

emphasises human action and the ways in which science and technology are used as resources by groups, such as rehabilitationists, to organise the market for their skills—the 'market' model. It is important to note the different importance that the two models accord science and technology in historical change. On the one hand, the 'natural' model emphasises their centrality to historical change. On the other, the 'market' model suggests that science and technology may be social products. As you might guess, Gritzer and Arluke are not interested in the nuts and bolts of the practice of rehabilitation medicine. Instead they seek to show how physiatrists and their forerunners have carved out a niche for themselves in American medicine.

After the first chapter Gritzer and Arluke go on to produce a readable history of American rehabilitation medicine. It begins in the late 19th century and traces the political struggles of physiatrists and physical therapists and their predecessors through to the 1980s. Physiatry's 19th century roots, they suggest, are in electrotherapy, and the book traces the emergence of a collective specialist identity among electrotherapists. Subsequently, the book examines the effect of World War I demands for the rehabilitation of wounded soldiers on the development of the specialty. Later chapters trace conflicts between physical and occupational therapy, and the ways in which physiatry gained official specialty status during World War II, imposing its control over lay physical therapists. Thus by mid-century, Gritzer and Arluke suggest a medically controlled division of labour had developed, with relationships and tasks defined by formal agreements and licensing laws. Subsequently, they examine the ways in which physiatry has attempted to maintain its position at the top of the division of labour in rehabilitation medicine.

Within the limitations of this type of history Gritzer and Arluke have produced an account that far exceeds anything that has been written to date on the subject, either in the United States or elsewhere, and it should serve as the standard account for some time to come. But note the words 'roots' and 'development'. These are Gritzer and Arluke's own, and they point to a major difficulty in their attempts to distance themselves from a natural growth model. By writing of the 'roots' of rehabilitation medicine, or of its 'development' Gritzer and Arluke reintroduce the very natural, biological metaphors or models of growth from which they wish to distance themselves.

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**Positive Health Guides: Avoiding Osteoporosis.** A Dixon, A Woolf. (Pp 151; £5.99.) London: Macdonald, 1989. ISBN 0-356-15445-9.

Rheumatologists no longer limit their attention to the joints and increasingly realise the complexity, importance, and attraction of the diseases which affect the bones between them. This book by Dixon and Woolf, both rheumatologists, on a common skeletal disease, is a clear example of this change. It is simple, straightforward, and useful. It is uncluttered with controversial metabolism, and is ideal for present and potential sufferers from osteoporosis, for whom it is intended.

Osteoporosis is not a new disease. What is new is the fuss made about it. With the aging population many more people (especially women) will live long enough to fracture. To an elderly woman fracture of the femoral neck is a catastrophe; it may be fatal, it certainly shortens life, and it will disable. On an economic basis such fractures cost millions of pounds a year. Current opinion states that these fractures are largely due to osteoporosis. If this is only partly true, prevention and treatment of osteoporosis are astonishingly important and are sufficient justification for this book.

Within 150 pages (and for £5.99) the authors define osteoporosis and its causes, consider who is at risk, and outline strategies for prevention and treatment. They give practical

advice; and they devote 10 pages to sufferers' questions and answers. Within the limits of description and space which the authors have presumably set themselves I found a lot to commend and little to criticise. My main problem came on the opening page where there is the statement that 'this increased fragility of bone is what is meant by osteoporosis'. Such an offering might well throw the simple reader into confusion. Osteoporosis is exactly what it says and that is porosis of the bones. It is only one cause of bone fragility. Indeed a major problem facing those people trying to relate osteoporosis to fractures is that there is not a close association between them. This is because the fragility of bones is not solely determined by the reduction in its amount but also by changes in its composition, architecture, and by many other factors, known and unknown. Excluding this opening statement the book is non-controversial (so far as this is possible in such an emotive field) and may in my opinion be enthusiastically recommended to patients and non-patients alike, who will appreciate and benefit from its advice. The medical reader should note that this is not the only book on osteoporosis written by these authors and would be well advised to spend his or her valuable time on a more detailed discussion of the problems of osteoporosis.

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**Common Vertebral Joint Problems.** 2nd ed. Gregory P Grieve. (Pp 804; £65.) Edinburgh: Churchill Livingstone, 1988. ISBN 0-443-03365-X.

This volume has the cachet of a magnum opus. Although superficially similar in appearance, it is unrelated to a large multicontributor volume—*Modern Manual Therapy*—edited by the same author.

At 2.5 kg it is a heavyweight, comprising about 800 pages of double column text and 2505 references, it is strongly bound, and authoritatively presented. The author is a physiotherapist with an international reputation for teaching about the spine. The text evidently encapsulates a lifetime of practice and teaching. Does the book live up to expectations?

A principle declared in the preface is that therapists should be acquainted with all aspects of science related to their own fields of expertise. This sets out the motivation for producing detailed sections on anatomy, aetiology, pathology, clinical features, and investigations. Physiotherapy techniques of examination and treatment are covered in detail. Techniques adopted by doctors, surgeons, and those in fringe medicine are by no means neglected. I found myself lost in admiration at sections describing the anatomy of vertebral joints, the circulation of the spinal cord, and pathology, to list but a few. These are all topics of fundamental importance but are often neglected in teaching. I am sure physiotherapists will feel the same about the detailed sections on examination and treatment.

While I have had the book I have repeatedly done spot checks to see if my current queries were answered—or to discover loopholes. Nothing was found lacking. This checking led, however, to a bone of contention—the index. This failed to list nearly everything in which I, as a rheumatologist, was interested. For example, rheumatoid arthritis, chemonucleolysis, magnetic resonance imaging: none is indexed, though all are covered in the text. True, one could find the section by referring to the contents and then flicking through the subheadings, but a better index would be a boon.

The reference list is huge and helpful, but I could not help noticing a few inaccuracies (especially as one related to a publication of my own). Another is the failure to differentiate the two volumes of the Cyriax *Textbook of Orthopaedic Medicine*.

For physiotherapists interested in the spine this is a veritable vade-mecum. For similarly interested rheumatologists it is an important book to which one should have access.

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