the school is an outgrowth of a community of families that is in direct interaction in everyday life and shares common values. Coleman and Hoffer label this sense and presence of community with the concept "social capital." Just as physical capital is created by working with materials to create tools that facilitate production and human capital is created by working with persons to produce skills and capabilities that make them more productive, so social capital is a quality of inter- and intra-generational relationships in functional families and communities that facilitates individual productivity. Social capital is a necessary condition for the effective operation of schools.

The authors decry a decline in the embeddedness of youth in these enclaves as evidenced in the decreasing strength of social institutions, the declining presence of fathers and mothers in households, and the increasing psychic involvement of youth with the mass media. Given the erosion of social capital outside the school, the authors conclude with recommendations on what educational decisions families should make, what policies school principals should promote, what superintendents should do, and what state and federal policy should support. The common theme in the recommendations is that at every level the store of social capital must be enhanced.

Public and Private High Schools: The Impact of Communities is a provocative contribution based on the best data available to inform an ongoing public debate. The book is readable, though there is occasional vacillation between technical writing and popular prose. Critical readers will miss discussion of the technical characteristics of the data, and leisure readers may occasionally stumble over statistical formulas and related exotica. The book is rich in conjecture and hypotheses that will fuel further investigation and debate. Elsewhere Coleman has taken the position that the role of social policy research is not to resolve conflicts but to inform the issues and to raise the content level of the debate. This book accomplishes that purpose.

LUTHER B. OTTO
Department of Sociology and Anthropology, North Carolina State University, Raleigh, NC 27695-8107

The Testing Movement and Its Founders

Psychological Testing and American Society, 1890–1930. MICHAEL M. SOKAL, Ed. Rutgers University Press, New Brunswick, NJ, 1987. xvi, 205 pp. $28. Based on a symposium, New York, May 1984.

The multiple-choice test, observes Franz Samelson in this volume, "is as American as the assembly line." For modern Americans are habituated to taking tests—intelligence tests and others constructed according to psychologists' principles. How was this pattern effected, and what have been its ramifications? Conventional historical accounts point to events of the World War I era. Led by American Psychological Association president Robert Yerkes, psychologists persuaded the wartime army to commission them to devise multiple-choice intelligence tests, which were administered to over 1.7 million recruits. The general public accepted the psychologists' valuation of the tests and their data analysis: the tests measured innate talents, not learned skills important in a particular culture; the average citizen, represented by the average soldier, was rather dull, and in the aggregate blacks and immigrants were inferior to native-born Americans of Western European stock. Having demonstrated the utility of their services during the war, psychologists gained professional status after it, securing markets for their services in education, industry, and therapeutic agencies, and persuaded Congress to pass the 1924 Immigration Restriction Act, designed to exclude persons from ethnic groups supposedly proven inferior. Some historians add to this narrative the argument that when the schools adopted intelligence tests to sort students for differential processing—responding to the exigencies of the development of mass education—they became the agents of transmission of class privileges from one generation to another: schools grant the credentials necessary to membership in the middle class, and intelligence tests have served to label disadvantaged youths uneducable, fit only for adult careers performing joyless labor.

The authors of this collection join other recent revisionists in recognizing that we owe our exaggerated notions of the importance of psychologists' research for policymakers to the psychologists' own campaign for professional advancement. Indeed, the army found little merit in their work, and their findings constituted but one of the many reasons Americans found for immigration restriction in the 1920s. I suspect that we have been willing to credit psychologists' misrepresentations because our own experiences as educated persons have affected our historical perceptions: the College Entrance Examination Board's multiple-choice Scholastic Aptitude Test, administered to prospective college students since 1926, and its objective achievement tests, administered since 1942, loom large in the memories of members of the middle class, and, as Samelson notes, students and adults recently surveyed generally believe such tests to be fair and consider the personal consequences of test-taking to be positive. But scholars of social stratification disagree about the importance of education per se in the reproduction of class privilege. And as Samelson cautions, we have inadequate evidence to specify the direct and indirect results of testing—its impact on pedagogy and its effects on American social structure.

Questions of its impact aside, the testing movement was sustained because it addressed issues of concern to many Americans during the Progressive era. As Sokal observes, it had precursors throughout the 19th century, when Americans seeking guidance had been advised by practitioners of folk psychology—phrenologists and others who read character from physical traits. Folk beliefs were systematically translated into scientific terms during the period covered by this collection, when the development of tests to gauge individuals' merits by objective standards was emblematic of emergent national culture; indeed, this period's goals of centralization of authority and efficient use of all manner of resources were premised on the existence of universal standards by which individuals and policies might be judged. Furthermore, as Henry Minton indicates in his essay on the Stanford psychologist Lewis Terman, the IQ test had broad appeal because it could be advertised as a vehicle for the realization of the American ideal of equal opportunity for all. Since Terman dismissed environmental factors as irrelevant to explanation of the correlation between IQ and socioeconomic status, his interpretation of test results admitted the comfortable belief that American society approximated a meritocracy; his views appealed to such powerful scientific patrons as the Rockefeller Foundation, which supported his work to adapt the army tests for school use.

Nevertheless, psychological opinion cannot be reduced to a reflection of cultural biases general to—or dominant in—American society. This collection is distinguished by the attention the authors devote to specification of distinctive spheres of psychological work. The academic Yerkes, for example, pursued research in comparative psychology that was irreconcilable with the assumptions and methods of the conventional IQ test, although his fellows in the Committee on Psychological Examination of Recruits persuaded him to suspend his reservations

about the test during the war. As James Reed's essay indicates, Yerkes wanted to determine the role of consciousness in the evolution of human and other species and therefore considered critical the questions Terman disregarded; if the psychologist's object was analysis of his subjects' capacity to learn and judge, he could not evaluate their test responses in ignorance of the experiences that shaped them—experiences derived from socioeconomic circumstances—and he would regard the scores of subjects tested only once as meaningless, since he could plot their learning curves only from repeated trials.

Does Yerkes's willingness to compromise his theoretical rigor while he was working as an applied psychologist illustrate a generic distinction between academic and applied research? The practical career of Walter Dill Scott also seems to demonstrate this distinction. As Richard von Mayrhauser makes clear, Scott was not concerned to determine whether those qualities termed "intelligence" represented a single trait or diverse characters or whether his vocational tests measured inherited aptitude or learned skill, for resolution of these issues was irrelevant to his goal of constructing predictive measures. Nevertheless, as Leila Zenderland and Hamilton Cravens show in their essays on Henry Herbert Goddard, the applied psychologist may be an agent of intellectual innovation, and his workplace may serve as a laboratory in which theories are tested and dismissed. Goddard was to become an academic, but he introduced the IQ test developed in France by Alfred Binet to America while he was working with children institutionalized because they were judged ineducable or delinquent. His charges presented a bewildering array of symptoms, and Goddard initially believed that he had effected diagnostic order by tracing all pathologies to hereditary mental defect; experience convinced him that intellectual weakness was not necessary to the etiology of moral disorder and, moreover, that delinquency was the product of heredity and environment.

The book gives less attention to public debates over psychologists' work than to disagreements within psychology. We do learn, to give some examples, that such prominent laymen as Walter Lippman opposed the IQ test because it measured privilege, not heredity (as did such psychologists as William Bagley), that many classroom teachers considered multiple-choice tests to preclude meaningful education, that the old-guard administrators of institutions for wayward youths judged the rule of psychologists excessively permissive, and that psychologists frequently clashed with physicians when they made policy prescriptions. More detailed evidence of this sort might give us a better appreciation of the impact of psychology on society, for we can assume that those who objected to it were often (if not always) those who felt their interests threatened. It would be unfair, however, to hold this book to a standard no other history of psychology has achieved.

In sum, this is a fine book, whose authors illuminate both the social context of ideas and the process of intellectual discovery. Furthermore, it represents a triumph of editorial organization, a collection of essays by diverse hands that in the aggregate constitute a sustained narrative and a consistent argument.

HENRIKA KUKLICK
Department of the History and Sociology of Science, University of Pennsylvania, Philadelphia, PA 19104