Your Inner Fish: A Journey into the 3.5-Billion Year History of the Human Body

Neil Shubin

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The ideal of design is perfection - an object so well put together that the alteration of the slightest detail ruins the overall effect. *La Gioconda*. More commonly, design can be classified as "organic". A simple concept embellished by contingency. Make do with what you have available. Sometimes contingency can lead to its own beauty - more often it's a mess.

In this little book, Neil Shubin provides an overview of a number of perspectives by which one can trace the evolutionary history of the human body from the earliest single-cell (despite the title) organism. The author takes us on a somewhat breathless romp through evolutionary anatomy and physiology in what amounts, often, to a textbook update. He opens *Your Inner Fish* with an excellent description of the frustrations, triumphs, luck and hard work of paleontological field exploration. In the chapters that follow he combines humor and expertise in detailing the evolutionary paths to human appendages, the parallels between anatomy and genetics, between physiology and biochemistry. Along the way he finds time to discuss the evolutionary implications of such diverse topics as hiccups and hernias.

Like S. J. Gould, Shubin comes up short in making the fundamental connection between architecture and phylogeny. Why not, in the assembly of limbs, 5, many, 2, 1 or even 4, 1, 3, 2 instead of 1, 2, many, 5? Is the order inevitable or accidental? Is ET a cute joke or a reasonable alternative?

The book could well have been titled "A brief introduction to human comparative anatomy", but that would not have been very sexy. However, "brief" should have been appended to the title, for that would have helped to soften the books major flaw - too much is attempted in too little space, especially when one takes into account a bit too much repetition. The author does redeem himself to some degree with an excellent set of annotated notes that includes a solid selection of additional readings.

Shubin deserves kudos for taking on such a daunting task and coming up with a fine book that is well worth the read and an excellent starting point for further exploration.

*Richard R. Pardi* Environmental Science *William Paterson University*