

Letter L

28 July 1704

Leibniz to Bouvet<sup>1</sup>

(AA I xxiii: N. 422)

My Very Reverend Father,

I received with joy your news and the honor of your letter dated from Peking on the 8 November, 1702. And I hope that you will also have received in the meantime my reply to your preceding one<sup>2</sup> which was longer, where you spoke so learnedly of the hieroglyphs, and in particular of the linear characters of Fu Xi which correspond so well with my binary arithmetic. I will now tell you that I see more and more that we will better approach the perfection of the science of numbers by this than by any other way. Because, all the expressions in it proceed in a certain order, and because everything is based on periods of two marks in combination, 0 and 1, which allows for remarkable shortcuts.<sup>3</sup> But besides mathematics I see that these same characters could have considerable usages in philosophy.

I have been meditating for some time on certain philosophical elements after the manner of those of Euclid, which could be called *elementa aeternae veritatis* [i.e.,

---

<sup>1</sup> There is strong evidence that this letter was never sent. See WB 746. Zacher believes that it was not sent and that Letter M was in effect a substitute (“*Ersatz*’-Brief”) for it. See Z 202, n. 366.

<sup>2</sup> Letter J.

<sup>3</sup> These “remarkable shortcuts” are of course the reason why various combinations of 0 and 1 form the basis of transcribing all data in modern computing.

elements of eternal truth]. I rigorously substantiate therein all of the propositions which I introduce; and this is done by a manner of calculus of universal plausibility, presupposing only a small number of axioms.<sup>4</sup> But what delays me most are the definitions that must be

---

<sup>4</sup> Since the late 1670's, in conjunction with his efforts to develop a universal characteristic, Leibniz attempted to devise a logical calculus or formal apparatus which could generate logical truths ("elementa aeternae veritatis") by deducing the laws of logic from a basic set of axioms. His first efforts at such a logistic method date from 1679-1680, and include not only a propositional calculus, but a predicate calculus as well. See "Two Studies in the Logical Calculus" (AA VI iv: N. 57; L 235-247). For some of the details of these new efforts, see E. J. Aiton, Leibniz, pp. 114-115. His most advanced efforts at a logical calculus culminated in the 1690's; e.g., "A Study in the Logical Calculus" (AA VI iv: N.177; L 371-382: see E. J. Aiton, Leibniz, p. 208. A selection of canonical materials on the logical calculi of Leibniz can be found in G.W.Leibniz: Die Grundlagen des logischen Kalküls: Lateinisch-Deutsch, F. Schupp. ed. & trans. (Hamburg: Meiner Verlag, 2000).

In certain ways, Leibniz's attempts at a logical calculus prefigured 19<sup>th</sup> and 20<sup>th</sup> century efforts by Frege as well as Russell and Whitehead (in their monumental *Principia Mathematica*) to reduce all mathematical truths to logical ones. But whereas the latter restricted themselves to mathematical truths, Leibniz set himself the impossible task of wishing to demonstrate logically "all known truths by reducing them to simple, evident principles." This assumed a classification of all true knowledge. Such an encyclopaedic endeavor was always on his mind; indeed he often complained that such an undertaking would require a whole academy of collaborators. See E. J. Aiton, Leibniz, pp. 93-94

created altogether anew and in a manner appropriate to the precise arguments, which is ordinarily lacking in philosophy. This is why I would not know how to proceed quickly. I hope to demonstrate in this way my system of monads, or simple substances which constitute everything and, without depending one on another, work together by virtue of the harmony which their common creator preestablished in their natures. It was spoken of previously in the *Journal des savants* and I believe I have written to you about it.<sup>5</sup> This system provides a very rich philosophy and a natural theology such as one might wish for.

I strongly hope that the characters of the Chinese are thoroughly examined and that we are informed about the abundance of other fine things that are found there. I ask you, my Reverend Father, to favor me with some things that might be gotten while waiting for something better, and to ask for the same from the Reverend Father Visdelou, and to pass on my regards to him.<sup>6</sup> I do not at all doubt that there are good observations

---

<sup>5</sup> Leibniz had not written Bouvet earlier about his “system of monads.” He is referring here to the *Journal des Savants*, issues 23 (June 27 1695) and 24 (July 4 1695), pp. 294-306, entitled (in English translation) *New System of the Nature of Substances and their Communication, and of the Union which Exists between the Soul and the Body*. Leibniz published this essay anonymously in the Paris Journal. See Letter B, n. 34. The word “monad” was not used by Leibniz in his published writings until 1698 (see AG 155). In the “New System,” Leibniz describes these key “building blocks” of his metaphysics as “real unities. . . formal atom[s]. . .” G IV 478; WF 11.

<sup>6</sup> On Visdelou, see Letter E, n. 9.

among them [i.e., the Chinese] in physics, medicine, and mechanics which would be of service to us, not to speak of history, geography, and languages. Their ancient astronomical observations would also suit us. It is said that there are particular languages in the different provinces of China and in Korea; it would be good to have the Lord's Prayer and some words from them.

Your sentiments on ancient Chinese history are quite important. Perhaps it is like the mythology of the Greeks where there is some truth at the bottom but wherein fables are intermingled. You will judge, my Reverend Father, whether their history is drawn from more than one original book, or whether some are copied from others. One speaks of an emperor who burned all of the books.<sup>7</sup> Their history could be the fabrication of those who restored them [i.e., the books] in whatever way they were able.<sup>8</sup>

I do not have the discourse of Kepler, printed on the subject of a letter from Father Terrentius. They must have it in Paris. I will write about it to the Reverend Father Fontaney so that he can have it copied for you.

I will write to the Reverend Father Verjus myself in order to try to bring him to some resolution in favor of researches in China. The trouble is that the great war which divides Europe lends opposition to all good plans.<sup>9</sup> The Reverend Father Fontaney writes me that Mister Sloane, secretary of the Royal Society of England (to which I have also had the honor of belonging for more than 30 years), is writing to the Reverend Father Visdelou.<sup>10</sup> I hope

---

<sup>7</sup> note on Qin shihuangdi and Shi ji account;

<sup>8</sup> As an accomplished historian, Leibniz was acutely aware of the problematic nature of early historical sources.

<sup>9</sup> Leibniz is referring here to the War of the Spanish Succession. See Letter J, n. 4.

to also profit from this exchange, of which you will not fail, my Reverend Father, to be informed. And if the Reverend Father Visdelou gives leave to Mr. Sloane, I could take part in it.

Are there not any foundations in China, as there are here, for academies, universities, and doctrinal colleges; and could one not bring the emperor to establish one in order to cultivate the sciences? A prince so powerful who rules at ease, is there not an infinity of means to provide for them? It is to this end that it would be necessary to try to convince him by way of his uncle, the prince Sosan,<sup>11</sup> and others who are interested and favor you. It could be done between Tartars, Chinese, and Europeans. I hope that the great Chinese-Tartar dictionary will be completed. It would be necessary to work as soon

---

<sup>10</sup>In his letter of 13 July, a few weeks earlier, Fontaney told Leibniz that Sloane was going to start corresponding with Visdelou, “the only one able to satisfy you on [matters concerning] Chinese history.” WB 450. Sir Hans Sloane (1660-1753), English physician, was Secretary to the Royal Society from 1693 to 1712. He served as President from 1727-1741, succeeding Isaac Newton. Leibniz was unanimously elected a Fellow of Royal Society of London in April 1673 and corresponded with Sloane from 1700 to 1712.

<sup>11</sup>Sosan or Songgotu (? – 1703), along with Tong Guogang, were the chief envoys of the Chinese delegation at the Treaty of Nerchinsk. (See Letter B, n. 12). Songgotu appreciated the help of the Jesuits at Nerchinsk and supported them at court. He was “one of the most influential voices that led to the issuance of the 1692 Edict of Toleration.” N. Standaert, Handbook of Christianity. . ., p. 445. On the Edict, see Letter A, n. 6.

as possible at adding to it one of our languages and sending it to Europe. This would already be a start. I spoke to you in my last [letter], my Reverend Father, of a Chinese and Portuguese dictionary which is in Berlin,<sup>12</sup> for you pointed out that you have never seen one; but it is not ample enough. The Reverend Father Grimaldi spoke to me of a work where the Chinese characters are accompanied by pictures of things.<sup>13</sup>

I wish you progress and assistance worthy of your merit and your zeal, and I am perfectly,

My Very Reverend Father,

Your very humble and very obedient servant,

Leibniz

Hanover, 28 July, 1704

---

<sup>12</sup>At the end of the postscript to Letter J, Leibniz mentions such a “small Latin dictionary” – meaning in Latin letters. See n. 72.

<sup>13</sup>In Leibniz’s “Notes on his Conversation with C. F. Grimaldi,” Leibniz recorded Grimaldi’s answers to some of the questions he had earlier posed to him during their meeting in the summer of 1689 in Rome (AA III iv: NN. 213-214). His answer to Leibniz’s general query (AA III iv: N. 213, #22) about possible Chinese materials in Latin on general or natural history occasioned a response which included mention of books such as Leibniz describes here.

