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978-0-521-40386-3 - Nationalism and Internationalism in Science, 1880–1939: Four Studies of the Nobel Population

Elisabeth Crawford

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Elisabeth Crawford's new study departs from the commonly held notion that universalism and internationalism are inherent features of science. Showing how the rise of scientific organizations around the turn of the century centered on national scientific enterprises, Crawford argues that scientific activities of the late nineteenth century were an integral part of the emergence of the nation-state in Europe. Internationalism in science, both theoretical and practical, began to hold sway over scientists only when economic relations and transportation and communication facilities began to cross national boundaries.

The founding of the Nobel prize in 1901 confirmed the internationalization of science. The workings of the Nobel institution rested on an international community of scientists who forwarded candidates for the prizes. Along with the candidates and eventual prizewinners, they constituted the Nobel population, which, in the fields of chemistry and physics between 1901 and 1939, numbered more than a thousand scientists of greater and lesser renown from 25 countries.

Crawford uses the Nobel population for prosopographic studies that shed new light on national and international science between 1901 and 1939. Her four studies examine critically the following problems: the upsurge of nationalism among scientists of warring nations during and after World War I and its consequences for internationalism in science, the existence of a scientific center and periphery in Central Europe, the effective use of the Nobel prizes in an organization whose primary purpose was to further national science, and the elite conception of science in the United States and its role in the success of the national scientific enterprise. Two introductory chapters provide necessary background by discussing research methodology, and national and international science between 1880 and 1914.

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ELISABETH CRAWFORD

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Group d'Etudes et de Recherches sur la Science, Paris*



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For my son Alexander

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The idea of using the Nobel population – the approximately one thousand individuals who acted as nominators and nominees for the prizes in physics and chemistry between 1901 and 1939 – for studies in the social history of science arose from solicitations for papers presented at scientific meetings. Two of these papers have been included in collective volumes. I am grateful to the American Institute of Physics for permission to publish materials from my article “Scientific elite revisited: American candidates for the Nobel prizes in physics and chemistry, 1901–1938,” which appeared in Stanley Goldberg and Roger H. Stuewer, eds., *The Michelson era in American science, 1870–1930* (New York: American Institute of Physics, 1988). I am equally grateful to the Deutsche Verlags-anstalt GmbH and the Max-Planck-Gesellschaft zur Förderung der Wissenschaften, which hold the copyright to Rudolf Vierhaus and Bernhard vom Brocke, eds., *Forschung im Spannungsfeld von Politik und Gesellschaft: Geschichte und Struktur der Kaiser-Wilhelm-/Max-Planck-Gesellschaft* (Stuttgart, 1990). This book contains an early version of the study of the Kaiser-Wilhelm Society and the Nobel institution by J. L. Heilbron and me. I also want to thank Sage Publications for permission to reprint materials from my article “Internationalism in science as a casualty of the First World War: relations between German and Allied scientists as reflected in nominations for the Nobel prizes in physics and chemistry,” *Social Science Information* 27 (1988): 163–201.

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