

In further fundamental writings, Gottlob Frege attempted to establish a logical foundation for arithmetic and the study of numbers. To achieve this, he refined and perfected the axiomatic method that had been known since the time of Euclid. At first, it appeared that his project had been successful. However, in 1902, Bertrand Russell discovered a logical contradiction within Frege's system, which dealt a devastating blow to Frege's confidence and left a lasting impact on him.

While it was possible to circumvent the contradiction, doing so meant that arithmetic could no longer be derived purely through logical means; a realization, which was to a large extent prompted by Frege's own works. Additionally, Frege delved into the substantive issues of logic, leading him to make a crucial distinction between the sense and reference of linguistic expressions. This contribution had a profound impact on linguistics and the philosophy of language.

Despite being underappreciated during his lifetime, today, libraries around the world are filled with Frege's works. His publications have been translated into numerous languages.

His findings stand as foundational pillars within the realms of computer development, artificial intelligence, and the digital world.



Gottlob Frege [3]

To honor the legacy of Gottlob Frege, the Hanseatic City of Wismar has erected a bust of Frege on the grounds of St. Marien Church. Also, a street has been named Professor-Frege-Straße, and commemorative plaques have been installed at Frege's birthplace and the cemetery. Each year, the city's university presents the prestigious Gottlob Frege Prize, donated by the city to recognize exceptional accomplishments by young academics. Furthermore, since 2000, the Gottlob Frege Centre has been established at Wismar University. Plans are underway to establish a memorial museum in the city center.

Quotations and references:

Gottlob Frege - Der Aristoteles aus Mecklenburg, Romanbiografie. Dres. Edith and Joachim Framm, Prof. Dieter Schott, Printing: Koch und Raum, Wismar 2022.

www.wismar.de

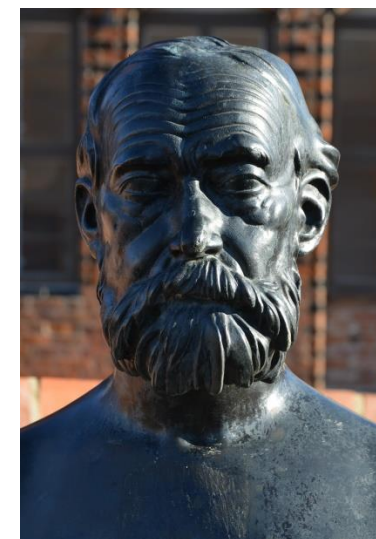
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Cover: Bronze bust of Gottlob Frege by Karl-Heinz Appelt (copy), erected on the grounds of the Church St. Marien in the Hanseatic city of Wismar, photo: Nils Volster, Wismar.

[1] In: Lothar Kreiser, Gottlob Frege. Leben - Werk - Zeit, Meiner Verlag, Hamburg 2001, p. 113.

[2] Münster University and State Library, p. Frege A44, 005.

[3] Wikipedia, photographer unknown, out of copyright.



Gottlob Frege

1848-1925

Gottlob Friedrich Ludwig Frege, mathematician, logician, and philosopher, exerted a profound influence on the advancement of modern science. Although Frege did not receive widespread recognition during his lifetime, his legacy underwent a significant transformation in later years. In professional circles today, Frege is often hailed as the 'Aristotle of the modern age' due to his remarkable scientific accomplishments. Through his groundbreaking work, the 'Begriffsschrift,' Frege developed the modern and what is now regarded as classic two-valued predicate logic, employing a comprehensive axiom system. This ingenious contribution paved the way for today's computer-driven world. Additionally, Frege's scholarly contributions comprise other significant works on the foundations of science.

Jubilee Year 2025 - Highlights
Frege exhibition, Schabell Museum
International Frege Conference
Digital Frege Tours
Frege events in schools
Frege city tours

08.11.1848	Born in Wismar
1854-1869	Attended and graduated from the Große Stadtschule Wismar
1869-1873	Studied mathematics in Jena and Göttingen Doctoral dissertation in Göttingen on <i>A geometric representation of imaginary entities in the plane</i>
1874	Habilitation in Jena on <i>Calculation methods based on an extension of the concept of magnitude</i>
1874-1918	Lectureship at the University of Jena
1879	<i>Begriffsschrift</i> , a formula language of pure thought modelled on the arithmetical one
1879	Associate Professor of Mathematics
1884	<i>Foundations of Arithmetic</i>
1887	Marriage of Margarete Lieseberg (1856-1904) from Grevesmühlen
1892	<i>On Sense and Reference</i>
1893	<i>Basic Laws of Arithmetic Volume I</i>
1896	Full Honorary Professor
1903	<i>Basic Laws of Arithmetic Volume II</i>
1903	Grand Ducal Saxon Court Councillor
1908	Guardian of Alfred (*1903) and Toni (*1905) Fuchs, later adoption of Alfred
1918	Move to Bad Kleinen
1918	Emeritus in Jena, retirement
26.07.1925	Died in Bad Kleinen, buried in Wismar



Symbol of Begriffsschrift Gottlob Frege ca. 1875 [1]



Family Frege ca. 1860 [2]
(Gottlob Frege: second from the right)

The family home played a crucial role in shaping Gottlob Frege's career. His father, Alexander Frege (1809-1866), established a secondary school in Wismar in 1840, and authored several publications. In his work, *'Die Entwicklung des Gottesbewußtseins'* (The Development of the Consciousness of God), he wrote: *"It is evident that the greatest clarity of knowledge belongs to the highest perfection of the human spirit, and it must be called the goal of man to attain it."*

Following Alexander Frege's death, Gottlob's mother, Auguste Frege, assumed the responsibility of managing the school.

Gottlob Frege's profound intellectual contributions have left an indelible mark on the landscape of scientific progress, cementing his position among the distinguished figures of the modern era. During his education at the Wismar grammar school, the Große Stadtschule, Frege encountered a formative influence. The headmaster, Dr. Eduard Haupt, who became a member of the Frankfurt National Assembly in 1848, aimed to foster the students' talents to *"... gain from them what we are used to consider the most beautiful blossom of all human education and call ... humanity"*. Even more transformative were Frege's years of study in Jena and Göttingen, where his remarkable talents caught the attention of Ernst Abbe, a renowned physicist and entrepreneur. Abbe became Frege's lifelong mentor in Jena. In 1879, Frege's *'Begriffsschrift,'* was published. Building upon the foundation laid by Aristotle, Frege succeeded in devising a comprehensive system of formulas for modern logic.

Through the *'Begriffsschrift,'* Frege introduced a method of combining scientific discoveries in a manner that enables the acquisition of new and irrefutable knowledge. His logical approach not only contributed significantly to the advancement of mathematics and philosophy but also delved into the fundamental laws of thought and the pursuit of truth.

Obituaries for the world-famous and revered native son of the Hanseatic city:

"This Frege was one of the greatest German thinkers. Indeed, one of the greatest Western thinkers ever. A thinker of the rank and depth of Leibnitz and a creative force of the rarest power." Heinrich Scholz, Münster
"Frege was a genius. ... His work has significantly influenced the development of science and philosophical thought in the 20th century." Lothar Kreiser, Leipzig