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Transforming tradition: Richard Courant in Göttingen. (English) [Zbl 1320.01045](#)
Math. Intell. 37, No. 1, 20-29 (2015).

Courant came to Göttingen in 1907 where he met three other Breslau Jews: Otto Toeplitz, Max Born and Ernst Hellinger. At that time, the leading scientists in Göttingen were David Hilbert, Hermann Minkowski and Felix Klein, exponents of the so-called Weimar culture. After the First World War, Courant became assistant to Carl Runge, in 1919, Courant married Runge's daughter Nina. In 1920, Courant succeeded Felix Klein and collaborated intensively with Max Born and James Franck; Courant's main idea was a closer link between pure and applied mathematics. Since Born and Franck also were of Jewish origin, they were called the "Courant clique". All three of them were dismissed in 1933 and Courant left Göttingen and Germany. Courant was an innovator as well as a traditionalist. During his time in Göttingen, Courant's main fields were conformal mapping, boundary value problems, Riemann surfaces, and Dirichlet's principle. Courant had a close relationship to Ferdinand and Julius Springer, the "yellow series" was founded. Courant contributed to a textbook of *Adolf Hurwitz* [Vorlesungen über allgemeine Funktionentheorie und elliptische Funktionen. Herausgegeben und ergänzt durch einen Abschnitt über geometrische Funktionentheorie von R. Courant. Berlin: J. Springer (1922; [JFM 48.1207.01](#)); 2nd ed. (1925; [JFM 51.0236.12](#)); 3rd ed. (1929; [JFM 55.0171.01](#)); 4th ed. (1964; [Zbl 0135.12101](#))]. Of great importance was the textbook by *R. Courant* and *D. Hilbert* [Methoden der mathematischen Physik. 1. Band. Berlin: J. Springer (1924; [JFM 50.0335.07](#)); 2nd ed. (1931; [JFM 57.0245.01](#); [Zbl 0001.00501](#)); 3rd ed. (1968; [Zbl 0156.23201](#)); Vol. 2 (1937; [JFM 63.0449.05](#); [Zbl 0017.39702](#)); 2nd ed. (1968; [Zbl 0161.29402](#))]. Otto Neugebauer "was still only a student without a doctorate when Courant took him under his wing". Later, *O. Neugebauer* dedicated his textbook [The exact sciences in antiquity. Princeton, N. J.: Princeton University Press (1952; [Zbl 0049.00201](#)); Copenhagen (1951); 2nd ed. (1957; [Zbl 0084.00201](#))] to Richard Courant. The author's last sentence gives the following summary: "So Courant continued to innovate in the name of preserving past ideals. In both settings however, a consistent theme remained: his romantic longing for the Göttingen he had known in his youth".

Reviewer: [Karin Reich \(Berlin\)](#)

MSC:

[01A70](#) Biographies, obituaries, personalia, bibliographies

Keywords:

[Courant](#); [Göttingen](#); [Jewish question](#); [transforming tradition](#); [Weimar culture](#); [Julius Springer](#); [yellow series](#)

Biographic references:

[Courant, Richard](#)

Full Text: [DOI](#)

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