The infinite dimenisonal case is treated in Chapter 3. The author describes it as the "core of the book." The general saddle functional is introduced together with the necessary background in applied functional analysis. The theory is illuminated by model problems and examples.

Chapter 4 describes some extensions of the basic theory, and Chapter 5 is a wide-ranging account which it illustrates in the previous chapters in selected topics in the mechanics of fluids and elastic and plastic solids.

According to the author "the treatment is designed to be accessible in the first three chapters to final year undergraduates in mathematics and science" (in British Universities) which is just attainable with a careful selection of material. His second set of intended readers are "postgraduates and research workers in those subjects." The author has succeeded in the difficult task of achieving both these aims; he has made the subject very accessible and the book is a pleasure to read. It should interest researchers in a wide variety of applications of mathematics and particularly those who are looking for new approaches to seemingly intractable problems. It contains a wealth of representative examples and applications which the reader can dip into, and study and develop for his or her own particular interests.

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Torsion theories, by Jonathan S. Golan. Longman Scientific and Technical, Essex, and John Wiley and Sons, New York, 1986, xviii + 651 pp., $175.00. ISBN 0-582-99808-5

Torsion Theory traces its origins back to two independent developments in the 1950s. On the one hand was the generalized theory of localization of noncommutative rings being worked out by Johnson, Utumi, Lambek and others. On the other hand was the theory of localization of categories originated by Serre and first formalized by Grothendieck in [2]. It was not long before the connections between these two ideas were noticed and the theory synthesized, the most notable contribution here being that of Gabriel [3]. By the early 1970s this generalized theory of localization of rings and categories had reached a fairly mature stage and a number of good accounts of the subject appeared (for instance, [6, 7]).

For those unfamiliar with the subject, the idea is the following. A torsion class is a full subcategory of the category R-Mod of all modules over