

Verhulst, Pierre-François | Encyclopedia.com

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(b. Brussels, Belgium, 28 October 1804; d. Brussels, 15 February, 1849)

statistics, sociology, probability theory, mathematics.

According to [Adolphe Quetelet](#), Verhulst, while on a trip to Rome, “conceived the idea of carrying out a reform in the [Papal States](#) and of persuading the Holy Father to give a constitution to his people.” The project was, in fact, considered; and Verhulst, ordered to leave Rome, was almost besieged in his apartment.

Verhulst first thought of publishing the complete works of Euler but abandoned this idea in order to study with Quetelet, with whom he eventually collaborated on [social statistics](#). The two did not, however, always share the same views in this field, in which the theoretical foundations were uncertain and observations far from abundant. It was generally assumed, following Malthus, that the tendency of a population to increase follows a geometric progression. Quetelet, however, believed he had grounds for asserting that the sum of the obstacles opposed to the indefinite growth of population increases in proportion to the square of the rate at which the population tends to grow. Verhulst showed in 1846 that these obstacles increase in proportion to the ratio of the excess population to the total population. He was thus led to give the figure of 9,400,000 as the upper limit for the population of Belgium (which, in fact, has grown to 9,581,000 by 1967). Verhulst’s research on the law of population growth makes him a precursor of modern students of the subject.

Verhulst was a professor at the Université Libre of Brussels and later at the école Royale Militaire. He was elected to the Académie Royale de Belgique in 1841 and became its president in 1848.

BIBLIOGRAPHY

There are articles on Verhulst by J. Pelseneer, in *Biographie nationale publiée par l’Académie royale de Belgique*, XXVI (Brussels, 1936–1938), cols. 658–663, with bibliography; and A. Quetelet, in *Annuaire de l’Académie r. des sciences, des lettres et des lettres et des beaux-arts de Belgique*, **16** (1850), 97–124, with a bibliography of Verhulst’s works and a portrait.

J. Pelseneer