

New Titles

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the relationship between genes and phenotypes is not simple.

Minelli points out the historically different research objectives of the fields of development and evolution. He feels that the comparative spirit was reinvigorated initially by the enormous success of the comparative genetic and developmental studies by the model organism communities, and it now must be kept alive by an evolutionarily oriented view of the development of form. However, the broad coverage of many “evo-devo” fundamentals (e.g., modules, homology, segmentation, and the like), and perhaps the unusual nature of his views, contributed to my sense that Minelli’s coverage of the topics was a bit fragmented and lacked overall coherence. I wasn’t sure exactly what the central message book was intended to be. For example, the concept of morphological modules is raised in chapter 12, but not brought into the discussion of somatic versus visceral components of animals (chapter 9), or gene networks and their relation to phenotypic features (chapter 4), or the competitive situation that most likely exists in the development of larval versus adult organs within an organism (a fascinating chapter). Another example of the book’s discontinuity is promoting a combinatorial (rather than an all-or-nothing) view of homology but not integrating this into some of the other discussions on segmentation. That said, it is a tall order—and we lack the knowledge—to truly integrate the multiple developmental facets and comparative morphological approaches that he describes.

Overall, I enjoyed reading *Forms of Becoming*. It added depth to my knowledge of the historical background of comparative morphological studies, and it regrounded my appreciation of the diversity of evolutionary modifications in development across animals. I recommend this book as entry-level reading for non-“evo-devo” folks as well as the

many developmental and evolutionary biologists whose research involves phenotype. I also recommend this thought-provoking book to graduate students. Minelli suggests several easily tested, high-impact research questions (e.g., figuring out what “anterior” is to a tapeworm by looking at a particular set of genes). In summary, Minelli promotes an integrative view that is timely and immensely valuable.

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NEW TITLES

Ant Encounters: Interaction Networks and Colony Behavior. Deborah M. Gordon. Princeton University Press, 2010. 184 pp., illus. \$19.95 (ISBN 9780691138794 paper).

Beyond Naturalness: Rethinking Park and Wilderness Stewardship in an Era of Rapid Change. David N. Cole and Laurie Yung, eds. Island Press, 2010. 304 pp., illus. \$35.00 (ISBN 9781597265096 paper).

Culturing Life: How Cells Became Technologies. Hannah Landecker. Harvard University Press, 2010. 276 pp., illus. \$18.95 (ISBN 9780674034761 paper).

Debating Climate Change: Pathways through Argument to Agreement. Elizabeth L. Malone. Earthscan, 2009. 160 pp., illus. \$39.95 (ISBN 9781844078295 paper).

Essay on the Geography of Plants. Alexander von Humboldt and Aimé Bonpland. Stephen T. Jackson, ed. University of Chicago Press, 2010. 296 pp., illus. \$45.00 (ISBN 9780226360669 cloth).

The Evolution of Childhood: Relationships, Emotion, Mind. Melvin Konner. Belknap Press, 2010. 960 pp. \$39.95 (ISBN 9780674045668 cloth).

Leopold’s Shack and Ricketts’s Lab: The Emergence of Environmentalism. Michael J. Lannoo. University of California Press, 2010. 218 pp., illus. \$24.95 (ISBN 9780520264786 cloth).

Letters to Linnaeus. Sandra Knapp and Quentin Wheeler, eds. The Linnean Society of London, 2009. 336 pp., illus. £15.00 (ISBN 9780950620794 paper).

Life in the Hothouse: How a Living Planet Survives Climate Change. Melanie Lenart. University of Arizona Press, 2010. 256 pp. \$22.95 (ISBN 9780816527236 paper).

The Nesting Season: Cuckoos, Cuckolds, and the Invention of Monogamy. Bernd Heinrich. Harvard University Press, 2010. 337 pp., illus. \$29.95 (ISBN 9780674048775 cloth).

Race and Reality: What Everyone Should Know about Our Biological Diversity. Guy P. Harrison. Prometheus Books, 2009. 336 pp. \$20.00 (ISBN 9781591027676 paper).

Remarkable Biologists: From Ray to Hamilton. Ioan James. Cambridge University Press, 2009. 196 pp., illus. \$45.00 (ISBN 9780521699181 paper).

Teaching Children Science: Hands-on Nature Study in North America, 1890–1930. Sally Gregory Kohlstedt. University of Chicago Press. 384 pp., illus. \$45.00 (ISBN 9780226449906 cloth).

Where the Dragon Meets the Angry River: Nature and Power in the People’s Republic of China. R. Edward Grumbine. Island Press, 2010. 238 pp., illus. \$25.96 (ISBN 9781597265515 cloth).

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