

Book Reviews

The Coming of the Refugees

The Intellectual Migration. Europe and America, 1930–1960. DONALD FLEMING and BERNARD BAILYN, Eds. Belknap (Harvard University Press), Cambridge, Mass., 1969. viii + 752 pp., illus. \$12.95.

Sometime between the terminal dates of this collaborative work, 1930 and 1960, a fundamental movement in the history of scholarship, including science, took place. The migration of those years frames a period which began with the fall of Constantinople. The coming of the refugees from Hitler to American shores in the 1930's is as easy to evoke as a causal factor as is the flight of Greek scholars to Italy in 1453—comfortably complete as an explanation and supported by the genius and the accomplishments of a few people, especially physicists, headed by the symbolic figure of Albert Einstein. Yet the truism must be the subject of unrelenting analysis if the boundaries of the migration, the nature of the flow of information, and the impact on the refugee, the sender, and the host are to attain clarity. The importance of the task and its breadth, as wide as scholarship itself, has already become clear in Laura Fermi's *Illustrious Immigrants: The Intellectual Migration from Europe, 1930–41* (University of Chicago Press, 1968).

Significantly, the editors of this most recent examination of the migration are American historians. Like "each of the many other waves of immigration that have peopled the United States, this movement affected both the migrants and the host country in uncountable ways" (p. 3). Fleming and Bailyn, while by no means escaping the unevenness that marks all such ventures, have marshaled three distinct types of historical writing. First are the memoirs—of Leo Szilard, Paul Lazarsfeld, T. W. Adorno, and Herbert Feigl—each with major insights into the process of his own migration and adapta-

tion. If this volume should spur others who made the migration to put down both their personal and their intellectual experience, it will have helped create historical sources which only those still surviving can provide.

A second category of contributions has one scholar or a small group in the focus of a portrait written by an observer who may or may not be a refugee but who was close to the subject. The major scientific portrait of this kind is one of John von Neumann adapted from earlier essays in the *Bulletin of the American Mathematical Society* by S. Ulam, H. W. Kuhn, A. W. Tucker, and Claude E. Shannon. The resulting portrait is a luminous exposition of major trends in modern mathematics that is completely accessible to a historical (that is, nonmathematical) audience, but possibly a better way to assuage our regret at not having a personal memoir from von Neumann would have been for the editors to persuade Ulam to write such a memoir on himself.

The third category of contribution to the collection is history. Some of the authors are refugees, and others not, but the intent of these contributions, comprising more than half the volume, is the historical analysis of the intellectual migration, the beginning of the transition from personal memoir, where bias is illuminating, to history, where disinterestedness is a greater virtue than passion.

A double meaning hovers over this book, for "intellectual migration" may be either the movement of people or the movement of ideas, and clearly the editors intend both. Yet ideas may move laterally in space without the permanent displacement of persons, especially in the 20th century. The movement of ideas by physically transporting them in a person is a return to a more primitive communication system, and its revival in the 1930's is a measure of the deep troubles of those

times. The earlier trans-Atlantic migrants had brought their share of intellectual baggage, the contents seldom organized in neat packages of university disciplines. The "migration" of this book has a much more structured definition than that given by such modern students of the phenomenon as Oscar Handlin, who have taken great pains to downgrade the ideological content and the significance of outstanding individuals in the German migration of 1848.

Fleming and Bailyn set very definite limits to their concept of the intellectual migration, 1930–1960. They are not concerned with the mass movement of "the millions uprooted by the fascist regimes" (p. 3). They concentrate on only that small fraction of the displaced population who (i) were professional intellectuals and had completed their education in German-speaking Europe; (ii) managed to reach the United States; and (iii) managed to reestablish their professional careers in their new environment. Thus the Hungarians are here, who studied in Berlin, but not the French, the Spanish, or the Italians. Children, people too old to start anew (many of whom reached America by virtue of being relatives of the intellectuals), nonprofessionals, and those professionals who could not adapt, as was often the case with lawyers, all remain outside the editors' purview.

The editors' choices emphasize the uniqueness of the intellectual migration, the role of individuals of outstanding talent, and the breadth and depth of German scholarship before 1933. Peter Gay's 81-page opening essay "Weimar culture: the outsider as insider" strongly suggests a polarity to the intellectual migration with the sad flowering of a German Renaissance in the 1920's counterbalanced with American culture in the era during and after World War II. "The excitement that characterized Weimar culture stemmed in part from exuberant creativity and experimentation; but much of it was anxiety, fear, a rising sense of doom" (p. 12). The new Periclean age "was a precarious glory, a dance on the edge of a volcano."

Hence almost inevitably Hitler becomes the prime mover and the dismissal of Jews from the German universities the signal for the many hundreds of individual decisions that made up the intellectual migration to begin. As Szilard put it (pp. 96–97),

I left Germany a few days after the Reichstag fire. How quickly things move you can see from this: I took a train from Berlin to Vienna on a certain date, close to the first of April, 1933. The train was empty. The same train, on the next day, was overcrowded, was stopped at the frontier, the people had to get out and everybody was interrogated by the Nazis. This just goes to show that if you want to succeed in this world you don't have to be much cleverer than other people, you just have to be one day earlier than most people.

The other pole of the migration, the United States, was, at least in the scenario of the dramatic interpretation of the migration, not immediately apparent as the destination. Most of the émigrés from Germany found initial haven in Denmark, Great Britain, or even in Turkey or Argentina. Yet by the late 1930's the centuries of preparation which had gone into the scholarly institutions of the United States began to show. If the displaced scholars were to have not only food and shelter but professional opportunities comparable with the ones they were leaving behind, they had to have jobs. The only possibility of permanent positions lay in the number, the diversity, the flexibility, and the affluence of American universities and colleges.

Much of the history in *The Intellectual Migration* is a field-by-field account of the way in which American institutions reacted to the greatest sudden windfall of mature talent that had ever come within their reach. The migration was managed for individuals judged by standards of scholarly merit even higher than those previously obtaining in America, and the result was permanent placement. Those like Adorno who returned to Europe after the war were a small minority. The judgments, made by the universities and colleges themselves, came forth more readily when people who were already on the faculties knew European scholarship firsthand, often by having been migrants themselves in the 1920's.

The volume as a whole leaves the impression that American universities and colleges unaided could not have played their role very handsomely. Too few of them had good information; at least one major psychologist, Karl Bühler, never found a satisfactory place. Jean Matter Mandler and George Mandler in their chapter, "The diaspora of experimental psychology: the Gestaltists and others," also point to the existence of xenophobia, saying "there is no doubt about an attitude

... that the German psychologists and, in particular, the Gestalt group, were seen as intruders, alien to the prevailing psychological atmosphere." Finally, the depression limited the amount of expansion that universities could support from local funds and reserve for refugees against the claims of their existing staffs.

The great permanent personnel placement operation, which might have foundered as did that of Great Britain, was saved from its own pluralism by infusions of capital and information from two sources—the temporary refugee committees and the private foundations, especially the Rockefeller Foundation. Paul Lazarsfeld tells candidly of his personal and institutional pilgrimage from Vienna to Pittsburgh to Newark to Princeton and finally to Columbia, where he emerged with a social research institute as unusual on the American scene as it was unthinkable for wartime Europe. Only the federal government was missing from the support system of the 1930's which underlay what was rapidly becoming a highly efficient personnel selection process for American scholarship. The system nationalized information about scholars on disciplinary lines and nationalized critical decisions on where financial support should go, but left the judgment of individual placement with the local university. The intense experience of placing hundreds of distinguished scholars in the 1930's tuned this informal system for ready use during the following war. When the government did enter the process it did not have to cope with the émigrés as a separate group but could consider deploying the intellectual resources available in the country without much thought of the origin of the scholars.

Charles Weiner in "A new site for the seminar: the refugees and American physics in the thirties" provides an exceptionally clear analysis of the migration of the prototype scholarly discipline for the mid-20th century, physics. The group that brought the quantum mechanics revolution and nuclear physics to the New World was surprisingly small—about 100 refugees in all by Weiner's estimate. They passed the familiar milestones of the migration—loss of position in the German universities, temporary haven in England or elsewhere, assistance in some cases from the Emergency Committee in Aid of Displaced Persons, placement at an American university,

and the resumption of creative work with frequent communication among the erstwhile Europeans. Yet Weiner's thesis runs counter to the predominant theme of a unique intellectual migration impelled solely by Hitler. The "physics seminar" which made the revolution was a peripheral group even in the '20's, circulating internationally among a half-dozen European locations. This interchange of ideas by the temporary transporting of persons was in part financed by the Rockefeller Foundation and included an increasing number of Americans as the '20's wore on and the excitement of the new physics grew. American university departments were upgrading their physics before 1933, and the stream of European scientists was already circulating through Michigan, Illinois, and Princeton as well as Caltech and the University of California. After 1933 the traveling seminar of the European circuit began again, "but now in a new environment and on an expanded scale." Rigid separation between experimentalist and theoretician tended to break down, as did that between academic physics and industry. "By the end of the 1930's, just prior to America's involvement in the war, the refugee physicists were fully immersed in the scientific community and, in collaboration with their American colleagues, were making major contributions to their field" (p. 228).

In a footnote (p. 226) Weiner makes explicit a major revision of the concept of the intellectual migration.

The social environment for science and the organization of the scientific community in the United States in the 1930's suggest that the conditions for a "brain drain" already existed at that time, and that large numbers of European scientists would have emigrated to the United States even without the political upheavals of Nazism. Recent studies of the large-scale emigration of scientists from all over the world to the United States in the past two decades emphasize that they have come because of the greater opportunities for professional development and self-expression in their work, better pay, and better facilities available.

If the tides on the American shore indicate a longer period for the migration than the nightmare of 1933–1940, the tides on the European side may run deeper than the trappings of Weimar culture and the specific plight of the Jewish refugees. The one serious flaw in this book is that the title flaunts a terminal date of 1960, but no provision accompanies that extension to take in

the possibility of a German-speaking migration of scientists other than those of the Hitler years.

One of the editors, Donald Fleming, does try to get into the postwar period with his "Émigré physicists and the biological revolution." This article comes close to meaning the migration of ideas, and the term "émigré" could well mean refugees from physics rather than from Hitler. Francis Crick and Maurice Wilkins are almost as much a part of the movement as Max Delbrück and Leo Szilard. Author Fleming's perceptive interpretation of the intellectual history of DNA, the "indispensable fostering environment for Watson and Crick," has to stretch the ground rules laid down by editor Fleming for the book as a whole. To complete his roster of émigrés he has to add to Delbrück and Szilard the names of Erwin Schrödinger, who migrated only to Dublin, and Salvador Luria, whose place in the German migration seems no more appropriate than those excluded, notably Enrico Fermi and Emilio Segrè. By making intellectual sense of the story he tells, Fleming raises the question whether, given a reasonably free flow of information, the migration of ideas follows the paths of the migration of persons except under acutely agitated circumstances.

If the assumption is tenable that German scholarship could survive in individuals who endured the Hitler years under diverse insignia, then the concept of the intellectual migration from German-speaking Europe, 1930-1960, must include groups not considered or even mentioned in this volume. Operation Paperclip occurred before 1960, and the veterans of Peenemuende have not only become fully functioning professionals in the United States, they have helped write chapters of American history that belong in the same series of volumes as the Manhattan project.

The incompleteness of their attempt only emphasizes the accomplishment of Fleming and Bailyn and their authors in sketching some of the main outlines of a movement which has at once transformed the history of Europe, the history of the United States, and the history of scholarship. The volume contains countless deeply moving personal chronicles, which add up to an epic.

A. HUNTER DUPREE

*Department of History,
Brown University,
Providence, Rhode Island*

An Ecological History of a Culture Area

Mesoamerica. The Evolution of a Civilization. WILLIAM T. SANDERS and BARBARA J. PRICE. Random House, New York, 1968. xx + 266 pp., illus. Paper, \$3.95. Studies in Anthropology.

This book is a wonderfully stimulating preliminary statement that reflects the growing emphasis upon an ecological approach to the problems of prehistory. Although it will not win universal approval of either its total commitment to a single viewpoint or of many of its specific interpretations, it cannot be ignored by anyone dealing with Mesoamerica. In the preface, Sanders and Price announce their intention to be speculative and controversial. They have been both, and their efforts will have a profitable impact both upon those who look to ecology as the primary explanatory means to an understanding of cultural development and upon those who consider it only one among a number of necessary alternative approaches.

Mesoamerica is primarily a statement of the way in which environment, agricultural systems, and social systems interact in the formation of a civilization. The Mesoamerican culture area is used as a test case to demonstrate the applicability and operation of a set of principles and postulates. The result is not a standard culture history that attempts to give a rounded summary of facts and theories, but a view of Mesoamerican prehistory as it appears through a single analytical lens—that of cultural ecology.

The theoretical framework that structures Sanders and Price's viewpoint is evolutionary. They consider cultures to be adaptive subsystems reacting to biological and physical environments. Primary stimuli such as population growth necessitate readaptations that first affect subsistence systems and then relate outward to other facets of culture. Sanders and Price thus share Steward's concept of cultural core features directly related to subsistence adaptations surrounded by less directly pertinent, peripheral features. Responses, within the limits of environment and level of technology, may take a variety of forms, but the forms will differ in adaptive efficiency. The result of the operation of selective factors upon responses is the advance of culture through a series of levels of increasing complexity that culminates in the formation of state-level societies.

The vitality of the book, however,

does not spring from this fairly conventional theoretical structure, but from a series of recurring themes derived from it. These themes, each applicable to a number of different situations, are what seem to me to be most profitable to discuss.

Population growth is one of the processes repeatedly emphasized by Sanders and Price as an explanatory mechanism. It is presented as both a primary cause of change within the ecosystem and a measure of adaptive efficiency. Such diverse features as the early rise of the Olmec chiefdom and the increase of occupational specialization in areas of growing urbanization are convincingly related to demographic pressures.

Competition and cooperation are viewed as "derivative processes" that present alternative responses to demographic stimuli. Although the theoretical section discussing these responses is regrettably short, competition, at least, is an important explanatory principle in the substantive section of the book. To emphasize the effects of competition, both within and between societies, is a valuable contribution. Many of the applications of the principle are effective, but there are times when it seems to be one of those ever-present mechanisms that can be relied upon for explanation when all else has failed.

The book provides a thorough analysis of the contrast between the highland and lowland sections of Mesoamerica. The differing ecological possibilities of the two zones lead to distinct agricultural adaptations and ultimately to two kinds of civilization. True urban civilization results from the intensive agricultural systems of the highlands, while lowland swidden agriculture provides a stimulus toward a relatively rare form, nonurban civilization. The discussion of the highland system strikes me as more insightful than that of the lowlands, but this is simply a reflection of the fact that almost all of the recent wave of ecologically oriented research projects have concentrated upon the highland zone.

Finally, to explain the rise of state-level societies, the authors turn to two mechanisms, irrigation and economic symbiosis. Since it was first proposed by Wittfogel, the "irrigation hypothesis," suggesting that the need to organize and control irrigation systems calls forth centralized authority systems, has had a