

**G. W. LEIBNIZ'S PHILOSOPHY AND  
PRACTICAL PROJECTS**

**Licentiate thesis**

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## ABBREVIATIONS

A	Academy-edition
AG	Ariew & Garber, Leibniz: Philosophical Essays
C	Couturat: Opuscles et fragments
D	Deutsche Schriften
Du	Dutens : Opera Omnia
FC	Foucher de Careil : Oeuvres
G	Gerhardt: Die philosophische Schriften
H	Huggard: Leibniz: Theodicy
K	Klopp: die Werke von Leibniz
L	Loemker : Philosophical Papers and Letters, 2nd ed.
LC	Leibniz-Clarke Correspondence
P	Parkinson : Leibniz: Logical Papers
R	Riley : Leibniz : Political Writings
Re	Rescher : Leibniz's Monadology. An Edition for Students.
RB	Remnant & Bennett : New Essays

## PART I : G. W. LEIBNIZ AND HIS PHILOSOPHY

### 1. THE LIFE AND WORKS OF LEIBNIZ

#### 1.1. Leibniz's character

According to Benson Mates, Leibniz was not a very dignified man and his presence was not very convincing. He was found provincial in Paris.<sup>1</sup> The Duke of Orleans, however, describes Leibniz as an elegant courtier ("It is unusual for intellectuals to dress elegantly, not to smell bad and to understand jokes").<sup>2</sup>

Leibniz considered himself as a person "who likes sweets, sleeps well, likes to work at evenings or nights, likes perfumes, is short-sighted, prefers quiet life, reads a lot, has difficulties pronouncing the letters g and k, does not like conversation or games or other physical amusements."<sup>3</sup>

Despite his habits, he was planning to get married at the age of fifty in 1696, but when the lady proposed asked more time for consideration, his enthusiasm settled. It is said, that Leibniz followed the old maxim which states that marriage is such an important commitment that a wise man should think about it his whole life through.<sup>4</sup>

#### 1. 2. The Character of Leibniz's Philosophy and his Philosophical Writings

The usual - and trivial - image of Leibniz and his philosophy follows the imago expressed by Voltaire in "*Candide*", where he mocks Leibniz's philosophy as follows :

"Well, my dear Pangloss" [a leibnizian], said Candide to him, "when you were hanged, dissected, whipped, and tugging at the oar, did you continue to think that every thing in this world happens for the best?"

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<sup>1</sup>Mates, *The Philosophy of Leibniz*, p. 32.

<sup>2</sup>MacDonald Ross, *Leibniz*, p. 62.

<sup>3</sup>Mates, *The Philosophy of Leibniz*, p. 32.

<sup>4</sup>Ibid.

"I have always abided by my first opinion", answered Pangloss; "for, after all, I am a philosopher; and it would not become me to retract my sentiments; especially, as Leibniz could not be in the wrong; and that pre-established harmony is the finest thing in the world, as well as the plenum and the materia subtilis."<sup>1</sup>

Candide was not persuaded, however.

"Candide, stunned, despaired, stupefied, bleeding, trembling, said to himself :

- "If this is the best of all possible worlds, what are the others like?"

This image of Leibniz's philosophy was very persistent and lures in the background in 1900, when Bertrand Russell formulated his famous (and dated) view on Leibniz. According to Russell, "there are two systems of philosophy which may be regarded as representing Leibniz : one, which he proclaimed, was optimistic, orthodox, fantastic, and shallow; the other, which has been slowly unearthed from his manuscripts by fairly recent editors, was profound, coherent, largely Spinozistic, and amazingly logical."<sup>2</sup>

The popular image of Leibniz, to which Russell hints above, is based on his works published in his lifetime and shortly afterwards his death. The only monograph Leibniz ever published is *Essais de théodicée sur la bonté de Dieu, la liberté de l'homme et l'origine du mal* (1705) henceforth called *Theodicy*. This large work is a reply to Pierre Bayle, who criticized Leibniz's system in his *Dictionnaire. Nouveaux essais sur l'endement humain* (written in 1704, published in 1765) is a commentary on John Locke's *An Essay Concerning Human Understanding*. This work is henceforth called *New Essays*.

Leibniz's metaphysics is most clearly expressed in short treatises *Discourse de la métaphysique* (*Discourse in Metaphysics*) (1685-86, published in 1846), which, for the first time, binds Leibniz's most important philosophical ideas together into a coherent

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<sup>1</sup>Voltaire, *Candide and Other Tales*, p. 201.

<sup>2</sup>Russell, *A History of Western Philosophy*, p. 563.

system; *La Monadologie (The Monadology)* (1714, published in 1720) and *Principles de la nature et de la grâce, fondes en raison (Principles of the Kingdoms of Nature and Grace, Based on Reason)* (1714, published in 1718).

Leibniz never wrote a systematic treatise of his philosophy. According to Russell, this is because there was no time in the busy world of politics, courts and ceremonies. This explanation is hardly a valid one, keeping in mind that *Theodicy* and *New Essays* are very large works and that Leibniz conducted a correspondence in a massive scale. The next citation may hint at the direction that Leibniz never even wanted to write a magnum opus

"An intellectual will have some opinions which he thinks great and fine. Thereupon he wants to turn himself to the head of a sect...He will make himself a learned magicians book, to which his disciplines will so accustom themselves as to be unable to reason without it...Good understanding and communication destroys this willfulness. Then one recognizes that he should not limit himself to [the doctrines of] his master, and that a single man counts for little compared with the union of several."<sup>1</sup>

Leibniz seems here to hint at scholarly co-operation, but it is also possible that Leibniz did not want to present his thought in a unified and popular form until little before his death with the result of *Monadology* and *Principles of the Kingdoms of Nature and Grace*.

For my part, I feel that the *Monadology* is, in a way, the Magnum opus (or even an encyclopedia) in its basic elements. The footnotes in *Monadology* to larger explications in *Theodicy* form a hypertext which is a substantial exposition of his work. The

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<sup>1</sup>"Un sçavant aura quelques veues qu'il croira grandes et belles. La dessus il se veut eriger en chef de secte. ...il se fait un grimoire étudié, auquel ses disir s'a clustument jusqu'à n'estre plus capables de raisonner au dèla...la bonne intelligence et la communication détruit ces entètemens. On y reconnoist aisement qu'on ne se doit jamais borner à son maistre, et qu'un seul homme est peu de chose au prix de l'union de plusieurs."

(*Memoir for Enlightened Persons of Good Intentions*) K X, p. 19; Brown, S., *Leibniz*, p. 6.

*Monadology* and the *Theodicy* are to be read side by side.

All in all, Leibniz's literary output is a tremendous one. He had lots of unpublished manuscripts and his correspondence is massive (more than 15 000 letters and 1050 correspondents).<sup>1</sup> Of all the correspondence the letters between Leibniz and Arnauld, Bayle, Bernoulli, de Volder, des Bosses and Clarke are most important.<sup>2</sup>

These letters became known only in the end of the 18th century and in the beginning of the 20th century. Leibniz was also the author of numerous pamphlets and articles about political matters, which were often written pseudonymously. The project of editing Leibniz's works is still under way. They will consist of 60 volumes with more than 800 pages each.<sup>3</sup>

A large part of Leibniz's shorter writings appeared in various scientific periodicals. It is typical that he published different material in different periodicals - at this time the different schools of Cartesians and baconians etc. were centered around different periodicals and in order to address the right audience one had to write to the appropriate periodical.

In Latin he wrote to *Acta eruditorum*, which was directed to learned men and scholastics, in French in *Journal des savants*, which was read by the intellectuals in court<sup>4</sup> and of different scientific subjects in Dutch periodicals *Emigré*, *Nouvelles de la république des lettres*, *Histoire des ouvrages des savants* and *Bibliothèque universelle*, which were directed to cartesians and other adherents of modern philosophy.<sup>5</sup>

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<sup>1</sup>Mates, *The Philosophy of Leibniz*, p. 34.

<sup>2</sup>Broad, *Leibniz, an Introduction*, p. 4-5.

<sup>3</sup>Mates, *The Philosophy of Leibniz*, p. 35.

<sup>4</sup>*Journal des savants* became a weekly popular French institution in the hands of its second editor, Jean Gallois. It was regarded as more important than the *Philosophical Transactions*, published by the Royal Society.

<sup>5</sup>L, p. 11.

### 1. 3. A short biography of Leibniz

Gottfried Wilhelm Leibniz was born at 6.45 PM on Sunday 1 July (NS) 1646 in the Protestant city of Leipzig, which had been a prominent seat of German learning and science since the Renaissance. His father, Friedrich, was a Professor of Moral Philosophy and Vice Chairman of the faculty of philosophy in the University of Leipzig, besides being in practice as a notary. Leibniz devoted himself to books in an early age and was soon familiar with Suarez, the Church fathers and Aristotle's logic.

In 1661 Leibniz entered the University of Leipzig, where he studied philosophy, mathematics and law. The most significant teachers were philosopher Jacob Thomasius who founded the scientific study of philosophy in Germany and mathematician Erhard Weigel, who taught in the University of Jena where Leibniz also studied in the summer semester of 1663.<sup>1</sup> He was refused a dissertation in Leipzig (possibly because of his age or because of the malice of the Dean's wife) and he matriculated in the faculty of law in the University of Altdorf, situated in Nürnberg.

Leibniz refused an offer of professorship in the University of Altdorf and planned to set out to travel the first stop being Holland. In Mainz, however, he met Elector Johann Philip von Schönborn<sup>2</sup>, who appointed him to his court as a judge in the High Court of Appeal and as an assistant to the Court Assessor Hermann Andreas Lasser, who was improving the Roman Civil Code for the needs of the state.<sup>3</sup> This nomination did not take place without some stir - a young Protestant of 24 years old was nominated to a high post in all-Catholic

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<sup>1</sup>Leibniz was influenced especially of the way Weigel tried to demonstrate propositions with mathematical method instead of boasting with words as the scholastics did. Aiton, *Leibniz, a Biography*, p. 15-16. Through Weigel he also heard of Pythagorean, Neoplatonic and Keplerian doctrines. Wilson, *Leibniz's Metaphysics*, p. 12.

<sup>2</sup>Johann Philipp von Schönborn was the first representative of a great family, which held the archbishops- and bishopseats in Mainz, Trier, Würzburg, Bamberg, Speyer and Worms. The Schönborn family was active in politics of the empire and an important patron of arts. *Propyläen Geschichte Deutschlands*, p. 90.

<sup>3</sup>Aiton, *Leibniz, A Biography*, p. 23-25.

According to MacDonald Ross, an important influence in this was Leibniz's alleged alchemistic ability. MacDonald Ross, *Leibniz*, p. 169. I find a more probable answer in Boineburg's influence, who had a little earlier reconciled with the Elector.

Mainz.<sup>1</sup> Leibniz settled in Frankfurt am Main.

Before Mainz Leibniz had already found a patron and friend in the distinguished statesman Baron Johann Christian von Boineburg, who had acted as a minister to Schönborn, until a french intrigue led to his dismissal in 1664.<sup>2</sup> Among other duties Leibniz acted as a secretary, assistant, librarian and adviser for Boineburg. He also had a chance to occupy himself with politics : he wrote a pamphlet concerning the Polish succession to the throne among other things. The year of 1670 saw Boineburg's and Leibniz's most ambitious undertaking, the Egyptian plan (*Consilium Aegyptiacum*), in which the King of France is persuaded to divert his aggression from Europe to east and against the heretics.

Leibniz was sent secretly to promote the plan to the French court in early 1672. He was also obliged to look after Boineburg's son's education and upbringing in Paris. The Egyptian plan was not very popular in French court - one main reason was that the political situation had already changed when England declared war against Holland and France joined in with the war.

The time in Paris was very useful, however, to Leibniz. He became acquainted with many great figures of science at the time, among others the Jansenist theologian Antoine Arnauld, the theologian and philosopher Nicholas Malebranche, the mathematician Christian Huygens and the physicist Edme Mariotte. In 1673 Leibniz visited London, where he promoted his ideas about calculus and calculating machine to Oldenburg, the secretary of the Royal Society and to Robert Boyle, the famous chemist. Leibniz was also elected to a member of the Royal Society in 19. 4. 1673.<sup>3</sup>

Leibniz's calculating machine was an improvement to Pascal's machine, since it could perform four basic arithmetical operations (addition, subtraction, multiplication and division) whereas Pascal's machine was able only to perform addition and subtraction. Leibniz was never able to craft his machine absolutely secure. He had also other technical

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<sup>1</sup>Guhrauer, *Gottfried Wilhelm von Leibniz*, p. 59.

<sup>2</sup>Aiton, *Leibniz, a Biography*, p. 23.

<sup>3</sup>MacDonald Ross, *Leibniz*, p. 7.



projects during his time in Paris, such as a device, which could give a definition of a ship's geographical position without a compass, a plan of an underwater vessel and a kind of a tank propelled by gunpowder. Leibniz considered also the possibilities of space flights but rejected the plan due to thinness of air.<sup>1</sup>

Then both Schönborn and Boineburg died within a short period of time. Leibniz was bound to find a new patron elsewhere.<sup>2</sup> After trying in vain to obtain a nomination to French Academy he accepted an offer, which secured him a position in the court of Duke Johann Friedrich of Hanover. The court of Johann Friedrich was the cultural center of North-Germany principalities at the time.<sup>3</sup> Leibniz had already entered into correspondence with the Duke about theological matters and received previous offers from him in 1673.<sup>4</sup> The situation was different then - now Leibniz was ready, though reluctant, to enter to the service of the Duke.

Leibniz stayed in Paris for another three years concentrating in the study of mathematics with the aid of Christian Huygens. His intensive work led to the idea of the infinitesimal calculus (integral and differential mathematics), which was discovered independently of Isaac Newton, who also stumbled into this novel arithmetics which was to mark a turning point in mathematics.

Leibniz's appointment to Hanover took place in January 1676.<sup>5</sup> He traveled there via Holland where he met Baruch Spinoza, among others. In Hanover Leibniz was first assigned to take care of the Duke's library and in 1677 he was nominated to a Privy Councilor especially in legal matters. The Duke was sympathetic towards Leibniz's many diverse plans and let him conduct a large correspondence with some of the most distinguished learned men of his time. The court of Hanover was the cultural centre of

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<sup>1</sup>MacDonald Ross, *Leibniz*, p. 13; Walker, *Leibniz and Language* (In : *Gottfried Wilhelm Leibniz : Critical Assessments III*, ed. by R. S. Woolhouse), p. 446.

<sup>2</sup>Mario Biagioli demonstrates in his extraordinary study (*Galileo Courtier : The Practise of Absolutism*) that the discontinuities and disruptions of careers of European scholars such as Galileo, Kepler, Brahe and Leibniz were largely dependant on their relations with their Patrons.

<sup>4</sup>Rosendahl, *Geschichte Niedersachsens*, p. 387.

<sup>4</sup> Rosendahl, *Geschichte Niedersachsens*, p. 388.

<sup>5</sup>Aiton, *Leibniz, a Biography*, p. 70.

North-Germany at the time.<sup>1</sup>

Among other duties Leibniz was busy with chemistry and technical applications. He got assigned to improve the output of the mines of Harz by developing the power transmission and pump technique. The project turned out to be a lengthy one. After three years the Duke refused to finance the project any longer and Leibniz admitted his failure.

In 1679 the Duke died suddenly and was followed by his brother Ernst August, who was mainly interested about politics and did not have a very lively interest to scientific or literary matters. He was interested in the reunion of the churches, for example, but only on a political level, while his primary concern was the enhancement of the power and lustre of his House. Sophie, his wife, became Leibniz's friend and supporter and through her Leibniz was able to continue his scientific activities. Sophie's daughter Sophie Charlotte was also a dear friend and pupil of Leibniz's. Ernst August's main political goal was to strengthen Germany against the thread posed by French imperialism. At this time Leibniz wrote his famous political satire about Louis XIV called "*Mars Christianissimus*" or "*Most Christian War-God*" and the first systematic presentation of his philosophy, *Discourse on Metaphysics*, which he sent to Antoine Arnauld.

After the Harz-project Leibniz was assigned to write the history of the Guelfs (the ruling dynasty of Hanover) in 1685.<sup>2</sup> The project turned out to grow to such vast measurements that to complete the project it would require a whole academy instead of one man. The work never finished and got as far as the years 768-1005 by Leibniz's death.<sup>3</sup> Some good came out of the project : Leibniz did make progress in the field of criticism of sources and is now recognized as a pioneer in historical study. The goal of the work was to promote the Guelfs' aspirations to power - the rise to electorship and the ascendance to the English throne were realized during Leibniz's lifetime, although Leibniz's historical work did not have a great part in these developments.

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<sup>1</sup>Rosendahl, *Geschichte Niedersachsens*, p. 387.

<sup>2</sup>Aiton, *Leibniz, a Biography*, p. 137.

<sup>3</sup>Two collections of sources, "*Scriptores rerum Brunsvicensium*" (1707) and "*Annales imperii occidentis Brunsvicensis*" (1711) appeared. Rosendahl, *Geschichte Niedersachsens*, p. 409.

In order to get material for the work Leibniz traveled extensively in Southern Germany, Austria and Italy in 1687-90. He also made contacts with some of the leading theologians and Jesuits and discussed about the possibility of a church reunion. He was very interested of the methods used by Jesuits in China and discussed frequently with the famous missionaries Tolomei and Grimaldi.<sup>1</sup> Leibniz tried to meet Christina, the former queen of Sweden, but she died shortly after Leibniz's arrival to Rome. In Austria he made contacts in the court and managed to make an influence to Emperor Leopold I, but Leibniz's wishes to obtain a position in the imperial court were not realized.<sup>2</sup>

After the journey Leibniz accepted a post as a librarian in the service of Duke Anton Brunswick-Wolfenbüttel's library near Hanover in addition to his other duties, mainly because his work with the history of the Guelfs required a lot of his time in the library.<sup>3</sup>

Ernst August died in 1698. The new Duke, Georg Ludwig, was even less interested in Leibniz's scientific accomplishments and plans. He saw in Leibniz a handy tool when he needed an odd memoir crafted for his dynastic aspirations.<sup>4</sup> Georg Ludwig was annoyed by Leibniz's constant traveling and other occupations.<sup>5</sup> The work with the history of the dynasty did not seem to progress at all. At this time Leibniz was also writing his commentary of John Locke's *An Essay Concerning Human Understanding*, which was eventually issued in 1765 as *New Essays Concerning Human Understanding*.

When Sophie Charlotte married the Elector of Brandenburg, Frederick III, from 1701 the King of Prussia as Frederick I, Leibniz's travels between Berlin and Hanover increased. As the War of the Spanish Succession broke out in 1701, Hanover and Prussia had to face each other in opposite sides, which naturally made Leibniz's position even more

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<sup>1</sup>Vennebusch, *Gottfried Wilhelm Leibniz*, p. 9.

<sup>2</sup>Leibniz sought a position of an imperial historian or as a manager of an "universal" library. MacDonald Ross, *Leibniz*, p. 18.

<sup>3</sup>Mates, *The Philosophy of Leibniz*, p. 27.

<sup>4</sup>Haase, *Leibniz als Politiker und Diplomat* (In: *Leibniz: Sein Leben - sein Wirken - Seine Welt*, herausgegeben von Wilhem Totok und Carl Haase), p. 209. These aspirations were also realized: in 1692 Georg became an Elector and in 1714 the King of England as George I.

<sup>5</sup>In 1712 Leibniz was paid by five different courts: Hanover, Brunswick-Wolfenbüttel, Berlin, Vienna and St. Petersburg.

MacDonald Ross, *Leibniz*, p. 24.

troublesome.

In Berlin Leibniz was able to discuss philosophical questions in quite another extent than in the small provincial court circle of Hanover. One main reason for his sojourn in Berlin was also Sophie Charlotte, who supported Leibniz's plans in particular in the question of the church reunion and called upon Leibniz to visit her much more often than Duke Georg Ludwig allowed him to do. Leibniz also gained support for his plan of the Berlin Academy, which was founded in 1700.

At that time Georg Ludwig employed Leibniz in several tasks, which had to do with the English succession. The philosopher wrote many memoirs in favor of his master. Leibniz had also other employers : he performed several diplomatic missions for the Emperor and the Czar Peter The Great. Leibniz took interest in Russia after Peter came to the throne and tried (successfully) to persuade the Czar to realize some of his ambitious plans. Leibniz's undertakings in Vienna did also produce some positive feedback. Leibniz wrote his *Theodicy* at that time.

These successes did not help, however, when Georg Ludwig ascended to the English throne in 1714. At that time Leibniz was in Vienna, where he wrote the *Monadology*. By return to Hanover he found out that the Duke had left him in Hanover to finish the history of the Guelfs.<sup>1</sup> According to Nicholas Rescher, one of the main reasons for this was the priority dispute of the calculus against the Newtonians.<sup>2</sup> George Ludwig seems to have been fairly patient with Leibniz and tried to shelter him from the animosity of the court. It may have been the case that when landing on English soil he didn't want to take any unnecessary risks. In the same year 1714 Leibniz lost one of his most faithful friends, Sophie of Hanover.

In the new situation Leibniz tried primarily to make progress with his historical work and hoped to follow Georg Ludwig (now George I) to England. The enterprise was pressed

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<sup>1</sup>Georg Ludwig has been reported to have said : "He comes only when I have become king". Aiton, *Leibniz, A Biography*, p. 320.

<sup>2</sup>Rescher, *The Philosophy of Leibniz*, p. 4.

by the King's order that Leibniz should not be allowed to undertake any long journeys until the history was complete. Surprisingly, the King of France, Louis XIV had invited Leibniz to join in his court, but the opportunity failed when the Sun King died in 1715.<sup>1</sup>

The last years of Leibniz were troubled by gout, which he had suffered from the age of fifty and arthritis. He died in the age of 70 on 14. November 1716, 10 p.m.<sup>2</sup> The funerals were very modest and only one mourner appeared : Leibniz assistant Eckhart.<sup>3</sup> Leibniz was in disfavor amongst the population of Hanover, who regarded Leibniz as an atheist. We will return to Leibniz's religious views later, but it might be interesting to learn that Leibniz's last words were not pious or repentant, but concerned with a trivial scientific matter.<sup>4</sup>

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<sup>1</sup>The background of this event is as follows : Leibniz wrote to french jesuit Tourmine in 1715 that he wished to live in Paris. The latter showed the letter to the King who ordered to answer him that he knew the philosopher's achievements and wished to see Leibniz in his court. Hertz, *The Development of German Public Mind*, p. 120; Ross, *Leibniz*, p. 27. The reason for this was probably Leibniz's *Theodicy*, which was widely read in France.

<sup>2</sup>Aiton, *Leibniz, A Biography*, p. 349.

<sup>3</sup>Leibniz's assistant in the history of the Guelfs-project Johann Georg Eckhart became a professor in history in Helmstedt in 1706. He was an editor in Leibniz's *Monatliche Auszug*, a periodical with the main bias on German linguistics. Aiton, *Leibniz, A Biography*, p. 228.

<sup>4</sup>Wilson, *Leibniz's Metaphysics*, p. 296.