Record Nr. UNINA9910818180803321 From groups to individuals: evolution and emerging individuality // **Titolo** edited by Frederic Bouchard and Philippe Huneman Pubbl/distr/stampa Cambridge, MA,: The MIT Press, 2013 **ISBN** 1-299-44321-4 0-262-31344-8 Descrizione fisica 1 online resource (289 p.) Collana Vienna series in theoretical biology 570.1 Disciplina Soggetti Biology - Philosophy **Organisms** Individuality Group identity Adaptation (Biology) Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Description based upon print version of record. Note generali Includes bibliographical references and index. Nota di bibliografia Nota di contenuto Cover; Contents; Series Foreword; Acknowledgments; Introduction; I ORGANISMS AND INDIVIDUALITY; 1 Darwinian Individuals; 2 Defining the Individual; 3 Species and Organisms: What Are the Problems?; 4 Immunity and the Emergence of Individuality: II ADAPTATION AND COMPLEX INDIVIDUALS; 5 Adaptation of Individuals and Groups; 6 The Unit of Adaptation, the Emergence of Individuality, and the Loss of Evolutionary Sovereignty; 7 Adaptations in Transitions: How to Make Sense of Adaptation When Beneficiaries Emerge Simultaneously with Benefits?; III GROUPS AND COLLECTIVES AS INDIVIDUALS 8 Groups, Individuals, and the Emergence of Sociality: The Case of Division of Labor9 Colonies Are Individuals: Revisiting the Superorganism Revival; 10 Superorganisms and Superindividuality: The Emergence of Individuality in a Social Insect Assemblage; 11 What Is a Symbiotic Superindividual and How Do You Measure Its Fitness?; Contributors; Index Sommario/riassunto The biological and philosophical implications of the emergence of new collective individuals from associations of living beings. 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.ContributorsFrederic Bouchard, Ellen Clarke, Jennifer Fewell, Andrew Gardner, Peter Godfrey-Smith, Charles J. Goodnight, Matt Haber, Andrew Hamilton, Philippe Huneman, Samir Okasha, Thomas Pradeu, Scott Turner, Minus van Baalen