

Sociologists acquire data through the direct or indirect questioning of individual respondents more than from any other single source. So long as their Soviet colleagues obtain information in the context implied by this passage, one is bound to suspect that the responses are not likely to be reliable—and that may well be the fundamental obstacle to the development of sociology under Soviet conditions.

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Processes of Analysis

Introduction to Real Analysis. CASPAR GOFFMAN. Harper and Row, New York, 1966. 174 pp., illus. \$7.50.

A first course in the calculus develops intuitions about differential phenomena in mechanics and geometry. These intuitions are useful if two conditions are satisfied: (i) some reality is associated with the concepts of instantaneous rates of change, of the content of figures with irregular boundaries, of extreme values, and of approximation; and (ii) simple cases of the phenomena can be computed. It is too much to expect that the subtleties of careful mathematical exposition of these ideas will be mastered. Since the presence of singularities in physical situations is still beyond the student's experience, there is little motivation for a precise study of limiting processes.

The situation changes with the second course. Whether the student now has primarily mathematical interests or anticipates the use of mathematics in other fields, the methods of analysis must be more clearly understood. Physically significant singularities do exist; the computing machine has made the nature of a convergence process a very practical matter; the spread of statistical models in all fields makes analytical probability a basic tool. Goffman's text provides a judicious choice of topics and an agreeable style of exposition with which to make the shift toward sophistication. Before uniform convergence is introduced the functions $nx/(1 + n^2x^2)$ are shown to converge non-uniformly to 0, and the principle of condensation of singularities is exhibited. The theorem on uniform approximation of continuous functions by polynomials is reached via the famous Bernstein polynomials, and a page is

devoted to describing their probability properties. The last chapter gives an account of Fourier series for Riemann integrable functions in the perspective of orthonormal series. It concludes with Fejer's theorem on the uniform convergence of the means of the Fourier partial sums for a continuous function.

Along the way the author develops the standard special functions and their functional equations, functions of bounded variation and the Stieltjes integral, power series, including Abel's theorem and one of its converses, and the fundamental results of the differential and integral calculus. The real number system and its topology are disposed of in 26 pages. The exhibition of analytical pathology for its own sake is avoided. There are a large number of exercises, some of which extend the main line of the text.

There is solid fare for a semester course here, and a nonmathematician who is curious about how the calculus lives at home might find some pleasure in the book.

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Young Emissaries

Volunteers for Peace. The First Group of Peace Corps Volunteers in a Rural Community Development Program in Colombia, South America. MORRIS I. STEIN. Wiley, New York, 1966. 272 pp., illus. \$7.95.

Four months after President Kennedy established the Peace Corps on 1 March 1961, the first contingent arrived at Rutgers University to be trained by CARE to work with Colombian villagers in a program of community development. Morris I. Stein tells the story of these 62 young men—why they volunteered, how they were screened and trained, what they accomplished on their missions, and how they were affected by their experience—and discusses the usefulness of psychological measures in predicting their performance.

The book pioneers in several ways. U.S. commitments to developing nations have made the "overseas American" a subject of increasing concern. Anthropologists have documented attempts to introduce "western" innovations into traditional societies. But aside from a dozen interview surveys of returned Americans, little quantitative research on such agents of change

has been published. Stein took measurements of the Peace Corps group six times: at the beginning of training, after six months in the field, after one year in the field, on completion of service, six months later, and one year later. Around these statistics, enriched with quotations and case histories, he builds an account that is coherent and scientifically sound.

Especially intriguing is the promise of a personality typology for improving the selection process and predicting effectiveness. The personality types were derived from self-descriptive rankings of 20 paragraphs based on "needs" in Murray's system of personality—achievement, affiliation, dominance, order, and so on. By a "Q-factor analysis," nine-tenths of the trainees could be categorized in five main types. At the end of two years, three supervisors who had close contact with the volunteers and their communities rated the volunteers' effectiveness. The "action-oriented" type, surprisingly, scored the lowest—significantly lower than the "intellectually oriented" or the "socially oriented." Five of the seven action-oriented volunteers had frequently had problems that needed administrative intervention; not more than one-fourth of the other types presented such difficulties. Yet at the outset, the Final Selection Board had accepted all trainees of the action-oriented type and had rejected one-fifth to one-third of the other groups. Why the discrepancy? The Selection Board, Stein suggests, may have been impressed with the achievement orientation and self-confidence of this type. In the field, however, the essential task was to help others organize so as to achieve their own goals, and the action-oriented person might lack the patience to share control with others.

The data also suggest the typology as a "moderator" variable (D. R. Saunders) to improve selection. For the total group, only the letters of reference and the Final Selection Board's overall rating correlated significantly with effectiveness in the field. But within certain types, ratings by instructors and psychiatrists as well as test scores correlated significantly with performance. Knowledge of Spanish (instructors' rating) showed no correlation with effectiveness. More important, Stein suggests, was a sincere desire to communicate.

Another pioneering aspect of the study is the plotting of changes over time. The author sees the volunteers