kästner's Preface. Its strategic significance is reported in "Leibniz to Franklin on 'Happiness,'" page 44 of this issue. Bracketed editor's notes, supplied by David Shavin, are at the end of the translation; the author's superscript footnotes appear at the bottom of the pages. Emphasis has been added.

That the real universe is something altogether different from the apparent one, is a truth that should no longer be in doubt since Descartes, who maintained, to the great astonishment of the philosophers of his time, that light and color have no similarity to the ideas that we form of them.¹ The metaphysics of Leibniz have always seemed to me to be based on this principle.

Those who accuse him of impenetrable obscurity [1] would find it quite clear, if only they would rid themselves of certain prejudices similar to the "intentional species" against which Descartes had to battle. [2] They maintain that the manner in which M. Leibniz has conceived the origin of extension is inexplicable. They prove by geometrical demonstrations, how absurd it is to look at a body as a sum of points. Can one blame for this absurdity, the person to whom the whole continent of Europe is indebted for the infinitesimal calculus? I say

this *continent*—in order to let them rejoice in that liberty, of which they are so jealous—

Deeply divided from the whole world are the British. [3]

It is not body which M. Leibniz composes from simple beings [4], but the phenomenon of extension, which he accounts for, by saying that we represent to ourselves, indistinctly, a great number of non-extended beings. The telescope shows us clusters of stars, where the naked eye sees only luminous spots. The spot is not composed of stars, as the whole is composed of parts: it is an appearance which offers itself to eyes too weak to distinguish the stars. So, the Elements [5] of Leibniz.

For those who have fought against them [6] with geometrical arguments—which, without doubt, Leibniz could have done as well as they—have they not wasted their time? And those who have claimed that the events of the *visible* universe could be explained by simple beings—would they not have done better by asking at the outset, *how* the sensation, which is excited in us by the

1. *Dioptrics*, Chap. 1 [Descartes, 1637].

sun's light, is born of an infinity of sensations of color, which no one before Newton had been bright enough to look for in a ray of sunlight? How can it be that a lady who might not even know the rule of three, feels harmony with a sensitivity at times more reliable than Euler's calculations of the ratios of vibrations? [7] Let us pursue these two examples, taken at random from an infinity of similar ones, to try to clarify the relationship between the phenomena and their causes [8]: this relationship must be infinitely simpler, than would be the relationship between the visible universe and its Elements.

The representative force, with which M. Leibniz has endowed his Elements, seemed dubious even to M. Wolff. Yet, this same M. Wolff had brought into the full light of day this truth—that the universe is a whole whose parts are so intimately connected, that one could not change the least thing, without changing the whole into a completely different universe; that it holds together the spider's thread with the same force which pushes or pulls the planets around the sun. This is how a French Philosopher and beautiful spirit² understood what the German Metaphysician had demonstrated by profound reasoning. Knowing this, could M. Wolff still doubt, that that which happens at each moment to each individual, so affects the universe as a whole, that the infinite mind sees in this, the universe that *is*, the only one to which an individual, such as he is, could be a part? [9]

If one were to say to someone who is not so well schooled in the science of numbers, that 23 is the 12th term of an arithmetic progression which starts with 1, he will find, first of all, that this progression is one of odd numbers. You need only put in place of the sequence and its given term, the universe and the individual. It is in this sense that I have always understood those "mirrors of the universe" of Leibniz [10], which seemed so ridiculous to many Philosophers, because these gentlemen had no idea how to find an entire sequence from one given term. M. Leibniz used the verb "to represent," as he explains it himself in his remarks on the book of M. Locke now being published.³ The relationship of the circular base of a cone and its section is such that, if you know the one, you also know the other. It is thus, that we represent in mechanics, velocities and times by straight lines; thus, that a thermometer represents the warmth of the air, a barometer the weight of the atmosphere.

I had hoped that these reflections would not be altogether misplaced at the beginning of a collection of this great man's philosophical writings, extracted from his manuscripts, many of which are still kept at Hanover to

this day. It is up to those who will benefit from it, to acknowledge the protection always so graciously accorded the sciences by the enlightened Ministers to whom the King has confided the happiness of his domains [11], in the care of enriching the republic of letters with these works.

One could not have chosen an editor more worthy than M. Raspe, who combines a solid knowledge with satisfying insights, and who has made every possible effort to make this choice agreeable to the general public. It is for him to instruct the readers concerning some historical circumstances pertinent to this edition. As for me, having had, among many other duties, only a few days to write this Preface, first in Latin as the editor had wished, and then after that to recast it into French, as he thought to ask a little while later, I would hope that I will be pardoned if this Preface is found to be less worthy than the place it holds.

If only I may be permitted to add yet some few more thoughts to which the reading of the following passages has given rise.

In Part II, there is a discussion of the law of continuity in respect to the collision of bodies. M. Euler is of the same mind as M. Leibniz and has, happily, made use of this to calculate the laws of motion.⁴ [12]

It is also known that M. Leibniz distinguished the species of Ideas more rigorously than anyone before him.⁵ Hence, one would expect to see him sometimes correct M. Locke, a far less rigorous writer on these matters. Thus, in the investigation of simple Ideas, p. 77 [13]. The English Philosopher is as much beneath the German, as the opticians of earlier times, who mistook a ray of sunlight for a simple phenomenon, were beneath Newton. If M. Leibniz had written the history of the human mind, his work would differ from that of M. Locke, as the history of an insect described by Roesel, would differ from a rough draft done by Frisch. [14]

M. Poley enriched his excellent translation of M. Locke's book [15] with observations drawn from the Philosophy of Leibniz and of Wolff. It is a shame that these observations were not written in another language. Perhaps they would have been useful for some [British–DS] minds, who were too superficial to understand M. Locke, and who, in order to pass as Philosophers at very little cost, became extreme admirers of his—imagining him to have seen all truths, as the pedants of barbarous ages imagined it with respect to Aristotle. [16]

Subsequent to the time when the philosophers were

2. M. de Maupertuis, *Essay de Cosmologie* [1750].

3. Book II, Chap. 8, Sec. 12, p. 87.

4. *Histoire de l'Academie Royale de Berlin*, 1745, p. 37, 51.

5. "De cognitione, veritate & Ideis," *Acta Eruditorum*, Leipzig, 1684 [Leibniz].

debating the question of the blind man, p. 92 [17], there was an experiment on this which was reported in the *Philosophical Transactions*.⁶ At first glance, it appeared to be more in opposition to M. Leibniz, than it was after a more thorough examination. The blind man, who wishes to recognize by sight the bodies that he had distinguished by touch, must, according to M. Leibniz, compare the effects that the surfaces of the bodies have on his two senses. This is what the blind man seemed to do after having been cured by Cheselden, when he took the cat into his hands, which he had not been able to distinguish well enough from the dog, when he was first beginning to see. The observers imagined that he was merely examining the cat with great intensity, whereas, in fact, he was examining it as much with his hands as with his eyes. No one thought of proposing to this young man an experiment with some surfaces as uniform as those of a sphere, or a cube; and it appears that this singular event lacked the presence of sufficiently philosophical observers. His judgement on the

paintings was just as Leibniz had predicted. [18]

It is not only nowadays that we have begun to ask if all the rotations of the Earth around its axis are equal,⁷ since M. Leibniz had the same doubt, p. 104. [19]

Are we to believe that, in the most immediately apprehended science [20], the first notion, that of figure, would yet be not well defined? This is nonetheless what is shown, p. 105. [21]

The reader will see by these examples, chosen randomly, whether these works by Leibniz merit the public's attention, and whether, as in the already known writings of the same author, they contain the seeds of truths, which will enrich the cultivation of the republic of letters.

Göttingen, September 1764

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—translated from the French by Nancy Shavin

6. *Philosophical Transactions* [Roy. Soc. London], No. 402; Robert Smith's *Compleat System of Optiks*, Book I, Chap. 5. [Also, Smith's "On Distinct and Indistinct Vision" was the cause of some debate and notoriety.—DS]

7. See the dissertation of M. Paul Frisius on the diurnal motion of the Earth, which has won the prize awarded by the Royal Academy of Berlin, 1756.

[1] In particular, Leonhard Euler's 1760/1 *Letters to a German Princess* and Voltaire's 1759 *Candide*, both attacks on Leibniz.

[2] Medieval, scholastic term. Kästner picks up on Leibniz's attack, that "modern" Newtonians were reviving occultist appeals to innate qualities.

[3] Latin in text: "Penitus toto divisos orbe Briannos."

[4] I.e., the "Monads."

[5] I.e., "simple beings" or "Monads."

[6] "Elements."

[7] Euler's 1739 *Tentamen novae theoriae musicae* and 1760/1 *Letters*. Kästner judos Euler's patronizing, "dumbing-down" approach to ladies. The ear and mind of a woman, or man, can distinguish harmonies, without a supercomputer counting vibrations.

[8] I.e., where both phenomena and cause are in the visible universe.

[9] Christian Wolff's problem with "representation" included his sensitive theory on the relatedness of the universe, that would not allow him to explain why he himself existed, that is, what God's mission for Wolff was. (Or, to make a business of representing Leibniz, is not to know Leibniz.) Kästner had fun counterposing the "French Philosopher" Maupertuis, to the "German Metaphysican" Wolff.

[10] The "Monads."

[11] Such is Kästner's description of the role of Baron Gerlach Adolph von Münchhausen, Minister to Hanover from the British Court, and leader of the faction for "happiness" for the body politic. (Pierre Beaudry has located a 1766 work by Kästner, in part on "happiness," entitled *Nowelle Theorie des Plaisirs* by Sulzer and Kästner.) Münchhausen was key in liberating the Leibniz documents they published.

[12] Kästner alludes to one of the last works written by Euler prior to

Maupertuis' arrival at the Berlin Academy in 1745, after which Euler was instructed by Maupertuis, effectively, that Leibniz was now to be treated as a public enemy. Hence, Kästner's reminder to Euler was probably a jab, not a compliment.

[13] See "Of Simple Ideas," Book II, Chapter ii, in Leibniz's *New Essays*.

[14] A.J. Roesel von Rosenhof's *Historia naturalis ranarum*, a massive work on the frogs and toads of Germany, was noted for the vivid artwork, capturing, e.g., muscles in action. J.L. Frisch's *Beschreibung von allerley Insecten in Teutschland*, also voluminous, was evidently known for its "just the facts, ma'am" style of drawings.

[15] Heinrich Eberhard Poley's 1757 German publication of the 1709 abstract of Locke's *Essay*.

[16] Kästner effectively blasts as medievalists, the English followers of Locke, who had such great pretensions as modern defenders of liberty!

[17] Found in *New Essays*, Book II, Chapter ix, section 8.

[18] William Molyneux, who was engaged in catty comments with Locke about Leibniz, proposed for public consideration: Would a blind adult, upon first being able to see, recognize by sight objects that he had learned by touch? In 1728, the British surgeon William Cheselden removed the cataracts from a 14-year old, who was observed as described above.

[19] Found in *New Essays*, Book II, Chapter xiv, section 21. In 1749, the year after Kästner's translation of Cadwallader Colden's work, Colden made astronomical observations of the Earth's unequal daily rotations.

[20] I.e., geometry.

[21] Found in *New Essays*, Book II, Chapter xv, section 4.