as an important factor and applies appropriate treatment, the reader will find this book a very valuable guide to the evaluation of equilibrium constants.

LEO BREWER

Department of Chemistry, University of California, Berkeley

## Social Patterns

Hualcan. Life in the highlands of Peru, William W. Stein. Cornell University Press, Ithaca, N.Y., 1961. xxi + 383 pp. Illus. + maps. \$6.

This community study of the Indian estancia of Hualcán (in the Peruvian department of Ancash) is a valuable addition to Adams' work on Muquiyauyo and Fals-Borda's on Saució, the only other recent monographic treatments in English of highland communities. Its avowed purpose, as part of the Cornell-Peru Project, is to provide a base line for studies of social and cultural change in the Callejón de Huaylas and to assess the human potential of Hualcán. On the basis of approximately six months' field work, supplemented by library research on theoretical and comparative materials, the author treats economy, social relations, community and religious organization, and prospects for change. Although coverage of cultural activities is extensive, the discussion of field methods makes it clear that much of the data must have been secured merely at the level of informants' verbal description. In this regard, one may well question the representativeness of information obtained during such a short period by a non-Quechua speaker working in an area noted for the reticence and verbal deviousness of its population toward non-Indians. Also problematical under such circumstances is the correspondence between behavior and its verbalizations. (The same problems of sampling and correspondence, of course, plague every analysis of field data, although often to a lesser extent.)

Stein's organization of the analysis leans heavily on the structure of the Hualcán family and the extensions of that structure and associated sentiments into a wider social sphere, particularly in matters of individual and collective motivation. Socio-psychiatric arguments, although often employed analogically, are basic. Some of these ring true (for example, conceptualization of the patron as a parental figure); some seem

a bit farfetched (for example, the Indians' transference of an evil parental image to the whole mestizo class). Psychological instruments exist which could be used to test such hypotheses, and they might well have been employed. These remarks are not so much critical as cautionary. Like any other theoretical framework, the extension of individual psychic process and family structure to analysis of a total sociocultural entity asks only certain questions of the data and, in consequence, obtains only certain answers. Whether the orientation here employed is at all adequate for the analysis of larger social systems is beyond the scope of this review, but in any case I feel that psychological hypotheses should be tested by psychological means and not employed in humanistic description.

More than most authors of community studies, Stein considers the crucial problem of the nature of social integration and solidarity beyond the level of the family or of extrafamilial, dyadic relationships. Although the specification of extrafamilial group relationships is not his central problem, Stein's treatment of it makes an important contribution to the study of peasant society. His empirical data are also a welcome addition to the Englishlanguage literature on Andean communities; of particular interest in this regard are his discussion of the "pseudomoiety" system operating in Hualcán and his description of kinship structure. His remarks on the latter, describing a combination of affiliation with father's and mother's patrilineages plus bilateral reckoning of a type of kindred, indicate the possibility of a new approach to the analysis of ayllu organization.

Apart from the cautions noted, *Hualcan* is altogether an excellent book and should be of interest not only to the specialist in Andean culture and peasant society but to the educated general reader as well.

E. A. HAMMEL

Department of Anthropology, University of California, Berkeley

## New Books

## Mathematics, Physical Sciences and Engineering

Absorption, Distillation and Cooling Towers. W. S. Norman. Wiley, New York, 1962, 487 pp. Illus. Plates. \$11.50. Combustion, Eighth International Symposium, Papers. Published for the Combustion Institute. Williams and Wilkins, Baltimore, Md., 1962. 1192 pp. Illus. \$31. Papers (124 contributed and 9 invited) presented at the symposium, which was held at California Institute of Technology, 28 August to 2 September 1960.

Dictionary of Commercial Chemicals. Foster Dee Snell and Cornelia T. Snell. Van Nostrand, Princeton, N.J., ed. 3, 1962. 723 pp. \$12.50.

Electromechanics. A first course in electromechanical energy conversion. Hugh Hildreth Skilling. Wiley, New York, 1962. 490 pp. Illus. \$10.

Elementary Metallurgy and Metallography. Arthur M. Shrager. Dover, New York (reprint of ed. 2). 1961. 401 pp. Illus. Paper \$2.

Elements of Chemistry. Raymond B. Brownlee, Robert W. Fuller, William J. Hancock, Michael D. Sohon, Jesse E. Whitsit. Revised by Paul J. Boylan. Allyn and Bacon, Boston, Mass., ed. 2, 1962. 704 pp. Illus. Plates. \$5.68.

Elements of Modern Physics. Alfred T. Goble and David K. Baker. Ronald, New York, 1962. 506 pp. Illus. \$8.75.

Experimentation. An Introduction to Measurement Theory and Experiment Design. D. C. Baird. Prentice-Hall, Englewood Cliffs, N.J., 1962. 198 pp. Illus. Trade ed., \$6; text ed., \$4.50.

Extraction of Signals from Noise. L. A. Wainstein and V. D. Zubakov. Prentice-Hall, Englewood Cliffs, N.J., 1962. 394 pp. Illus. Trade ed., \$14; text ed., \$10.50.

Flight Handbook. The theory and practice of powered flight. W. T. Gunston. Aero Publishers, Los Angeles, Calif., ed. 6, 1962, 338 pp. Illus. Plates. \$7.50.

Fourier Series. Georgi P. Tolstov. Translated from the Russian by Richard A. Silverman. Prentice-Hall, Englewood Cliffs, N.J., 1962. 346 pp.

Fundamentals of Semiconductor and Tube Electronics. H. Alex Romanowitz. Wiley, New York, 1962. 632 pp. Illus. \$8.25.

Geologie von Paraguay. Hannfrit Putzer. Borntraeger, Berlin, 1962. 194 pp. Illus. Plates. DM. 78.

High Magnetic Fields. Proceedings of the International Conference on High Magnetic Fields, Massachusetts Institute of Technology, 1–4 November 1961. Henry Kolm, Benjamin Lax, Francis Bitter, and Robert Mills, Eds. M.I.T. Press and Wiley, New York, 1962. 766 pp. Illus. \$15. The conference was sponsored by the Solid State Sciences Division of the Air Force Office of Scientific Research.

Inertial Guidance. George R. Pitman, Jr., Ed. Wiley, New York, 1962. 493 pp. Illus. \$18.50.

Integrated Basic Science. Stewart M. Brooks, Mosby, St. Louis, Mo., 1962. 507 pp. Illus. \$7.85.

Lecture Notes on the Many-Body Problem. Christian Fronsdal, Ed. Benjamin, New York, 1962. Paper, \$9.75. "Proceedings" lecture notes of the First Bergen International School of Physics, held from 23 May to 3 June 1961, under the auspices of the University of Bergen.

Machine-Independent Computer Programming. Maurice H. Halstead. Sparton, Washington, D.C., 1962. 282 pp. \$6.50.