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(*b*. Hamburg, Germany, 13 November 1876; *d*. Denver, Colorado, 14 September 1932)

Mathematics.

Wilczynski was a son of Max Wilczynski and Friederike Hurwitz, who settled in Chicago when he was young. He returned to Germany for advanced study, receiving the Ph.D. from the University of Berlin in 1897 with a dissertation entitled "Hydrodynamische Untersuchungen mit Anwendung auf die Theorie der Sonnenrotation." Upon returning to the United States, he spent a year as a computer in the Office of the Nautical Almanac in Washington. In 1898 Wilczynski went to the University of California as an instructor; he rose to the rank of associate professor and served there until 1907. From 1903 to 1905 he was in Europe as assistant and associate of the Carnegie Institution of Washington, which provided the financial support that enabled him to write *Projective Differential Geometry of Curves and Ruled Surfaces* (1906). In 1906 he married Countess Ines Masola, of Verona. He was associate professor at the University of Illinois from 1907 to 1910 and at the University of Chicago from 1910 to 1914, achieving full professorship in the latter year.

Wilczynski's main work was in projective differential geometry, a subject of which he is generally considered the creator. A prolific worker, he published seventy-seven books and papers. He was also active in scientific organizations, serving as vice-president of the American mathematical Society, as a member of the council of the Mathematical Association of America, and as an associate editor of the *Transactions of the American Mathematical Society*. Wilczynski won a prize (and was named laureate) of the Royal Belgian Academy in 1909, and in 1919 he was elected a member of the National Academy of Sciences.

What is now called classical different geometry studied the local metric properties of geometrical configurations; projective differential geometry proposed similarly to study the local properties invariant under projective transformations. When Wilczynski started his work, about 1900, Halphen's projective different geometry of curves already existed; but Wilczynski devised new methods, deepened the theory for curves, extended it to surfaces, and brought it to its present form.

In 1900, classical differential geometry was already a century old. Although it could still provide much interesting detail, it had lost its vitality; and by 1920 it had been declared dead. E. T. Bell has suggested that classical differential geometry lacked method and aim. Projective differential geometry, although it contained new points of view, was only a part of that larger subject and, therefore, shared its fate, although classical metric differential geometry is still a staple university course.

BIBLIOGRAPHY

See E. T. Bell, *Development of Mathematics* (New York, 1940), 332; and E. P. Lane, "Ernest Julius Wilczynski," in *American Mathematical Monthly*, **39** (1932), 567–569, see also 500; and "Ernest Julius Wilczyn ski–In Memoriam," in *Bulletin of the American Mathematical Society*, **39** (1933), 7–14, with bibliography of 77 works published by Wilczynski from 1895 to 1923.

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