



Book Review

Biotensegrity, the Structural Basis of Life,
Graham Scarr. 2nd ed. Handspring Publishing
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The author takes his readers onto a journey into the world of tensegrity. A world which turns out to be much vaster and more diverse than the reader could have ever have imagined.

This is a book of first principles: In the initial chapters, the author Graham Scarr explores geometrical foundations – two dimensions become three, and triangles develop into icosahedrons or helices. Even readers who so far lacked an interest in geometry will be astonished as to how this intelligible lesson in morphology quickly becomes conspicuously relevant to living organisms. Nature employs energy-efficient and light designs that have close-packing properties and can be organised hierarchically. Tensegrity structures are, in fact, a physical representation of invisible forces: Tension and compression, pull and push, are ubiquitous in nature. In living organisms, the dynamic balance between these forces represents the basis for movement. In this way, simple tensegrity models convey a more realistic biomechanical understanding. *Islands of compression floating in a sea of tension*; on every level, from molecular interactions to musculoskeletal anatomy.

Whilst Graham Scarr is cautious not to provide simplified answers, the potential significance for manual therapy is apparent in every chapter. The author's reservation to draw comparisons to hands-on work enables the reader to take ownership of these physical principles,

and to explore their relevance to his or her work themselves. As an osteopath, scientist, and artist, Scarr's understanding of bodily health influences his discussion of, for example, spinal mechanics, the temporomandibular joint, and even the cranial vault. Therein lies the beauty of biotensegrity: It is of such fundamental nature that it may permeate every level of a manual therapist's way of working. Tensegrity provides a different way of thinking about the human body which is enriching in both theory and practice.

This edition is a noticeable upgrade from the first, providing an abundance of coloured images that represent a worthy collection in themselves, as well as more detail on some of the physical principles. The author's style of writing keeps the reader engaged throughout, making complex ideas easy to grasp, but also allowing for skim reading if it becomes a little too geeky. Published only four years after the first edition, which by the way has been translated into several other languages including Korean, this book bears testimony to many a profession's need for a better understanding of human form and function. Biotensegrity replaces traditional biomechanics which are based on stacking of compression forces and movement by levers. As such, tensegrity has made its way into the introductory chapters of nearly every recent osteopathic book. However, it is Graham Scarr's merit to have provided a comprehensive and highly intelligible source of reference for anyone working with the human body.

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