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(*b*. Rotterdam, Netherlands, 23 September 1900; *d*. Amsterdam, Netherlands, 22 July 1959)

mathematics, statistics, logic, philosophy, history of science.

At the age of thirteen, Van Dantzig wrote his first mathematical paper, which was published in a Dutch mathematical periodical. After high school he studied chemistry, which he did not like; he soon stopped, owing to family circumstances that obliged him to take various odd jobs to support himself. At night he prepared for a sequence of state examinations in mathematics, which he passed in 1921, 1922, and 1923. After a short time at Amsterdam University he passed the *doctoraalexamen* (roughly equivalent to a master's degree). In 1927 he became an assistant to Jan A. Schouten at Delft Technical University. After a brief stay at a teacher training institution, Van Dantzig returned to Delft, where he became a lecturer in 1932, an extraordinary professor (roughly equivalent to associate professor) in 1938, and an ordinary professor (roughly equivalent to full professor) in 1940. He had received a Ph.D. degree at Groningen in 1932.

During the German occupation he was dismissed and obliged to move with his family from the Hague to Amsterdam. In 1946 he was appointed a professor at Amsterdam University and was a cofounder of the Mathematisch Centrum, a research and service institution. Until his death he played a leading role at this institution while retaining his chair at the university.

During his short period of study at Amsterdam University, Van Dantzig was strongly influenced by one of his mathematics professors. Gerrit Mannoury (1867–1956). whose personality had a great impact on many people (including L. E. J. Brouwer). With Mannoury, Van Dantzig shared the disbelief in mathematical certainty—intuitionist or formalist— and even more than Mannoury he stressed the social responsibility of the mathematician as a teacher and a researcher, which he expressed in a number of publications.

As an assistant to and collaborator of Schouten. Van Dantzig took up Schouten-style differential geometry and its applications, in particular projective and conformal differential geometry, and electromagnetism and thermodynamics, independent of Riemannian geometry. Unfortunately, he never elaborated on his idea of a statistical explanation of Riemannian metrics.

After the war Van Dantzig turned to probability and statistics, mainly by stimulating research in this field. After the flood of 1953 he took a part in the research preparing the now completed "Delta Works."

The most important part of Van Dantzig's work lies in topological algebra, a term coined by him. Although published in the 1930s, it was probably conceived in the late 1920's. His Groningen Ph.D. dissertation, "Studiën over topologische Algebra" (1931), is a fine example of mathematical style: it consists of a concise string of definitions and theorems organized in such a way that in this context each theorem is obvious and none needs a proof. He elaborated on this theme in a series of papers titled "Zur topologisehen Algebra" that dealt with questions of metrization and completion of groups, rings, and fields, and eventually classified the fields with a nontrivial locally compact topology. In the course of these studies Van Dantzig discovered the solenoids as completions of the additive group of real numbers. These strange homogeneous spaces led to a problem on connected metric homogeneous spaces in general, solved by Van Dantzig and B. L. van der Waerden, showing that conjugacy classes of the fundamental group of such spaces must be finite.

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Hans Freudenthal