constraints, each of which requires that the feasible point be a member of a union of faces of P. This type (facial disjunctive programs) is appropriate for the study of zero-one integer programs. This area is briefly described in the last section of Chapter V and in Chapter VII (see [1, §6] and [5]–[7]).

I am unhappy with the writing style. Sentences such as "Among other applications, the multiple choice problem is of significant importance." and "To begin with, let us make the following interesting observation." are irritating. The first chapter assumes that the objective function is lower semicontinuous, but the only objective functions treated later are linear. Many of the comments in the "notes and references" sections repeat statements made in the "introduction" sections.

An alternative approach to the subject is the sequence of papers:

[1] E. BALAS, *Disjunctive programming,* in Discrete Optimization 2, Hammer, Johnson, and Korte, eds., North-Holland, Amsterdam, 1979.

[2] C. BLAIR AND R. JEROSLOW, *A converse for disjunctive constraints;* J. Optim. Theory, 25 (1978), pp. 195–206.

[3] H. SHERALI AND C. SHETTY, *On the generation of deep disjunctive cutting-planes;* Naval Research Logistics Quarterly, 27 (1979), pp. 453–475.

[4] R. JEROSLOW, *Cutting-plane theory: disjunctive methods,* Ann. Discr. Math., 1 (1977), pp. 293–330.

[5] C. BLAIR AND R. JEROSLOW, *Extensions of a theorem of Balas,* Tech. Rep., College of Management, Georgia Institute of Technology.

[6] R. JEROSLOW, *A cutting-plane game for facial disjunctive programs,* SIAM J. Control Optim., 18 (1980), pp. 264–81.

[7] C. BLAIR, *Facial disjunctive programs and sequences of cutting-planes,* Discr. Appl. Math., 2 (1980), pp. 173–179.

CHARLES BLAIR
University of Illinois

Aspects of Contemporary Complex Analysis. Edited by D. A. BRANNAN and J. G. CLUNIE. Academic Press, London, 1980. xiii + 572 pp. $108.00. Proceedings of a NATO Advanced Study Institute held at Durham, UK, July 1–20, 1979.

This is an excellent book for people who would like to become better informed about one or more of the specialized fields in modern (one-variable) complex analysis. Since it consists mainly of lectures by eminent specialists, for other specialists (together with a list of open problems and notes on problems from preceding conferences), it is unlikely to be very helpful to applied mathematicians. However, if you have encountered off-hand references to mystifying terms, and wondered what they might mean, you can look here with a better chance of success than if you were just to ask a randomly chosen complex analyst.

R. P. BOAS
Northwestern University

OTHER BOOKS RECEIVED

Note. All books received are listed here. Some of them will be reviewed at a later date.

Asymptotic Efficiency of Statistical Estimators. By MASAFUMI AKAHIRA and KEI TAKEUCHI. Springer, New York, 1981. v. + 242 pp. $14.80. Paper.

Applied Functional Analysis. By A. V. BALAKRISHNAN. Springer-Verlag, New York, 1981. xiii + 373 pp. $34.00. Second edition.

Global Lorentzian Geometry. By JOHN K. BEEM and PAUL E. EHRLICH. Marcel Dekker, New York, 1981. vi + 460 pp. $45.00.