

Forced Migration and Scientific Change

EMIGRE
GERMAN-SPEAKING SCIENTISTS
AND SCHOLARS AFTER 1933

Edited by
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and
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Washington, D.C.



PUBLISHED BY THE PRESS SYNDICATE OF THE UNIVERSITY OF CAMBRIDGE
The Pitt Building, Trumpington Street, Cambridge, United Kingdom

CAMBRIDGE UNIVERSITY PRESS
The Edinburgh Building, Cambridge CB2 2RU, UK
40 West 20th Street, New York NY 10011-4211, USA
477 Williamstown Road, Port Melbourne, VIC 3207, Australia
Ruiz de Alarcón 13, 28014 Madrid, Spain
Dock House, The Waterfront, Cape Town 8001, South Africa
<http://www.cambridge.org>

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First published 1996
First paperback edition 2002

A catalogue record for this book is available from the British Library

Library of Congress Cataloguing in Publication data

Forced migration and scientific change: emigré German-speaking
scientists and scholars after 1933 / edited by Mitchell G. Ash
and Alfons Söllner.

p. cm. – (Publications of the German Historical Institute)
Includes index.

ISBN 0 521 49741 8 (hc)

1. Germans – United States – Intellectual life. 2. Germans – Great
Britain – Intellectual life 3. Brain drain – Germany – History – 20th
century. 4. Brain drain – United States – History – 20th century.
5. Brain drain – Great Britain – History – 20th century. 6. United
States – Intellectual life – 20th century. 7. Germany – Emigration and
immigration – History – 20th century. 8. Great Britain – Intellectual
life – 20th century. I. Ash, Mitchell G. II. Söllner, Alfons.

III. Series.

E184.G3F3 1995

306.4'2'08931073–dc20 95-24894 CIP

ISBN 0 521 49741 8 hardback
ISBN 0 521 52278 1 paperback

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Introduction: Forced Migration and Scientific Change after 1933

MITCHELL G. ASH AND ALFONS SÖLLNER

The so-called “Law for the Reconstitution of the Professional Civil Service” of April 7, 1933, which authorized the dismissal or premature retirement from government service of persons who were not of “Aryan” descent or who were associated with groups considered politically undesirable in the new German state, was only the beginning of a massive, forced exodus mainly of Jewish scholars and scientists from Nazi Germany. Some particularly prescient intellectuals had already fled when the Reichstag burned in February of that year. The Nuremberg Laws of 1935, the invasion of Austria in March and the pogroms in Germany in November 1938, and finally the Nazi conquests in the rest of Europe made the emigration of scientists and scholars a mass phenomenon unprecedented in the modern history of academic life. Compared with the total of more than half a million refugees from Germany alone, the fate of approximately 2,000 academics and research scientists may seem of modest concern, but not when we remember how innovative some of these scholars and scientists were or became. Nonetheless, skeptical voices have been raised, asking among other things whether these innovations were indeed the results of emigration, or whether they might have occurred in any case. Did that “exodus of reason” in fact lead to significant scientific change, and if so, how should that change be characterized? The essays in this book attempt to provide answers to these questions, and thus to contribute to the comparative study of science in culture.

FROM A DISCOURSE OF “LOSS” AND “GAIN” TO
PROCESSES AND CONTINGENCIES OF CHANGE

A certain unavoidable pathos has permeated discussion of this “intellectual migration” and its impact. Dominant in both public and academic discourse

during the first postwar generations, especially in West Germany, were the perspectives of political and literary exiles. Many spoke – and still speak – of this migration as an “exodus of the mind” (*Auszug des Geistes*), of the modern spirit, or – depending on the political viewpoint of the speaker – of democracy.¹ Following, and at times combining with this discourse, came studies of émigré scientists and scholars, ranging from triumphant accountings of the émigrés’ contributions to American and British science and culture since the 1960s, to mournful assessments of loss in West Germany and Austria centered about the fiftieth anniversaries of the Nazi takeover in 1933 and 1938, respectively – one of many ironic aspects of those reversed jubilees.²

Stimulated in part by these efforts, younger researchers from Germany and Austria took up the subject in the 1980s, many of them funded by a major research program organized by the Deutsche Forschungsgemeinschaft (German Research Foundation). Alongside or in collaboration with American, British, and Israeli scholars, these researchers have cast their nets more widely than before, going beyond the earlier focus on literary and political exiles and more prominent scientists and scholars to consider the careers and achievements of émigré academics and professionals in more detail.³

- 1 See, e.g., Radio Bremen, *Auszug des Geistes: Bericht über eine Sendereihe* (Bremen, 1962); Manfred Briegel and Wolfgang Frühwald, eds., *Die Erfahrung der Fremde: Kolloquium des Schwerpunktprogramms “Exilforschung” der Deutschen Forschungsgemeinschaft* (Weinheim, 1988). For an American variant of this perspective, see Anthony Heilbut, *Exiled in Paradise: German Refugee Artists and Intellectuals in America from the 1930s to the Present* (New York, 1983).
- 2 See, e.g., the essays by Louise W. Holborn, Herbert Marcuse, Albert Wellek, and Gerald Stourzh in *Jahrbuch für Amerikastudien* 10 (1965); Donald Fleming and Bernard Bailyn, eds., *The Intellectual Migration: Germany and America, 1930–1960* (Cambridge, Mass., 1969); Jerold C. Jackman and Carla M. Borden, eds., *The Muses Flee Hitler: Cultural Transfer and Adaptation, 1930–1945* (Washington, D.C., 1983); Horst Möller, *Exodus der Kultur* (Munich, 1984); Lewis A. Coser, *Refugee Scholars in America: Their Impact and Their Experiences* (New Haven, Conn., 1984); “Vor fünfzig Jahren: Emigration und Immigration von Wissenschaft,” *Berichte zur Wissenschaftsgeschichte* 7 (1984); Friedrich Stadler, ed., *Vertriebene Vernunft: Emigration und Exil österreichischer Wissenschaft*, vols. 1 and 2 (Vienna and Munich, 1987, 1988); Werner E. Mosse et al., eds., *Second Chance: Two Centuries of German-Speaking Jews in the United Kingdom* (Tübingen, 1991). For an overview, see Herbert A. Strauss, “Wissenschaftsemigration als Forschungsproblem,” in Strauss et al., eds., *Die Emigration der Wissenschaften nach 1933* (Munich, 1991), 7–24.
- 3 On émigré professionals, see, e.g., Wolfgang Mock, *Technische Intelligenz im Exil: Vertreibung und Emigration deutschsprachiger Ingenieure nach Grossbritannien, 1933–1945* (Düsseldorf, 1986); Michael Hubenstorf, “Österreichische Ärztemigration,” in Stadler, ed., *Vertriebene Vernunft*, 1:339–415; Hans-Peter Kröner, “Die Emigration deutschsprachiger Mediziner im Nationalsozialismus,” *Berichte zur Wissenschaftsgeschichte* 12 (1989), Sonderheft; Ernst C. Stiefel and Frank Mecklenburg, *Deutsche Juristen im amerikanischen Exil, 1933–1950* (Tübingen, 1991); Uwe H. Peters, *Psychiatrie im Exil: Die Emigration der dynamischen Psychiatrie aus Deutschland, 1933–1939* (Düsseldorf, 1992); *The essays on professionals in Mosse, ed., Second Chance*; Atina Grossmann, “German Women Doctors from Berlin to New York: Maternity and Modernity in Weimar and in Exile,” *Feminist Studies* 19 (1993): 65–88; and the essays on women professionals in Sybille Quack, ed., *Between Sorrow and Strength: Women Refugees of the Nazi Period* (New York, 1995). Although the situations of these émigrés had much in common with those of scientists and scholars, only cases in which sciences and professions inter-

Many of these attempts at a broader approach were stimulated by the publication of the *International Biographical Dictionary of Central European Emigrés* in 1983, which improved the basis for aggregate studies.⁴ Research has since proceeded from individuals to collective biography, from the sufferings of exile to systematic comparative studies of emigration from the Central European countries as well as the émigrés' careers and impact in their new homelands, and from an exclusive focus on the contributions of a successful elite to more detailed studies of entire disciplines.

One result is that a more differentiated, in some respects more modest, picture has emerged; although earlier rhetoric and metaphors persist, it has become more difficult to be satisfied with them. The fascination with the lives and brilliant achievements of the more prominent émigrés – from physical scientists such as James Franck, Erwin Schrödinger, or Lise Meitner, to social scientists such as Paul Lazarsfeld or psychoanalysts Sigmund and Anna Freud, to the social theorists of the Frankfurt School or political thinkers such as Hannah Arendt and Leo Strauss – continues with good reason.⁵ In addition to pathbreaking scientific innovations, the émigrés have given us some of the most profound and complex accounts of the cultural breaks and ironic reconstructions characteristic of modern life, as they lived through them. But continuing nearly exclusive emphasis on prestigious innovators – a common tendency in both cultural history and the history of science – diverts attention from potentially more broadly significant changes in the work and careers of less prominent researchers.

In keeping with this awareness of cultural breakage and reconstruction, there has been a turn in recent years from assessing the products or contributions of the émigrés to the processes of intellectual and cultural change that produced them. A “products” perspective has a certain historical justification in the vocabulary of the time. Even Alvin Johnson, then president of the New School for Social Research, founder of the so-called “University in Exile” and a leading advocate of rescue for émigré scholars, had no qualms about calling them “Hitler’s gift to American culture.” Another

acted or overlapped, such as medical science, psychology, psychoanalysis, and pedagogy, will be considered here.

- 4 Herbert A. Strauss and Werner Röder, eds., *International Biographical Dictionary of Central European Emigrés, 1933–1945*, 3 vols. (Munich, 1980–83). The editors' standards of inclusion (described in vol. 1, lxxxvii ff.) limit this work's value for studies of émigré scientists and scholars to some extent. Lesser-known émigré scientists and scholars have not been included, whereas many children of émigrés who later entered these professions have been.
- 5 See, e.g., Patricia Rife, *Lise Meitner: Ein Leben für die Wissenschaft*, trans. Peter Jacobs (Hildesheim, 1990); Peter Gay, *Freud: A Life for Our Time* (New York, 1988); Elizabeth Young-Bruehl, *Anna Freud: A Biography* (New York, 1988); Peter Graf Kielmannsegg, Horst Mewes, and Elisabeth Glaser-Schmidt, eds., *Hannah Arendt and Leo Strauss: German Emigrés and American Political Thought after World War II* (New York, 1994).

prominent academic reportedly put it even more directly when he said, "Hitler shakes the tree and I gather the apples."⁶ Today, it seems problematic to speak of the émigrés only in such terms, continuing to treat them or their research achievements now and without irony as a sort of human or intellectual capital, or as prestige objects to improve – or damage – the images of particular nations. It is surely appropriate, on the other hand, to speak of loss when the émigrés' personal experiences are in question. They lost not only their livelihoods, but personal connections to their families, their language, and not least their culture. These were, after all, the most highly acculturated Jews in Europe, for many of whom anti-Semitic discrimination came as an unbelievable shock.

More important in this context, however, is another aspect of the discourse of loss and gain – the continuing concentration on the émigrés' contributions, rather than on the processes and the sociocultural and biographical circumstances that made them possible. It is a fundamental but common error to suppose that these contributions were just what was "lost" to German-speaking culture. To inquire only about losses and gains in this sense presupposes a static view of science and of culture, as though the émigrés brought with them finished bits of knowledge, which they then inserted like building-stones into already established cultural constructs elsewhere. This error can only be reinforced by the continuing tendency – especially among German-speaking students of the subject – to ask only whether émigrés continued their previous research in their new locations, and to mourn the breakup of scientific schools or other research groups. Proceeding in this way without further reflection assumes that such research programs or groupings would necessarily have remained in place or continued working as before had their members not been forced to leave their homelands. It also ignores the fact that forced migration made possible careers that could not have happened in the smaller, more restrictive university and science systems of Central Europe, and the possibility that the pressure to respond to new circumstances may have led to innovations that might not have occurred in the same way otherwise.

Also related to the discourse of loss and gain, and equally questionable, is the widely held assumption that knowledge in the natural sciences is more "transferable" than the supposedly more language- and culture-dependent knowledge of the social sciences and the humanities. In the natural sciences the transfer of knowledge is often considered essentially unproblematic,

6 Alvin Johnson, *Pioneer's Progress: An Autobiography* (New York, 1953); Walter S. Cook, New York University Institute of Fine Arts, quoted in Wilfred McClay, "Weimar in America," *American Scholar* 55 (Winter 1985–86): 120.

with cultural factors influencing the process only indirectly, by affecting the contexts of transfer, rather than “the ideas themselves.” Sociologist Sven Papcke evokes this criterion to differentiate between literary and political émigrés, whose self-concept is correctly represented by the word “exile,” and émigré scientists, whom he prefers to describe as “emigrants.”⁷ These claims need to be examined rather than assumed. In any case, such assumptions are not well suited to help us understand or even recognize similarities in transfer or innovation processes in the natural and the social sciences.

Moreover, as biochemist Erwin Chargaff writes in his autobiography, even the modes of thought and practice of the natural sciences are not transferable without limit, for these too “live in the womb of a particular language and civilization.”⁸ Simply defining scientific knowledge per se as international closes off consideration of this point before it can even begin. Chargaff’s remark suggests that styles of thinking about and experimenting on or with nature are not independent of the cultural contexts of their creation. Recent work on research and theoretical preferences in Europe and America in the physical and biological sciences supports the claim that there may indeed be national or even local styles in science, the conversion of which into internationally understood science or their transfer to other cultural settings is by no means easy or simple.⁹

Paul K. Hoch and Jennifer Platt have suggested that forced migration actually accelerated what they term “the denationalization of science.”¹⁰ Taking this possibility seriously would cast the *Sonderweg* debate familiar to historians of Germany in a new light. The growth of research universities and other scientific research institutes in Germany during the nineteenth and twentieth centuries was surely part of that country’s “special path” into modernity; and the émigrés from Nazism learned their particular ways of doing science in those institutions. Closer study of the blendings – or clashes – of scientific cultures that occurred as a result of forced migration could thus become tests of the “specialness” of national styles in sciences, and of

7 Sven Papcke, “Fragen an die Exilforschung heute,” *Exilforschung* 6 (1988): 19.

8 Erwin Chargaff, *Das Feuer des Heraklit: Skizzen aus einem Leben vor der Natur* (Munich, 1984), 89.

9 On physics, see Paul K. Hoch, “The Reception of Central European Refugee Physicists of the 1930s: U.S.S.R., U.K., U.S.A.,” *Annals of Science* 40 (1983): 217–46; Silvan Schweber, “The Empiricist Temper Regnant: Theoretical Physics in the United States, 1920–1950,” *Historical Studies in the Physical and Biological Sciences* 17 (1986): 55–98. On biology, see Jonathan Harwood, “National Styles in Science: Genetics in Germany and the United States between the World Wars,” *Isis* 78 (1987): 390–414; Jonathan Harwood, *Styles of Scientific Thought: The German Genetics Community, 1900–1933* (Chicago, 1993).

10 Paul K. Hoch and Jennifer Platt, “Migration and the Denationalization of Science,” in Elizabeth Crawford et al., eds., *Denationalizing Science* (Amsterdam, 1993), 133–52. H. Stuart Hughes advanced a similar thesis some years ago when he spoke of the “deprovincialization” of social thought in his *A Sea Change: The Migration of Social Thought* (New York, 1976).

their limits. National and local peculiarities are evident in the sciences, as they are in the political and social spheres. Constituting and analyzing such differences, however, is only part of the story, for German scientists and scholars had participated in international networks of scientific exchange long before 1933. Rather than focusing on national or local differences alone, it is necessary to grasp the migration of scholars and scientists after 1933 as one particularly important episode in a larger drama – the geographical circulation of intellectual elites and the resulting de- or multinationalization of knowledge in the twentieth century.

More comprehensive overviews of individual disciplines and closer analyses of scientific continuity and change in both their cognitive and social dimensions are the unifying perspectives of this book. The contributors ask and attempt to answer the following questions:

- Who were the émigrés? How uniformly distributed were they in German-speaking Europe by discipline, specialty, or locale, and who among them were given the opportunity to continue scientific or scholarly work?
- What patterns of change can be detected in more global disciplinary surveys, or in closer analyses of individuals and research groups?
- What can we learn from this episode about the interrelationships of science and culture?

DEFINING THE SUBJECTS: THE EMIGRES AS A GROUP

In order to better understand what exactly is meant by speaking of the emigration of scientists and scholars as a group phenomenon, some initial remarks about its quantitative dimensions are in order. In the autumn of 1934, officials of the newly created Reich Ministry for Education and Science prepared a list of persons dismissed or forced to retire from higher education institutions in Germany as a result of the Nazi civil service law. The list included 614 university teachers; of these, 190 were full or tenured associate professors, and 424 non-tenured associate professors and *Privatdozenten* (lecturers). Of the 575 for whom such data are given, only 80 (13.9 percent) were dismissed under Paragraph 4 of the law – that is, for political reasons. The vast majority, 384 (66.8 percent), were dismissed under Paragraph 3 – as “non-Aryans” – but a surprisingly large number, 107 (18.6 percent), came under the “rubber” Paragraph 6 (“simplification of administration”). Already at this early stage, the uneven distribution pattern of dismissals is obvious. Only three universities – Berlin, Frankfurt, and Breslau – accounted for fully 40 percent of the total (136, 69, and 43, respectively),

whereas the universities of Rostock and Tübingen had as few as two each, and Erlangen only one. The numbers are thus reasonably clear indicators of the concentration of Jewish academics in Germany.¹¹

As noted earlier, the Nuremberg laws, the pogroms of November 1938, and the invasions of Czechoslovakia and Austria drove still more academics from their posts and into exile. American sociologist Edward Y. Hartshorne estimated in 1937 that by that time approximately 20 percent of all German higher education faculty, including university, technical pedagogical, and commercial academy personnel, had been dismissed or forced to retire on either racial or political grounds. In the 1950s, Christian von Ferber calculated a still higher figure of more than one-third.¹² Both of these figures, particularly von Ferber's, have been challenged on methodological grounds.¹³ According to an estimate by social historian Herbert Strauss, "approximately 15 percent (1,100 to 1,500) of university professors of all categories may have emigrated by 1940."¹⁴ Adding non-university research scientists – for example, associates of the various Kaiser Wilhelm Institutes, and scholars who had begun but not yet completed their training at the time of emigration – yields the currently accepted figure of approximately 2,000.¹⁵

A more precise interpretation of these numbers and their meaning emerges when one considers the institutions from which the émigrés came. Klaus Fischer has attempted this for émigré physicists.¹⁶ Of a total of 325 physicists in Germany who were "habilitated" – had earned the right to

- 11 "Liste der auf Grund des Gesetzes zur Wiederherstellung des Berufsbeamtentums verabschiedeten Professoren und Privatdozenten," submitted by the Reichsministerium für Erziehung, Wissenschaft und Volksbildung to the Foreign Office, December 11, 1934. Politisches Archiv des Auswärtigen Amtes, Bonn. See also Sybille Gerstengarbe, "Die erste Entlassungswelle von Hochschullehrern deutscher Hochschulen aufgrund des Gesetzes zur Wiederherstellung des Berufsbeamtentums vom 7.7.1933," *Berichte zur Wissenschaftsgeschichte* 17 (1994): 17–40. For further information on specific universities, see, e.g., Hans-Joachim Dahms, "Verluste durch Emigration: Die Auswirkungen der nationalsozialistischen 'Säuberungen' an der Universität Göttingen," *Exilforschung* 4 (1986): 165ff; Rudolf Schottlaender, *Verfolgte Berliner Wissenschaft: Ein Gedenkwerk* (Berlin, 1988); Dorothee Mussnug, *Die vertriebenen Heidelberger Dozenten: Zur Geschichte der Ruprecht-Karls-Universität nach 1933* (Heidelberg, 1988); Eckart Krause, Ludwig Huber, and Holger Fischer, eds., *Hochschulalltag im "Dritten Reich": Die Hamburger Universität, 1933–1945* (Berlin, 1991), vol. 1.
- 12 Edward Y. Hartshorne, *The German Universities and National Socialism* (London, 1937); Christian von Ferber, *Die Entwicklung des Lehrkörpers der deutschen Universitäten und Hochschulen, 1864–1954* (Göttingen, 1956), 145. Horst Möller, "Wissenschaft in der Emigration—Quantitative und geographische Aspekte," *Berichte zur Wissenschaftsgeschichte* 7 (1984): 1–9, constructs an estimate similar to von Ferber's by different means.
- 13 Klaus Fischer, "Die Emigration von Wissenschaftlern nach 1933: Möglichkeiten und Grenzen einer Bilanzierung," *Vierteljahresschrift für Zeitgeschichte* 39 (1991): 535–49.
- 14 Herbert A. Strauss, "Wissenschaftsemigration als Forschungsproblem," 10.
- 15 For a list of émigrés from institutes of the Kaiser-Wilhelm-Gesellschaft, see Kristie Macrakis, *Surviving the Swastika: Scientific Research in Nazi Germany* (New York, 1993), 207–14.
- 16 Klaus Fischer, "Die Emigration deutschsprachiger Physiker nach 1933: Strukturen und Wirkungen," in Strauss et al., eds., *Die Emigration der Wissenschaften*, 28–9.

teach at a university – 50, or 15.4 percent, emigrated after 1933. This corresponds to Strauss’s estimate of the proportion of all émigré scientists and scholars. More interesting still is their distribution: The 50 émigré physicists came from only 15 institutions, at which 212, or 65 percent of university physicists, taught; the other 21, generally smaller, institutions had no émigré physicists at all. The larger, generally more innovative, institutes were thus also the hardest hit.

When we realize concretely what is meant here – nearly the entire membership of the famous Göttingen institutes of physics and mathematics, for example – then we must acknowledge that the qualitative dimensions of loss were as significant in some disciplines as the quantitative. Data for psychology tell much the same story. Of the 308 members of the German Society for Psychology who lived or taught in German-speaking countries, 45 (14.6 percent) emigrated; among them, however, were the directors of four of the five largest and internationally best-known psychological institutes and 22 academics ranked associate professor or higher.¹⁷ Nazism’s racist policies thus left noticeable quantitative gaps in Germany’s scientific institutions, but the qualitative losses were often still more significant. Not for nothing does Alan Beyerchen speak, in a deliberately ironic reference to Martin Heidegger’s inaugural address as rector in Freiburg, of the “self-decapitation” (*Selbstenthauptung*) of German culture, rather than Heidegger’s proclaimed “self-fulfillment” (*Selbstbeauptung*) of the German university.¹⁸

And yet that is not the whole story. As recent research on science under Nazism has shown, emigration rates were not the same for all disciplines; successors were found often enough for those dismissed academics who emigrated; and the science that replaced their work cannot be dismissed simply as Nazified ideology disguised as science – although there surely was plenty of that. Studies of the dismissal and emigration of medical scientists from Berlin, for example, present a highly differentiated picture, from complete destruction in the case of Magnus Hirschfeld’s Institute for Sexual Research to nearly complete continuity in university and extra-academic institutes concerned with public health and population policy.¹⁹ In his study of the professionalization of psychology under Nazism, Ulfried Geuter shows that after the introduction of a professional certificate for psycholo-

17 Mitchell G. Ash, “Disziplinentwicklung und Wissenschaftstransfer—deutschsprachige Psychologen in der Emigration,” *Berichte zur Wissenschaftsgeschichte* 7 (1984): 208–9.

18 Alan Beyerchen, “Anti-Intellectualism and the Cultural Decapitation of Germany under the Nazis,” in Jackman and Borden, eds., *The Muses Flee Hitler*, 29–44.

19 See the essays by Rolf Winau, Michael Hubenstorf, and Sigrid Stöckel in Wolfram Fischer et al., eds., *Exodus von Wissenschaften aus Berlin* (Berlin, 1994).

gists in 1941 made it necessary to create and staff full professorships in the field in all German universities, by 1942 there were more professors of psychology in German-speaking institutions of higher education than there had been ten years earlier.²⁰ Ute Deichmann's study of biologists under Hitler shows that funding for basic research in genetics did not diminish, but increased, in the Nazi period. Herbert Mehrtens and Helmuth Trischler note a shift to "technoscience" – technology-oriented basic research – before and during World War II in fields as disparate as mathematics and aerodynamics, a shift that paralleled trends in the West. Finally, Michael Neufeld's study of the German rocketry project at Peenemünde clearly shows that despite the mass emigration of Jewish scientists and technicians, neither personnel, resources, nor the will to invest them were lacking when it came to programs deemed central to Nazism's eugenical or expansionist aims – and to creating and unleashing a modern war machine to achieve them.²¹

Whether the quality of scientific work according to then-current international standards remained as high after 1933 as it had been before, and whether it is even possible to discuss the quality of science under Nazism without some sort of moral compass, are hotly contested issues at present, ones that can hardly be resolved with quantitative methods alone. Nonetheless, it now appears exaggerated to speak in any simple or general sense of an "exodus of reason" or even of modernity as such from Nazi Germany after 1933. Perhaps it will be necessary to revert to a more neutral terminology of change, reconstruction, and redirection in the sciences and technology, both in Germany and abroad, as a result of political upheaval. Whatever terms may ultimately be preferred, the quantitative and qualitative aspects of this issue need to be considered together. As will be clear subsequently, this is also true for analyses of processes of change after emigration.

DEFINING THE SUBJECTS AGAIN: PRESELECTION IN COUNTRIES OF SETTLEMENT

A second issue that requires attention before we can move on to scientific change proper is the question of who got the opportunity to continue

20 Ulfried Geuter, *The Professionalization of Psychology in Nazi Germany*, trans. Richard Holmes (Cambridge, 1992).

21 See Ute Deichmann, *Biologen unter Hitler: Vertreibung, Karrieren, Forschung* (Frankfurt/Main, 1992; trans. Cambridge, Mass., forthcoming); Michael Neufeld, *The Rocket and the Reich: Peenemünde and the Coming of the Ballistic Missile Era* (New York, 1995), and the essays by Herbert Mehrtens, Ute Deichmann, Helmuth Trischler, and Michael Neufeld in Monika Renneberg and Mark Walker, eds., *Science, Technology, and National Socialism* (Cambridge, 1994).

scientific work, and thus at least potentially to participate in scientific change, and why. Significant here was the presence or absence of institutional, economic, and social support available for science and scholarship in the countries to which the émigrés went. Studies of émigré scientists and professionals in Turkey, Palestine, and Latin America amply document the difficulties they faced owing to the lack of infrastructure, and also the pioneer spirit many showed in the face of such adversities.²² For those émigrés – the vast majority – who received positions or stipends in the United States and to a lesser extent in Britain, it is important to clarify the mediating roles of influential scholars and scientists as well as the many aid organizations, disciplinary and multidisciplinary as well as humanitarian in character.

Traditional accounts of this subject understandably stress the humanitarian impulse to rescue persons in distress. Such humanitarian motives were undoubtedly present in most cases. Also important were the traditions of countries such as the United States as a nation of immigrants, and the continuing respect for German intellectual culture among segments of the educated elites in that country and in Britain. As recent research indicates, however, political and economic considerations and rhetoric were equally prominent. Important in this respect were two seemingly opposed but ultimately reconcilable impulses. The effects of the Great Depression and widespread fears of unemployment and competition for scarce resources among scientists and professionals in the host countries clearly worked against wholesale importation of academics or professionals, and encouraged careful selection among them. On the other hand, the desire of some influential academics as well as foundation and university administrators to grasp the opportunity of enriching their own discipline or institution by acquiring the émigré scholars judged to be best by their colleagues reinforced the impulse toward selectivity.²³

A closely related pattern appears in the work of many scientists and of

22 See, e.g., Regine Erichsen, "Die Emigration deutschsprachiger Naturwissenschaftler von 1933 bis 1945 in die Türkei in ihrem sozial- und wissenschaftshistorischen Wirkungszusammenhang," in Strauss et al., eds., *Die Emigration der Wissenschaften nach 1933*, 73–104; Robert Jütte, *Die Emigration der deutschsprachigen "Wissenschaft des Judentums": Die Auswanderung jüdischer Historiker nach Palästina, 1933–1945* (Stuttgart, 1991).

23 Karen J. Greenberg, "The Mentor Within: The German Refugee Scholars of the Nazi Period and Their American Context," Ph.D. diss., Yale University, 1987; Besse Zaban Jones, "To the Rescue of the Learned: The Asylum Fellowship Plan at Harvard, 1938–1940," *Harvard Library Bulletin* 32 (1984): 204–38; Gerhard Hirschfeld, "'The Defense of Learning and Science . . . ' Der Academic Assistance Council und die wissenschaftliche Emigration aus Nazi-Deutschland," *Exilforschung* 6 (1988): 28–43; Hirschfeld, "'A High Tradition of Eagerness . . . ' British Non-Jewish Organizations in Support of Refugees," in Mosse et al., eds., *Second Chance*, 599–610. Other aid organizations with less elitist orientations, such as the American Friends' Service Committee, are less well researched.

aid committees organized within individual disciplines – for example, in psychology, psychoanalysis, and physics. In all of these cases, humanitarian aims competed, not always on equal terms, with institutional, disciplinary, and professional politics. In some cases, the aid committee's very existence expressed a disciplinary political agenda. When political liberals within the American Psychological Association organized the Emergency Committee in Aid of Displaced Foreign Psychologists in 1938 and 1939, for example, they hoped with the help of émigrés to increase demand for social scientists in social service work and thus contribute to social change.²⁴ In the case of psychoanalysis, Ernest Jones in England and Lawrence Kubie in New York secured visas, affidavits, and other papers for dozens of colleagues, but functioned simultaneously as selectors for the immigration authorities and tried to persuade émigrés once they arrived to take up practice in the provinces in order to spread the good word and reduce competition in the metropolises.²⁵ Last, but by no means least, Copenhagen physicist Niels Bohr worked closely with the Rockefeller Foundation and other agencies not only to select and place outstanding émigré scientists but also, by doing so, to set specific scientific agendas – an effort that played an important role in the emergence of both molecular biology and nuclear physics.²⁶

IDENTIFYING PATTERNS OF CHANGE, LEVELS OF ACCULTURATION

Such patterns point to selective, even pre-selective, effects not only of influential individuals but also of local scientific and cultural milieus, which could have decisive impacts on émigrés' futures. Sociohistorical studies have made a start toward more careful examination of such impacts by employing acculturation rather than assimilation as an organizing concept.²⁷ This perspective avoids regarding the cultures of the so-called "host countries" as fixed entities to which émigrés had to adapt in a one-sided way, and opens

- 24 Robin E. Rider, "Alarm and Opportunity: Emigration of Mathematicians and Physicists to Britain and the United States," *Historical Studies in the Physical Sciences* 15 (1984): 107–76; Mitchell G. Ash, "Aid to Refugee Psychologists in the United States, 1933–1943: A Research Note," in Helio Carpintero and Jose Maria Peiró, eds., *Psychology in its Historical Context: Essays in Honor of Josef Brozek* (Valencia, 1985), 50–61.
- 25 For examples, see Margaret S. Mahler, *The Memoirs of Margaret S. Mahler*, Paul Stepansky, ed., (New York, 1987), 103; Mitchell G. Ash, "Emigré Central European Jewish Psychologists and Psychoanalysts in Great Britain," in Mosse et al., eds., *Second Chance*, esp. 112ff; Edith Kurzweil, "Psychoanalytic Science: From Oedipus to Culture," chap. 6 in this volume.
- 26 Finn Aaserud, *Redirecting Science: Niels Bohr, Philanthropy and the Rise of Nuclear Physics* (Cambridge, 1990), esp. chaps. 3–5.
- 27 For discussion of the acculturation concept, see Herbert A. Strauss, "Jewish Emigration in the Nazi Period: Some Aspects of Acculturation," in Mosse et al., eds., *Second Chance*, 80–95.