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LEIBNIZ AND CHINA

BY DONALD F. LACH

The thought of Gottfried Wilhelm Leibniz (1646-1716) is characterized by its universality. He is best known as a philosopher and mathematician, but his interests ranged from the reunion of Christendom to the study of Chinese games.¹ He argued for the founding in China,² as well as in practically every section of the European world, of scientific academies for the diffusion and propagation of knowledge. To Leibniz learning was not an end in itself; it was a means to the attainment of a universal civilization through which mankind might receive the combined blessings of its various cultures.

The "discovery" that China was the seat of an ancient and highly developed civilization independent of Europe awakened Leibniz to the importance of the "Middle Kingdom." There were available to him in the libraries at Vienna, Hanover, Munich, and Berlin a number of studies concerning China and eastern Asia, most of which were Jesuit letters and books concerning missionary enterprises. Even at the age of twenty-two, Leibniz knew enough about China to observe that "no matter how foolish and paradoxical the Chinese ordinarily appear to be in *re medica*, nevertheless, theirs is better than ours."³ From the missionary books and letters he learned of the Jesuit system of slow penetration into China through sympathetic understanding of Chinese problems and through gradual introduction of Western scientific methods and religion. Throughout the remainder of his career, he advocated the Jesuit policy of steady penetration through the development of cultural affinities as a means for bringing about world harmony and Christian-European rule.

From this analysis it is not to be assumed that Leibniz's work on things Chinese was systematized. It was not. One of his early

¹ See Leibniz's article "Annotatio de quibusdam ludis . . ." *Miscellanea Berolinensia*, I (1710), 25.

² Leibniz prevailed upon the Jesuits to ask the emperor K'anghsi of China to establish a scientific society (Leibniz to Grimaldi, December 20, 1696, cited in part in Franz Rudolf Merkel, *Leibniz und die China-Mission* [Leipzig, 1920], 35).

³ Preussische Akademie der Wissenschaften (eds.), *Gottfried Wilhelm Leibniz: Politische Schriften*, in *G. W. Leibniz, Sämtliche Schriften und Briefe* (Darmstadt, 1931), Series IV, I, 552.

and most lasting interests was the language of China, the nature of which served, he thought, to shed new light on earlier theories of comparative linguistics. He was interested in the theory of the artificiality of Chinese, a doctrine expounded by Jacob Gohl, an eminent Dutch orientalist, who felt that the Chinese language had been "invented all at once in order to establish verbal intercourse between the large number of different nations."⁴ The implications of this theory and of the hypothesis of John Webb that Chinese was the primitive language⁵ induced Leibniz to investigate the practicability of Chinese as a universal language.

By a universal language he meant a means of communication through which philosophers from all parts of the world could transmit abstract ideas, precisely and accurately, despite cultural and linguistic differences. Chinese, however, failed to meet Leibniz's rigid requirements in the quest for a universal language, and in April, 1679, he wrote Duke John Frederick his objections:

If you know Chinese characters, I believe that you will find a little more harmony in them, but basically they are indubitably far removed from that analysis of thought which comprises the essence of my plan, as they are apparently content to give several connotations, as do Egyptian hieroglyphics, all of which are *entre les choses*.⁶

Despite Leibniz's investigation of Chinese, it was long before he realized the elementary fact that "the Chinese language and the characters are as two different languages, the one speaking to the ear and the other to the eye."⁷ In connection with his studies, he learned, in January, 1679, of Andreas Müller's optimistic endeavors to work out a *Key to Chinese*—and showed himself to be a bit skeptical of such a simple solution to the difficult Chinese language problem.⁸ Müller's reply to the questions Leibniz directed to him concerning the *Key* must have been unsatisfactory, although the

⁴ Alfred G. Langley (trans.), *New Essays Concerning Human Understanding* (New York, 1896), 287.

⁵ See John Webb, *The Antiquity of China Endeavoring a Probability That the Language of the Empire of China Is the Primitive Language* (London, 1669). See also Ch'en Shou-Yi, "John Webb: A Forgotten Page in the Early History of Sinology in Europe," *Chinese Social and Political Science Review*, XIX (1935), 295-330.

⁶ Preuss. Akad. der Wissen. (eds.), *op. cit.*, Series I, II, 167.

⁷ L. Dutens (ed.), *Gothefredi Guilielmi Leibnitii . . . opera omnia . . .* (Geneva, 1747), IV, 161.

⁸ See the author's "The Chinese Studies of Andreas Müller," *Journal of the American Oriental Society*, LX (1940), 568-69.

philosopher was thoroughly convinced from Müller's other works that the provost of Bernau knew his subject; at one time Leibniz even went so far as to send Müller a Chinese book to translate.⁹ When, in 1697, he learned that Christian Mentzel, physician to the Elector Frederick William of Brandenburg, was also planning a *Key to Chinese*, he was not long in writing for specific information.¹⁰ It appears, therefore, that although Leibniz preserved a certain skepticism in accepting these attempts to solve the Chinese language problem, he still entertained the hope that such a solution was possible.

While Leibniz was meditating upon the possibilities of the Chinese language, the French had meanwhile become more active in their efforts to gain a leading position in Far Eastern trade. In 1664, the French East India Company had been organized to compete with the Dutch and the English companies. Under Spanish and Portuguese influence, the Society of Jesus had already long been active in China. In 1677, Father Ferdinand Verbiest had been appointed superior of the Jesuit missions in that empire. Three years later, Verbiest sent Father Phillipe Couplet to Europe with a request for students of science and mathematics. The French Academy gave heed to the Jesuit request, inasmuch as it was desirous of establishing relations with China and India. These two factors, plus the knowledge that the merchantman often follows the Cross, encouraged Louvois, Colbert's successor, to ask the Jesuit superior in Paris for six learned men.¹¹ On March 3, 1685, the French Jesuit scholars left Brest in company with Louis' new envoy to Siam.

Leibniz's interest in the China mission did not become profound until the departure of these French missionaries. Their participation gave the enterprise a semblance of scientific background which it had heretofore lacked for him. The vision of these men of science carrying knowledge of mathematics, astronomy, and Chris-

⁹ See *ibid.*, 569.

¹⁰ Letter of October 15, 1698. Excerpt given in E. Bodemann (ed.), *Der Briefwechsel des Gottfried Wilhelm Leibniz in der königlichen öffentlichen Bibliothek zu Hannover* (Hannover, 1889), p. 183. Mentzel's unfinished *Key* is merely a compilation of grammatical data based on the works of other more able Sinologists. It is still in the Prussian State Library in manuscript form (see M. V. LaCroze, "De libris Sinensibus bibliothecae regiae Berolinensis," *Miscellanea Berolinensia*, I [1710], 85).

¹¹ The men appointed were Fontaney, Visdelou, Bouvet, Le Comte, Gerbillon, and Tachard. All were men of erudition.

tianity to the Chinese fired his imagination. In the Jesuit mission, he felt that he was witnessing the first slight interchange of culture between East and West—a process which he later elaborated upon in all his writings about China. Although Leibniz probably corresponded with Father Kircher as early as 1670,¹² it was not until the French Jesuits were established in China that the philosopher began his extensive correspondence with the missionaries.

In 1676, after four years' sojourn in Paris and London, Leibniz returned to Hanover to assume charge of the electoral library. After his establishment in this official position, his studies of China gradually took definite shape. There is, however, little mention of China in his correspondence until after he visited Rome in 1689. In April of that year he arrived at the Vatican, in the neighborhood of which he stayed for the next six months.¹³ Here he met the Jesuit Father Grimaldi, who was on the point of returning to China. The picture Grimaldi painted of the emperor K'anghsi as a devotee of mathematics and philosophy appealed to Leibniz as the portrait of his ideal of a benevolent monarch.

Especially interesting in this connection is Leibniz's preface to the *Novissima Sinica* (*Latest News of China*).¹⁴ This work was first published in 1697. Two years later a second edition was forthcoming to which was added a portrait of K'anghsi and a short essay by Father Joachim Bouvet on the emperor's life and reign.¹⁵ The body of the opusculum comprises excerpts from the correspondence of the Jesuit fathers, Lusitan, Verbiest, Grimaldi, Thom, and Gerbillon which Leibniz received during the last decade of the seventeenth century.

In introducing the reader to the missionary letters, Leibniz presents a digest of his ideas and hopes for cultural relations. He

¹² Jean Baruzi (*Leibniz et l'organisation religieuse de la terre* [Paris, 1907], 53) makes the statement that Leibniz knew every important Jesuit connected with the China mission before 1672. He notes a letter from Father Kircher to Leibniz dated June 23, 1670.

¹³ See Kuno Fischer, *Gottfried Wilhelm Leibniz* (Heidelberg, 1889), 200.

¹⁴ The preface alone may be found in Dutens (ed.), *op. cit.*, IV, 78-86.

¹⁵ Neither edition of this work gives the name of a publisher or place of publication. The *Catalogue of the British Museum* suggests, however, that the first edition may have been published in Hanover, and the second in Leipzig. The most recent and most nearly complete bibliography of Leibniz (E. Ravier, *Bibliographie des oeuvres de Leibniz* [Paris, 1937]) contains no indication as to publisher or place of publication. On Bouvet's work concerning K'anghsi see J. J. Heeren, "Father Joachim Bouvet's Picture of Emperor K'anghsi," *Asia Major*, VII (1932), 556-72.

not only pictures the transfer of ideas between Europe and Asia, but also visualizes the inclusion of Russia in a contemplated chain for cultural transmission. Providential foresight, he asserts, has placed Russia between the two great cultural orbits dominated by the emperor K'anghsi and Louis XIV of France, so that its vast intervening territory might be fertilized by the transference of civilization from one side of the world to the other. Already Tsar Peter had evinced considerable interest in Western culture and had succeeded in patterning certain Russian institutions on Western European models.

In comparing the civilizations of Europe and China, Leibniz attributes superiority to the former in the theoretical-philosophical sciences and to the latter in moral philosophy. From China he hoped—rather vainly it would seem—that Europe might learn something of political ethics, international honesty, and the maintenance of law and tradition by teaching men to recognize their obligations to society and the social order.

The emperor K'anghsi's respect for learning, his interest in European sciences, and his tolerance of Christianity made him the object of Leibniz's reverence. The philosopher characterized the Manchu ruler as "the monarch . . . who almost exceeds human heights of greatness, being a god-like mortal, ruling all by a nod of his head, who, however, is educated to virtue and wisdom . . . thereby earning the right to rule." Has there ever been a more lucid description of the enlightened despot, the ideal cherished by many Europeans in the eighteenth century?¹⁶ To Leibniz the monarch of China was a personification of the model ruler. In the philosopher's contemplated chain for cultural transmission the emperor of China was looked upon as a prime mover—an initiator of a doctrine of universal intellectual development. Little wonder that Leibniz further declared "that Chinese missionaries should

¹⁶ Leibniz's evaluation of the emperor K'anghsi is another bit of evidence supporting Professor Dutcher's thesis "that the eighteenth-century development of enlightened despotism did not owe its inspiration to the philosophical writers" of France, but was chiefly derived from "Brandenburg-Prussian experience under its four rulers from the Great Elector to Frederick the Great." The last allegedly remarked that he owed his principal intellectual debt to Leibniz and Thomasius. See the two stimulating essays by G. M. Dutcher, "The Enlightened Despotism," *Annual Report for 1920 of the American Historical Association*, 187-198, and "Further Considerations on the Origins and Nature of the Enlightened Despotism," *Persecution and Liberty. Essays in Honor of George Lincoln Burr* (New York, 1931), 375-403.

be sent to teach us the aim and practice of natural theology, as we send missionaries to instruct them in revealed theology." Through missionary enterprise a veritable bridge was to be erected over which ideas might pass between China, the "Middle Kingdom" of Asia, and Germany, the "Middle Kingdom" of Europe.¹⁷

The *Novissima Sinica* must also be considered an appeal to Protestants to emulate the missionary activities of the Jesuits.¹⁸ Leibniz hoped to save Reformed Protestantism, which had suffered such severe defeats at the hand of Louis XIV of France beginning with the Revocation of the Edict of Nantes (1685) and culminating in the Peace of Ryswick (1697). The ever-widening circle of Catholic influence appeared to be smothering the struggling Protestant movement. For the second time in his career, Leibniz championed the cause of German Protestantism against French onslaughts. In 1672, he had thought to divert the German ambitions of Louis XIV by proposing the Egyptian expedition; in 1697, he urged the Protestants to preserve themselves by following the proved Jesuit policy of counter-reformation through spreading the gospel to all parts of the world.

Closely bound to Leibniz's plan for Chinese-European cultural relations was the geographical position of the rapidly expanding

¹⁷ In his thoughts on "the security of the Empire" Leibniz emphasised that it was only the disunity of Germany which permitted France and Spain to control European and colonial affairs (O. Klopp, [ed.], *Die Werke von Leibniz* (Hannover, 1864-84), I, 246). This idea has been exploited recently by Georg Runze in his article "Leibniz Gedanke einer natürlichen Interessengemeinschaft zwischen China und Deutschland," *Deutsche Rundschau*, CCI (1924), 35. Runze writes that Leibniz foresaw that: ". . . between Germany, the geographical center and the cultural heart of Europe, and China, the 'Middle Kingdom' of eastern Asia, there would be formed in the future a closer natural union, and not merely a superficial exchange of ideas, of economic relations, of trade, of institutional forms (or even of religious life), but of far more importance, a mutual, living consciousness that the two great central, primitive peoples (*Urvölker*) might insure . . . their deeply rooted national, social, and traditional forces, so that as the two strongest national unities they would embody in unmixed fidelity (*Echtheit*), adequately and emblematically, the extreme poles of East and West, of Orient and Occident: not in the sense of striving for hegemony, such as goads French ambition, or a tendency to world conquest such as characterized old Rome or modern England . . ., but rather in the sense of that estimable, peaceful, considerate inner superiority created through custom and order, reason and sophistication, belief in the worth as well as the seriousness of life, reverence before the *Tao* and the *Li*, before natural law and 'inner moral law.' And as roots, there as here, are the feeling of family, respect for parents, piety towards ancestors, love of the homeland, and esteem for the national community."

¹⁸ F. R. Merkel, *op. cit.*, 37-42.

Russian empire. In 1689, China and Russia had signed the Treaty of Nerchinsk regulating border difficulties. This was the first compact China had ever entered into with a Western, or even a semi-Western, power. Meanwhile, Peter—to be known as the Great—had acceded to power and under his influence relations were established with Western Europe. In 1697, the year of the *Novissima Sinica*, the tsar visited Germany. On this occasion Leibniz tried unsuccessfully to communicate with him upon the possibilities of using Russia as a highway between East and West. He had hoped to explain to Peter the benefits which could accrue to Russia from such a move.¹⁹

In his correspondence Leibniz commented frequently on the importance of Russia as an agent in the maintenance and furthering of international relations with China. On April 5, 1698, he congratulated the English church and Gilbert Burnet, bishop of Salisbury,²⁰ on the appreciative attitude of Tsar Peter, whose interest in the Reformed church might facilitate the introduction of Protestantism into the neighboring Chinese empire.²¹ Through Nicolas Witsen, burgomeister of Amsterdam, Leibniz learned that a Greek Orthodox priest had gone to Peking, and with the permission of the emperor, had there built a Russian church. Witsen also reported that “several Muscovites served the Emperor of China as cavaliers, while others ran cabarets and sold *eau de vie*.”²² Meanwhile, Ysbrandt Ides, a Dutchman, who had been the tsar’s ambassador to China during the years 1692–96, published in 1699 an account of his embassy. In this same year, Leibniz wrote to Father Verjus that “Peter the Great has given the Catholic missionaries permis-

¹⁹ W. Guerrier, *Leibnitz in seinen Beziehungen zu Russland und Peter dem Grossen* (St. Petersburg, 1873), 22.

²⁰ See T. E. S. Clarke and H. C. Foxcroft, *A Life of Gilbert Burnet, Bishop of Salisbury* (Cambridge, 1907), 349.

²¹ Although Peter was interested in the Reformed church, nevertheless he was not vitally concerned in forwarding its missionary ambitions. While sojourning in Western Europe in 1698, the tsar learned from Venius, an official at Tobolsk, that the Greek Orthodox missionaries had built a church at Peking and that several Chinese had been converted. In June, 1700, Peter ordered the establishment of a permanent Russian mission at the Chinese capital. See Albert Parry, “Russian (Greek Orthodox) Missionaries in China, 1689–1917, Their Cultural, Political and Economic Role” (Unpublished Ph.D. dissertation, Dept. of History, University of Chicago, 1938), 13–14.

²² Witsen received his information of Russian activities through Francois LeFort, adviser to Tsar Peter (W. F. Guerrier, *op. cit.*, part II, 40).

sion to travel through his empire; the journey from Tobolsk to Peking now is much easier through improvement of the roads and the use of horses and wagons instead of camels.'²³

With such reports as these, Leibniz started as early as 1695 to plan a scientific expedition to Russia and China for "the propagation of light and wisdom." He proposed that the projected academy in Berlin should make such an expedition one of its chief aims. He also suggested that the Russian ruler establish a scientific society in St. Petersburg to unite East and West culturally, and incidentally to spread Christianity through the pagan Orient. For Leibniz, Prussia became the gateway to Russia, while Russia he envisioned as the door to China, India, and Persia.²⁴ It was not, however, until October, 1711, that Leibniz actually met Peter at Torgau and discussed with him certain plans for scientific observations and travels in Siberia and China. Although the tsar seemed favorably disposed towards the philosopher's project, definite steps were never taken. But as late as 1716, Leibniz wrote to Peter suggesting that the arithmetic machine which he had invented might "serve as a present to the emperor of China."²⁵

Although Leibniz received a modicum of news about China through Russia, most of his important communications came from the Jesuits in Peking. From 1692, the date on which the emperor K'anghsi issued his Edict of Toleration, until 1707, the Jesuits enjoyed a period of unrestricted enterprise and activity in China. The missionaries studied the topography and made maps of the "Middle Kingdom." Some surveyed the Great Wall and others reckoned the Imperial Calendar. Certain scholars interested themselves in Chinese tradition, religion, and works of art. Great attention was given to the Classics.

One of the oldest Classics is the *I Ching* (*Book of Changes*). A translation of it into Latin was not made until one by Father

²³ E. Bodemann (ed.), *Der Briefwechsel des Gottfried Wilhelm Leibniz* (Hanover, 1889), 359. The Jesuits had been trying for many years to obtain permission to cross Siberia, but they had been refused time after time. Since the Greek Orthodox missionaries protested against granting the request of their Jesuit competitors, it appears unlikely that Leibniz's information was accurate. At least, there are no available records by which to confirm his statement. See G. Cahen, *Histoire des relations de la Russie avec la Chine sous Pierre le Grand* (1689-1730) (Paris, 1912), 174-75.

²⁴ See A. Harnack, *Geschichte der königlichen preussischen Akademie der Wissenschaften zu Berlin* (Berlin, 1900), I, 81.

²⁵ W. F. Guerrier, *op. cit.*, p. 363.

Jean-Baptiste Regis appeared in the eighteenth century.²⁶ Leibniz learned of the book and its implications through his correspondence with Father Bouvet, an influential member of the Figurist group which attempted to prove by reference to the mystical symbols of the *I Ching* that there had existed in ancient China a highly developed code of laws.²⁷ In November, 1700, Bouvet had written Father le Gobien a detailed analysis of the *I Ching*,²⁸ which communication Le Gobien forwarded to Leibniz. Thereafter, Bouvet and Leibniz wrote directly to each other exchanging reflections on the Chinese Classic.

The famous trigrams of the *I Ching* which follow were of primary interest to both men:



These symbols were allegedly the invention, for purposes of divination, of Fu Hsi, traditional first emperor of China. Commentaries on the significance of each hexagram, formed by forging together two of the trigrams, were supposedly written by Wen Wang (1231-1135 B.C.). At least, this was the history of the book accepted by Bouvet and passed on to Leibniz. In the letter which Bouvet sent to Le Gobien he made the following observation:

Although some believe that the *I Ching*, the oldest Chinese and perhaps the world's oldest work, and the primary source from which this nation (an opinion ascribed to by all scholars) has derived its science and tradition, contains only an evil doctrine, full of superstition, and without fundamental or basic principles; I am not of their opinion and I am even convinced that they delude themselves and that they do injustice to the ancient Chinese who appear to have had long ago a philosophy as sound and as sane, and I dare to add, perhaps sounder and more logical than ours today.²⁹

The Jesuit scholar elaborates upon this opinion by ascribing to Fu Hsi an insight into the true nature of science. Bouvet visualized the trigrams "as universal symbols invented by some extraordinary genius of antiquity . . . in order to present the most abstract principles in all the sciences."³⁰ To the Chinese commenta-

²⁶ See James Legge's preface to the *Yi King* in *The Sacred Books of China*, Vol. V, *The Sacred Books of the East* (American edition; New York, 1899), Part II, 6.

²⁷ For further information on the Figurists see A. H. Rowbotham, *Missionary and Mandarin* (Berkeley, 1942), 122-23.

²⁸ See Dutens (ed.), *op. cit.*, IV, 145-46.

²⁹ *Ibid.*, 146-47.

³⁰ *Ibid.*, 147.

tors on the trigrams he attributed the prevailing misinformation concerning the *I Ching*.









More recent scholarship asserts that the trigrams were probably invented during the Chou period (ca. 1122–256 B.C.). Possibly they were made as pictorial substitutes for the cracks formed in tortoise shells when Chou diviners heated the shells over fire; the prognostications based on these cracks being complicated and difficult to remember they were put down in writing as soon as possible. According to its own appendices, the *I Ching* was constructed in order to picture in simple symbols those universal laws on which humans should model their actions.³¹

Not having the benefit of modern scholarship, Leibniz was forced to depend for his information upon Father Bouvet. In his communications the latter had noted the mathematical regularity with which the trigrams were written and combined to make hexagrams. After Leibniz had studied the trigrams and their peculiarities himself, he noted an astonishing relationship between the Chinese figures and his binary arithmetic. In 1679, the German philosopher had invented the system of binary numbers in which he used two instead of ten as the base of a scale of notation. The ordinary method of notation is founded on the dinary scale. In expressing dinary numbers the matter of relative position is of prime importance as can be illustrated by the simple arithmetical progression: $8976 = 8 \times 10^3 + 9 \times 10^2 + 7 \times 10 + 6$. In like manner, any other number can be substituted as the base of a scale of notation. If two is the base, as in the binary scale, $2 = 10$; $4 = 100$; $8 = 1000$. Thinking then in terms of the binary scale, Leibniz was able by substituting 0 for each broken line, and 1 for each straight line in a trigram, to transpose the trigrams into the dinary order 7, 6, 5, 4, 3, 2, 1, 0.³² The following table³³ pictures Leibniz's mathematical analysis of the trigrams:

³¹ Consult Feng Yu Lan, *A History of Chinese Philosophy. The Period of the Philosophers from the Beginnings to Circa 100 B. C.* (Peiping, 1937), pp. 379–82.

³² See A. Waley, "Leibniz and Fu Hsi," *Bulletin of the London School of Oriental Studies*, II (1921), 165–67. Also L. Couturat, *La logique de Leibniz* (Paris, 1901), 474–75.

³³ This has been modeled on a diagram explaining the binary interpretation of the trigrams which Leibniz sent to Des Bosses on August 12, 1709. See C. J. Gerhardt (ed.), *Die philosophischen Schriften von Gottfried Wilhelm Leibniz* (Berlin, 1875), II, 382–83.

Trigrams*	Binary scale	Dinary scale
	111	7
	110	6
	101	5
	100	4
	011	3
	010	2
	001	1
	000	0

* Broken line = 0; straight line = 1.

By his analysis of Fu Hsi's trigrams, Leibniz hoped to strengthen Father Bouvet's theory that the *I Ching* was a key to all the sciences. Although there is no evidence that Fu Hsi's trigrams were ever used as numbers, Leibniz's hypothesis is interesting in that it infers a method of enumeration by position existent in China previous to that used in India around the sixth century A.D.

This interpretation of the *I Ching* was first published in the *Mémoires de l'académie des sciences* for 1703.³⁴ In 1709, Leibniz again made a complete analysis for Bartholomaeus des Bosses, a Jesuit theologian who was greatly interested in mathematics. In his long letter on Chinese philosophy to Remond in 1716 Leibniz included another lengthy digest of his application of binary arithmetic to the *I Ching*.³⁵ Leibniz brings out emphatically in all these discussions his belief that the binary arithmetic was not an invention, but a "rediscovery" of Fu Hsi's principles. This "rediscovery," however, has had slight attention paid it by either translators or mathematicians.³⁶

Leibniz hoped that his astute analysis of the trigrams from the

³⁴ See Leibniz to Fontenelle in Foucher de Careil (ed.), *Lettres et opuscules inédites de Leibniz précédées d'une introduction* (Paris, 1854), 225.

³⁵ Dutens (ed.), *op. cit.*, IV, 207-10.

³⁶ A. Waley makes the unqualified statement that "no subsequent commentator, either Chinese or European, appears to have mentioned it (*op. cit.*, 166)." O. Francke (*op. cit.*, 162, n. 1) gives some evidence to the contrary. He notes that in 1753 a book by Johann Thomas Haupt was published under the title *Neue und vollständige Auslegung des von dem Stifter und ersten Kaiser des chinesischen Reiches Fohi hinterlassenen Buches, Ye-Kim genannt*. In this work Haupt gives a discussion of Leibniz's method and the elaborations made on it by F. A. Knittel and J. H. Hasenbalg (see review of Haupt's work in *Das Neueste aus der anmuthigen Gelehrsamkeit* [1753], 571-80).

I Ching would awaken in China a deep appreciation for Western science and, ultimately, for Christianity.³⁷ Since the emperor K'anghsi had issued the Edict of Toleration in 1692, the missionaries had made steady progress, despite the fact that the Rites Controversy had begun to assume serious proportions in 1666 with the death of Adam Schall. The controversy had largely to do with the true character of the part taken by Chinese Christians in the Confucian rites. The Jesuits in China asserted as a body that the rites were purely civil and political in nature, while the Dominicans in China and in Europe hurled charges of idolatry. The question was, however, not only one of rites; it involved also the interpretation of Chinese characters, such as *Li*, thus creating further difficulties. In 1702, the Pope decided in favor of the Dominicans and the following year sent a legate to China with his message. The emperor K'anghsi refused to tolerate interference by one whom he considered a foreign and a distinctly inferior prince. Many of the Jesuits, probably on adequate grounds, also hesitated to acknowledge the powers of the papal legate. But such an attitude naturally caused much criticism in Europe. In 1715, Pope Clement XI issued his famous bull *Ex illa die* by which all missionaries in China were ordered to swear strict obedience to the already issued decrees on Confucian rites.

Although the controversy went on after 1715, it is not the concern of this discussion, inasmuch as Leibniz died just one year later. While the philosopher lived, however, he staunchly defended the Jesuit position. In a letter to Louis Bourguet (1678–1742), a student of ancient languages, Leibniz wrote on April 11, 1710: "In the Chinese controversy which is raging at Rome today, I favor the Jesuits and have for a long time. . . ."³⁸ His attitude had been formed on this issue as far back as 1699 and is illustrated in a note to the Electress Sophie.³⁹ In this he explains the nature of the controversy and informs the electress of his earlier stand in favor of the Jesuits as outlined in the preface to the *Novissima Sinica*. By 1700, his interest in the controversy led him to write

³⁷ Leibniz himself voiced this hope in his letter to Remond in 1716 (see Dutens [ed.], IV, 207). Pelliot in a note in Cordier's *Bibliotheca Sinica* (3790) remarks that between 1708 and 1715 Bouvet tried to interest K'anghsi in his interpretation of the *I Ching*. It would seem reasonable to assume that Bouvet's interpretation was to some extent influenced by his correspondence with Leibniz on this subject.

³⁸ Gerhardt (ed.), *op. cit.*, III, 549.

³⁹ See O. Klopp (ed.), *op. cit.*, VIII, 144.

a treatise entitled *De cultu Confucii civili*.⁴⁰ In this work the title belies the content, inasmuch as Leibniz builds up the proposition that Confucianism is not a religious but a state cult, a concept which makes of Confucianism a persuasion similar in some respects to that of modern state Shintoism in Japan.

In many letters of the following years Leibniz elaborated upon his theme of Confucianism as a civil cult. His support of the Jesuit cause was so strong that Father Verjus wanted to sell the remainder of his life, if such a thing were possible, for Leibniz's conversion to Catholicism.⁴¹ By 1707, however, the Jesuit cause in China was out of the Church's hands, for persecutions by the Chinese had started. As far as Leibniz is concerned, his attitude in the controversy was probably to be expected.⁴² His ideas on China and Confucius had been formed by the Jesuits. His relations with them had always been agreeable. Their belief in a church universal with a civilizing-Christianizing mission as its basis had his sympathy. Moreover, the precision of Jesuit scholarship and the interest of the Jesuits in Chinese problems very likely led him to place more trust in their assertions than in the attacks of their enemies—many of whom knew little about China or the Chinese people.

In Leibniz's correspondence with Des Bosses during the years 1709-13⁴³ the reader at once notices the philosopher's great interest in, and deep understanding of, the issues at stake. He was especially interested in the mission of the papal legate, De Tournon, and believed that a much more mature man should have been sent to handle such a delicate situation.⁴⁴ His greatest concern, however, was the settlement of the dispute.⁴⁵ Unless an immediate settlement of the controversy was effected, he feared that contact between China and the West would once again be broken.

A part only of the controversy had been devoted to the question of rites. There was also the question of terminology, dealing with

⁴⁰ See F. R. Merkel, *op. cit.*, 99-102.

⁴¹ See Gerhardt (ed.), *op. cit.*, III, 303.

⁴² G. J. Jordan (*The Reunion of the Churches: A Study of G. W. Leibniz and His Great Attempt* [London, 1927], 36) makes the somewhat doubtful statement that Leibniz "took the side of the Jesuits in the China controversy because of their praise of his religious ideas."

⁴³ See Gerhardt (ed.), *op. cit.*, II, 372-508.

⁴⁴ Leibniz to La Croze (Dutens [ed.], *op. cit.*, V, 503-04).

⁴⁵ Leibniz to Des Bosses (Gerhardt [ed.], *op. cit.*, II, 445).

the meaning of the Chinese term *Li*. Leibniz entered into this philosophic discussion in 1701 with the appearance of Father Nicolas Longobardi's *Traité sur quelques points de la religion des Chinois*. In the 1747 edition of Leibniz's works the *Traité* is republished along with the philosopher's marginal notes on Longobardi's analysis of Chinese philosophy.⁴⁶

Longobardi depended for his knowledge of Confucian philosophy primarily on *The Philosophy of Human Nature* by Chü Hsi (1131-1200). This philosopher was of the Sung school of neo-Confucianism, known as *Li Hsüeh* or *School of the Norm*. Chü Hsi's chief contributions to Chinese philosophy were: clearer distinctions on moral issues, the coordination of the moral teachings of his predecessors, and—more than any of his predecessors—the gathering of data for a partly metaphysical and partly cosmological foundation for his moral philosophy.⁴⁷

In Chü Hsi's metaphysics there is one emphatic theme: "*T'ien* is *Li*" ("Heaven is Law"). Although *Li* is one, its functions are asserted to be diverse. One of the diverse functions of *Li* is the concept of *Ch'i*, or matter, which is coexistent and inseparable from *Li*, although *Ch'i* is subordinate to *Li* as is the child to the parent.⁴⁸ Chü Hsi's concept of *Li* has also a theistic import. Returning to his original thesis that "Heaven is Law," Chü Hsi advocates an idea far removed from the materialism of which he is often accused. In his philosophy *Li* is the eternal law of righteousness which affirms the spirituality and ethical perfection of Heaven (*T'ien*).⁴⁹

Of those who accused Chü Hsi, and the Chinese generally, of outright materialism, Fathers Longobardi and de Sainte-Marie were leaders. At the request⁵⁰ of M. de Remond, head of the Regent Duke of Orleans' councils, Leibniz stated his opinions on Chinese and *Li Hsüeh* philosophy in a long letter to Remond in 1716.⁵¹ This manuscript the German philosopher divides into four main sections, the first three of which deal with Chinese philosophy. In the first section Leibniz attacks the thesis of Longobardi and de

⁴⁶ Dutens (ed.), *op. cit.*, IV, 89-144.

⁴⁷ See Henri Bernard, "Chü-Hsi's Philosophy and its Interpretation by Leibniz," *T'ien Hsia Monthly*, V (1937), ii. See also W. E. Hocking, "Chü Hsi's Theory of Knowledge," *Harvard Journal of Asiatic Studies*, I (1936), 109-27.

⁴⁸ See J. P. Bruce, *Chü Hsi and His Masters* (London, 1923), 99-125.

⁴⁹ See *ibid.*, 294-300.

⁵⁰ Remond to Leibniz, April 1, 1715 (Gerhardt [ed.], *op. cit.*, III, 640-41).

⁵¹ Complete letter is in Dutens (ed.), *op. cit.*, IV, 169-210.

Sainte-Marie that Chinese traditions are materialistic. In their discussion of spirits the two priests contended that, since the Chinese assign bodies to their spirits, they therefore do not recognize spiritual beings. To this assertion Leibniz drew up the following answer :

At first thought one doubts if the Chinese do recognize, or have recognized, spiritual beings. But after some deliberation, I conclude they do, although they perhaps have never recognized these beings as separate from, and completely beyond, matter. There is nothing wicked in regard to created spirits [*esprits créés*], because I am myself inclined to believe that spirits have bodies, which has also been the opinion of several of the Church Fathers. I further believe that the rational soul is never entirely divested of matter. And in regard to God, the tendency [*sentiment*] of certain Chinese has also been to give him a body, thus considering God as the soul of the world, and combining God with matter, as the ancient philosophers of Greece and Asia have done. In making known, however, that the ancient writers of China attributed to *Li*, or the first principle, the very existence of *Ch'i*, or matter, there is no need for criticism, as explanation suffices. It is easier to persuade disciples that God is *Intelligentia Supramundana*, and superior to matter. Therefore, in order to judge whether the Chinese recognize spiritual beings, one ought to consider above all, their *Li*, or law, which is the first cause [*premier auteur*] and the basis of all else, and corresponds, therefore, I believe, to our divinity. Now it is not possible to comprehend that *Li* is a purely passive, brutal, universally indifferent and lawless concept as is matter. Law, for example, comes not from heaven, but from those who make it. Their [the Chinese] spirits, too, which they ascribe to the elements, the rivers, and the mountains . . . are endowed with the powers of action and knowledge, although they attribute to them aerial and dexterous bodies, as the ancient philosophers and Fathers gave to the spirits and angels. That is why the Chinese are similar to those Christians who believed that certain angels govern the elements and the other great phenomena of nature; an apparent error, but one which would not destroy Christianity. In the period of the Scholastics they were not condemned who believed with Aristotle that certain intelligences govern the celestial spheres. And those among the Chinese who believe that their ancestors and great men are among the spirits approach closely the words of Our Lord,⁵² which imply that the Blessed must be as the Angels of God.

From this partly logical and partly theological refutation of Longobardi's position, Leibniz proceeds to a more thorough examination of Chü Hsi's type of Confucianism. From Chü Hsi's

⁵² "For in the Resurrection they [the Blessed] are neither buried, nor are given in marriage, but are as the angels of God in Heaven (Matt. 22: 30)."

assertion that the spirits are not ether, but the force of ether, and that the word *Li* is used interchangeably with "spirits," Leibniz assumes that *Li* means at times the supreme spirit, and at other times, spirits in general. In this regard he sees the concept of *Li* "not as the prime spiritual being, but spiritual being in general, the entelechy, i.e., that which is endowed with activity and perception. . . . He [Chü Hsi] seems to indicate that the particular *Li* is an emanation from the great *Li*." In his discussion of *Li* as an entelechy, Leibniz will not concede that it is the first form, "the soul of the world of which individual souls are only miniatures." He believes, on the other hand, that it is possible to maintain that everything has its ego, and that "there are spirits different from the *Li*, although they emanate from it."

Leibniz supports his attack on Longobardi by asserting that the latter formed his opinions of Chinese philosophy purely from the point of view of the contemporary Chinese schools. He quotes Confucius at length to show that the ancient sage did not advocate materialism, but urged his disciples to honor and sacrifice to the spirits. Father de Sainte-Marie objected to the Confucian idea of spirits on the principle that Confucius argues "that spirits really unite and embody themselves with objects, from which they are not able to divorce themselves, so that they [the bodies] are not totally destroyed. . . ." Leibniz refused to concede this point as a Confucian precept. He argued that this was a modern misinterpretation of certain passages from the *Shu King* or *Book of History* in which various spirits are ascribed to natural phenomena, such as rivers, mountains, and other things in the lower world. That the ancients worshiped these material objects to which they assigned spirits, Leibniz would not agree. If one considers valid the Confucian statement quoted by Father de Sainte-Marie, one must understand, according to Leibniz, that the Chinese "worshiped the great God in the virtues of particular things, under the name of spirits of these things, in order to appeal to the imagination of the people."

Returning again to his assertion that individual spirits are not simply miniatures of the *Li*, Leibniz points out that spirits are diffused everywhere and that they are placed in contact with objects, from which they learn by means of their individual powers of perception. He goes on to show, too, how Chü Hsi, after establishing spirits as the force of ether, maintains that there is a connection

between the spirit to which one sacrifices, and the one sacrificing. According to this doctrine, it is proper for the king to sacrifice to the Lord of Heaven, for princes and dukes to sacrifice to the protecting spirits of the five species of life, for scholars to sacrifice to Confucius, and for each individual to sacrifice to his ancestors. Leibniz sees nothing which "prevents us from finding in this ritual a spiritual God, the creator of matter itself, showing his wisdom and power in base objects, and served by intelligent spirits similar to our angels and souls."

Directly in line with this train of thought, Leibniz continues by explaining the ideas of the Chinese on the immortality of the soul. Again he condemns the later interpreters of Confucianism for not understanding correctly the precepts of the sage. The philosopher visualizes the supreme being (*Li*) as a wise king who must necessarily regulate his empire, whether celestial or earthly, by meting out punishment for evil, and rewards for good. He admits that the Chinese scholars speak neither of hell, nor of purgatory, but "it seems to some of them that lost souls which prowl here and there are in a type of purgatory." As a further suggestion, Leibniz intimates that in the Chinese scheme of immortality punishable souls "may become spirits destined to low offices, to guard gates, food, and furniture until they have expiated their crimes." To the cult of the ancestor he ascribes "the aim of cherishing virtue and compensation in heaven in order to prevail upon men to do acts which render them deserving of the recognition of posterity."

In his analysis of Chinese philosophy Leibniz develops a system agreeable to his own precepts and to those of the Christian tradition. The concept of *Li* as an entelechy is a reminder of that definition of the Leibnizian monad which asserts "that all simple substances or created monads may be called entelechies." His refusal to acknowledge individual objects as miniatures of the *Li* and his insistence upon the ego of every substance are reminders that "each monad must be different from every other, for there are never in nature two beings which are exactly alike." In addition, the identification of *Li* with the Christian divinity serves as a stepping-stone to the concept of *Li* as "the ultimate reason for things." Despite these obvious comparisons, it is remarkable that Leibniz's interpretation of Chü Hsi's philosophy is in its essentials so similar to that accepted by scholars today. The attempt, however, to work Chinese philosophy into the Christian pattern forms the basic difference.

China also presented Leibniz with many historical facts to uphold his thesis of world unity. At this point in his career, he had probably studied Father Philippe Couplet's *Tabula chronologica monarchiae Sinicae* (1686), and perhaps had seen Mentzel's *Kurtze chinesische Chronologie* (1696), both of which were based upon traditional Chinese accounts of early history which purported to trace a dynasty as far back as 2952 B.C. In 1699, he wrote to Nicaise (1623-1701), canon at Dijon and an antiquarian, that if Chinese chronology were to be accepted, the date for the beginning of the world would have to be pushed back.⁵³ He urged Bouvet and Grimaldi to write upon, and to make critical editions of, Chinese sources.⁵⁴ Except for Jewish history, he considered Chinese history as the ultimate in both exactitude and antiquity.⁵⁵ He insisted that in order to understand man's development it was not only necessary to study the history of Greece and Rome, but that a comprehensive survey of Chinese and Arabian antiquities should be made. He felt, as do so many scholars today, that in Chinese history, probably more than in any other history, it is extremely necessary to understand the historical traditions of the country before studying its arts and sciences.

The influence of Leibniz upon his contemporaries and upon his successors was just as important in the field of Chinese studies as it was in general philosophy and mathematics. Of special significance was the stimulus which his thought gave to men of religion who were interested in opening China as a new field for Protestant missionaries. The message of the *Novissima Sinica* influenced to an important degree the activities of August Hermann Francke, the leader of Pietism at the University of Halle. The theologian, however, showed no great interest in Leibniz's plans for cultural interchanges; Francke was primarily desirous of establishing a chain of evangelical missions from West to East by way of an overland route through Russia.⁵⁶ This same idea was embellished

⁵³ Leibniz felt that Chinese history must go back almost to the Deluge. Letter to Nicaise in Gerhardt (ed.), *op. cit.*, III, 590.

⁵⁴ See L. Davillé, *Leibniz historien* (Paris, 1909), 343, n. 9, quoting unpublished letter of Leibniz to van der Hardt (ca. November 30, 1697).

⁵⁵ See Leibniz to Landgrave Ernest (December 10/20, 1687) in Ch. von Rommel, *Leibniz und Landgraf Ernst von Hessen-Rheinfels* (Frankfurt am Main, 1847), II, 113-14. See also Davillé, *op. cit.*, 425-26.

⁵⁶ See correspondence between Leibniz and Francke included as an appendix in Merkel, *op. cit.*, 214-224. Consult also Gustav Kramer, *August Hermann Francke: Ein Lebensbild* (Halle, 1880), I, 258-59.

by Konrad Mel, another Protestant theologian, who wrote at least two different books in which the idea of a Protestant mission to China is vividly set forth.⁵⁷ In fact, Mel made very definite proposals for an organized movement to include a special training program for missionaries to eastern Asia.

Those German scholars who followed the Leibnizian philosophy most closely were also moved in their thinking by the great philosopher's interest in Chinese thought and religion. Most erudite Europeans of the Enlightenment looked upon Confucianism as an outstanding example of a natural, tolerant religion, independent of revealed Christianity. Generally speaking, the *philosophes* emphasized the materialistic and rationalistic aspects of Confucianism and Chinese philosophy in general. Leibniz was the only major philosopher of the period to hold that the Chinese possessed a spiritualistic doctrine compatible in some of its aspects with Christianity. In certain ways Christian Wolff carried on Leibniz's philosophical system, but with respect to Confucianism, Wolff, like the *philosophes*, emphasized the rationalistic side of Chinese philosophical and religious traditions.⁵⁸ Contemporaneous with Wolff, Georg Eberhard Bilfinger, a professor at Tübingen, studied and wrote about Confucianism, but he arrived at different conclusions. Like Leibniz, Bilfinger believed that there are no stipulations in Confucianism which make it impossible for the Chinese to become good Christians; unlike Leibniz, Bilfinger attempts to show in his thought "in what ways Confucian philosophy lacks the perfection of Christianity."⁵⁹ Although Leibniz's influence is perfectly plain in the thought of Wolff, Bilfinger, and others, there was no single individual who comprehended all aspects of his Christianizing-civilizing idea.

Leibniz studied Chinese life and institutions, not for themselves alone, but in an effort to corroborate with facts his theory of universal culture. Chinese political and social administration he believed to be far superior to the rule of favorites and the balance-of-

⁵⁷ These two studies by Mel are *Legatio orientalis . . .* (1700) and *Die Schauburg der evangelischen Gesandtschaft* (1701) (sometimes referred to by its Latin title *Pharus missionis evangelicae*).

⁵⁸ Consult the author's unpublished doctoral dissertation, "Contributions of China to German Civilization, 1648-1740," (Dept. of History, University of Chicago, 1941), 125-31.

⁵⁹ For Bilfinger's ideas see his *Specimen doctrinae veterum Sinarum moralis et politicae* (1724).

power politics common to the monarchies of Europe. To Leibniz, the emperor K'anghsi was not only a paternalistic ruler: he was definitely an enlightened despot ruling by mandate of the people. It was in this connection especially that Leibniz felt Europe might learn something of moral philosophy from China.

According to Leibniz, China should profit from the revealed theology of Europe as exemplified in the Christian tradition. Chinese philosophy he considered not a foreign system of thought, but simply an alien counterpart of his own monadology and the Christian religion. In his analysis of the *I Ching's* trigrams, he was not only looking for another mathematical device; he hoped also to reveal that the ancient Chinese were a logical and highly intelligent people. For a time, at least, he considered the Chinese language as a possibility in his search for a universal philosophic language. Moreover, in his consideration of historical subjects Leibniz recognized the necessity of studying Chinese history if the development of mankind is to be adequately coördinated and understood.

In his great scheme of universal civilization the philosopher pictured China and Europe, geographical opposites, as intellectual allies. Ideas and philosophies, as well as mechanical contrivances, were to serve as connecting links in the chain which Leibniz visualized and which men had hitherto—and have even yet—failed to forge. His was not a mystical longing for union with the “enchanted” Orient; his was a carefully outlined plan to bring together in intellectual harmony the East and West which Kipling later contended would never meet.

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