

From Groups to Individuals

Evolution and Emerging Individuality

edited by Frédéric Bouchard and Philippe Huneman

Our intuitive assumption that only organisms are the real individuals in the natural world is at odds with developments in cell biology, ecology, genetics, evolutionary biology, and other fields. Although organisms have served for centuries as nature's paradigmatic individuals, science suggests that organisms are only one of the many ways in which the natural world could be organized. When living beings work together—as in ant colonies, beehives, and bacteria-metazoan symbiosis—new collective individuals can emerge. In this book, leading scholars consider the biological and philosophical implications of the emergence of these new collective individuals from associations of living beings. The topics they consider range from metaphysical issues to biological research on natural selection, sociobiology, and symbiosis.

The contributors investigate individuality and its relationship to evolution and the specific concept of organism; the tension between group evolution and individual adaptation; and the structure of collective individuals and the extent to which they can be defined by the same concept of individuality. These new perspectives on evolved individuality should trigger important revisions to both philosophical and biological conceptions of the individual.

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"A thoroughly modern take on the timeless questions surrounding the evolution of groups and individuality—rich and rigorous, creatively contrarian, and occasionally iconoclastic."—Dan McShea, Duke University

"The question of biological individuality, where one individual ends and another begins, has moved rapidly in recent years, from an occasional and rather exotic question at the boundaries of the subject to the cutting edge of the philosophy of biology. This volume brings together many of the leading contributors to this development and will provide the perfect starting point for anyone interested in understanding how this question has come to be so fundamental to our understanding of living processes."—John Dupré, University of Exeter; author of *Processes of Life: Essays in the Philosophy of Biology*

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