BOOK REVIEWS

is not likely to be a book that the average mathematician would want on his shelf. Every chapter has a bibliography. However, there are some inaccurate references, e.g., an unappropriate quotation on p. 384 (they quote only one author of a statement proved in a joint work in Amer. J. Math. **100** (1978), 727-746). Students who have finished a first course in commutative algebra and are interested in this subject can profit a great deal in studying this book.

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BULLETIN (New Series) OF THE AMERICAN MATHEMATICAL SOCIETY Volume 21, Number 2, October 1989 © 1989 American Mathematical Society 0273-0979/89 \$1.00 + \$.25 per page

Buildings, by K. S. Brown, Springer-Verlag, New York, Berlin, Heidelberg, 1989, viii + 215 pp., \$39.00. ISBN 0-387-96876-8

Lectures on buildings, by M. A. Ronan, Perspectives in Mathematics, No. 7, Academic Press, Orlando, 1989, xii + 216 pp., \$27.95. ISBN 0-12-594750-X

Buildings were invented by Jacques Tits to provide a unified geometric setting for the study of groups of Lie type, especially the "exceptional" ones. They are (usually) simplicial complexes, formed by splicing together copies of the "Coxeter complex" associated with a Coxeter group (such as the Weyl group of a simple Lie group). After a while the subject teems with architectural language: chambers ("rooms"), apartments, walls, panels, galleries, blueprints, foundations, etc. But Tits is no ordinary architect. His buildings have some of the flavor of M. C. Escher's drawings: e.g., any two apartments are required to share at least one chamber.

Over the years buildings have proven their conceptual usefulness in a broad spectrum of group-theoretic and homological investigations, and have been applied and generalized (by Tits and others) in a number of interesting directions unforeseen in the earlier work. See [7], for example.