

## BEING, NATURE, AND LIFE IN ARISTOTLE

This volume of essays explores major connected themes in Aristotle's metaphysics, philosophy of nature, and ethics, especially themes related to essence, definition, teleology, activity, potentiality, and the highest good. The volume is united by the belief that all aspects of Aristotle's work need to be studied together if any one of the areas of thought is to be fully understood. Many of the chapters were contributions to a conference at the University of Pittsburgh entitled "Being, Nature, and Life in Aristotle," to honor Professor Allan Gotthelf's many contributions to the field of ancient philosophy; a few are contributions from those who were invited but could not attend. The contributors, all longstanding friends of Professor Gotthelf, are among the most accomplished scholars in the field of ancient philosophy today.

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# BEING, NATURE, AND LIFE IN ARISTOTLE

Essays in Honor of Allan Gotthelf

EDITED BY

JAMES G. LENNOX AND ROBERT BOLTON





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## Preface

A number of the chapters in this volume began as presentations at a conference celebrating the many contributions of Allan Gotthelf to the study of ancient philosophy that took place on October 1–3, 2004. It gives the editors great pleasure to thank the many individuals and organizations who contributed to the success of that event. At the University of Pittsburgh both financial and organizational support were provided by the Center for Philosophy of Science and its staff, Karen Kovalchick, Joyce MacDonald, and Carol Weber. Further financial support was provided by the University of Pittsburgh's School of Arts and Sciences, and Departments of History and Philosophy of Science and Philosophy, and by the Rutgers University Endowment for Ancient Philosophy. Alec Stewart, Dean of the Honors College of the University of Pittsburgh kindly made its remarkable rooms on the thirty-fifth and thirty-sixth stories of the Cathedral of Learning available for a gala reception, funding for which was provided by the Anthem Foundation for Objectivist Scholarship.

We would like to thank Michael Sharp for his support and patience in working with us at all stages on the production of the present volume; Cambridge University Press's referees, whose suggestions helped to improve the final product; Elizabeth Hanlon and Sarah Roberts for their careful handling of editorial matters; Jan Chapman for her skillful copyediting; Benjamin Goldberg for help in preparing the indexes; and finally, the Syndics of Cambridge University Press for approving this volume for publication.



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- DAVID CHARLES is Research Professor of Philosophy at Oriel College, Oxford. He is the author of *Aristotle on Meaning and Essence* (2000), *Aristotle's Philosophy of Action* (1984) and the editor of *The Greeks on Definition* (2010).
- ALAN CODE is a Board of Governors Professor of Philosophy at Rutgers University; he was previously the Nicholas C. Petris Professor of Greek Studies at the University of California at Berkeley, and the O'Donnell Professor of Philosophy at the Ohio State University. His research has concentrated on Aristotle's metaphysics and logic, and related topics in his natural philosophy and biology.
- JOHN M. COOPER is Henry Putnam University Professor of Philosophy at Princeton University, and Director of the joint Ph.D. Program in Classical Philosophy there. He is editor of *Plato: Complete Works* (1997), co-author with John Procopé of *Seneca: Moral and Political Essays* (1995), and author of *Reason and Human Good in Aristotle* (1975), *Reason and*



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Emotion: Essays on Ancient Moral Psychology and Ethical Theory (1999), and Knowledge, Nature, and the Good: Essays on Ancient Philosophy (2004).

MARY LOUISE GILL is Professor of Philosophy and Classics at Brown University. She is the author of Aristotle on Substance: The Paradox of Unity (1989), co-translator and author of the Introduction, Plato: Parmenides (1996), and co-editor of Unity, Identity and Explanation in Aristotle's Metaphysics (1994), Self-Motion from Aristotle to Newton (1994), and A Companion to Ancient Philosophy (2006). She is currently completing a book entitled Philosophos: Plato's Missing Dialogue.

ARYEH KOSMAN is the John Whitehead Professor of Philosophy Emeritus at Haverford College, where he began teaching in 1962, after education at the University of California, Berkeley, Hebrew University, and Harvard. He specializes in the history of philosophy, particularly ancient philosophy, but continues to follow his earliest interests in contemporary analytic philosophy. He has held visiting positions at the University of California, Berkeley, UCLA, the University of Washington, Princeton, and the University of Pittsburgh.

JAMES G. LENNOX is Professor of History and Philosophy of Science and Director of the Classics, Philosophy and Ancient Science Program, University of Pittsburgh. He is the author of a translation, with introduction and commentary, of *Aristotle*: On the Parts of Animals (2001); and of *Aristotle's Philosophy of Biology: Studies in the Origins of Life Science* (Cambridge, 2001). He has held fellowships at the Center for Hellenic Studies (1983–4); Clare Hall, University of Cambridge (1986–7); the Istituto di Studi Avanzati, University of Bologna (2006).

PIERRE PELLEGRIN is Director of Research at the Centre National de la Recherche Scientifique (CNRS) in Paris and former director of the Center for the History of Science and of Arab and Medieval Philosophy. He has worked primarily on Aristotle's natural philosophy, notably his biology (Aristotle's Classification of Animals: Biology and the Conceptual Unity of the Aristotelian Corpus, 1986) and on Aristotle's political philosophy. He also specializes in ancient biology generally, and in Greek and Roman skepticism. He has translated works of Aristotle, Galen, and Sextus Empiricus into French.

DAVID SEDLEY is Laurence Professor of Ancient Philosophy at the University of Cambridge, and a Fellow of Christ's College. His books include



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The Hellenistic Philosophers (1987, with A. A. Long), and Creationism and its Critics in Antiquity (2007), based on his 2004 Sather Lectures. He edited Oxford Studies in Ancient Philosophy from 1998 to 2007. He is a Fellow of the British Academy, and a Foreign Honorary Member of the American Academy of Arts and Sciences.



## Acknowledgments

Parts of Chapter 1 appeared as Chapter 6 of *Creationism and its Critics in Antiquity*, University of California Press: Berkeley, Los Angeles, and London, 2007.

An earlier version of Chapter 5 (substantially revised and expanded for the present volume) appeared as "The Unity of Substances in *Metaphysics* H.6" (in Portuguese), in *Cadernos de História e Filosofia da Ciência*, series 3, 13 (2003): 177–203.

Earlier versions of Chapters 8 and 9 were published in French in *Dunamis: Autour de la puissance chez Aristote*, ed. M. Crubellier, A. Jaulin, and D. Lefebvre, Peeters: Leuven, 2008.

An earlier version of Chapter 10 has been translated into Portuguese and will appear in *Sobre a Ética de Aristóteles – textos selecionados*, ed. Marco Zingano, Odysseus Editores: São Paulo, Brazil, 2010.



## Allan Gotthelf: a biographical sketch

Allan Gotthelf was born on December 30, 1942, in Brooklyn, New York, the first of two children of Max and Dorothy Gotthelf. He thus came of age during the glory years of the Brooklyn Dodgers – he recalls attending games at Ebbets Field, once watching Jackie Robinson (who joined the Dodgers' roster in 1947) steal home, and forming an informal 'Gil Hodges Fan Club' with two friends. But as passionate as he was for sports, his true love was understanding things at the deepest level, and after doing three years of junior high school in two he attended the justly famous Stuyvesant High School, with its rigorous training in mathematics and science, from 1956 to 1959. (Stuyvesant has graduated an astonishing number of accomplished alumni, including four Nobel laureates – perhaps Joshua Lederberg being the most well known – and actors ranging from James Cagney to Lucy Liu.)

Prior to discovering philosophy, Allan focused his thirst for understanding on mathematics and physics, and in 1959, at the age of sixteen, he entered Brooklyn College, intending to major in physics but shifting after he arrived toward theoretical mathematics. During the summer of 1961 he read Ayn Rand's *Atlas Shrugged*, which influenced him to redirect his intellectual focus toward philosophy. He graduated in 1963 with a Major in Mathematics and a Minor in Philosophy, having taken classes in philosophy with Martin Lean and John Hospers. Though he had decided to pursue an advanced degree in philosophy, he had a strong interest in philosophy of mathematics and had already accepted a graduate assistantship at Penn State University in mathematics. So after completing his MA in mathematics there in one year, he entered the graduate program in philosophy at Columbia University in 1964.

Over the next two years he completed his course work and then spent three years as a full time instructor, at Wesleyan University. He eventually settled on "Aristotle's Conception of Final Causality" as the topic for his dissertation, and received his Ph.D. in 1975. An essay based on his



#### Allan Gotthelf: a biographical sketch

dissertation won the dissertation essay prize of the *Review of Metaphysics* and was published in its 1976/7 volume. By then he had already received tenure in the Department of Philosophy and Religion at Trenton State College (now The College of New Jersey [TCNJ]) and during his years there he was instrumental in fostering a thriving philosophy club and in the development of the Honors College, and a special Minor in Classical Studies. He chaired the department from 1988 to 1997, during which time the Philosophy Major grew fourfold. He was passionate about teaching philosophy, playing an active role in the American Philosophical Association (APA) Teaching Workshops. From 1982 to 1990 he and Michael Hooker were selected as co-leaders of annual weekend workshops in the Eastern United States.

In the twenty years between 1980 and 2000, Allan played a central role in organizing conferences, workshops, and summer institutes that encouraged scholars of Aristotle's philosophy to integrate the study of Aristotle's biological works into their research. Many of the contributors to the present volume, including its editors, were participants in the first of these, a conference organized in collaboration with David Balme that took place during the summer of 1983 at Williams College in Williamstown, MA. Allan had befriended David Balme during the latter's visit to the Center for Advanced Study in Princeton in 1976 and interacted constantly with him until Balme's untimely death in 1989.

Other collaborations on related themes followed, with Sir Geoffrey Lloyd, Michael Frede, John Cooper, Pierre Pellegrin, and Wolfgang Kullmann (a detailed list is provided on pp. 268–9), and Allan gained a reputation in the community of Aristotle scholars as a prodigious organizer. A number of these conferences led to the publications mentioned at the beginning of our introduction, publications credited with moving Aristotle's biological writings to the center of Aristotle scholarship.

During his years at TCNJ Allan held a number of visiting positions and fellowships: at Swarthmore in 1974–5; at the Center for Hellenic Studies in 1982/3; at Oxford (where he co-taught a seminar with John Ackrill), and at Clare Hall, Cambridge, in 1984; and at Georgetown in the spring of 1985. Having first gotten to know Gotthelf during his visit to Oxford in 1984 (and again during a number of visits to Oxford and to Clare Hall, Cambridge (where he had been appointed Life Member in 1985), David Charles invited him back in 1994 to co-teach a seminar with him and one of this volume's editors (Lennox) called "Philosophical Issues in Aristotle's Biology." Shortly after leaving Oxford he spent five weeks in Japan, presenting a week long intensive course at Toyko Metropolitan

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University entitled "Aristotle's Biological Enterprise and its Philosophical Significance" and lecturing in five other cities, including Kyoto.

As noted earlier, Allan developed a close friendship with David Balme, widely considered the leading scholar of the twentieth century on Aristotle's biological works. In fact his first edited volume was a festschrift in honor of Balme, Aristotle on Nature and Living Things: Philosophical and Historical Studies, published in 1985. Allan worked collaboratively with Balme during the 1970s and 80s, and when Balme died 1989, he was invited by the Loeb Classical Library to see Balme's Loeb edition of History of Animals, Books VII–X through to publication; and then, working closely with the Balme family, he took on the much more daunting task of preparing Balme's draft of his planned editio maior of the entire History of Animals for publication as a two-volume work in the Cambridge Classical Texts and Commentaries series. Volume 1 appeared in 2002; Volume 11 is currently projected for publication in 2011. Gotthelf took early retirement from TCNJ in 2002, at which time the College created the Gotthelf Prize to be awarded annually to an outstanding graduating senior at TCNJ, who is chosen by the Classical Studies Faculty.

Upon retiring, Allan accepted an offer to be a visiting professor for the fall term at University of Texas, Austin, and since 2003, thanks to the creation of a Fellowship for the Study of Objectivism in the Department of History and Philosophy of Science (HPS), University of Pittsburgh, he has been Visiting Professor of HPS at Pittsburgh.

Earlier it was noted that his turn to philosophy from mathematics and science, and to Aristotle in particular, was due to the influence of Ayn Rand. Allan was among a number of young philosophers with whom Rand met regularly to discuss her more recently developed philosophical work, and throughout his career Allan has devoted the same energy and focus as he had devoted to putting Aristotle's biological works "on the map," to putting Objectivism, Rand's philosophy, on the contemporary philosophical map. He has been a prime mover behind the Ayn Rand Society, which became affiliated with the APA Eastern Division in 1988, and his fellowship at the University of Pittsburgh is appropriately designed to support work both on Aristotle and Rand, and on the relationship between Rand's philosophy and Aristotle's. Since coming to Pittsburgh he has organized a number of workshops on both philosophers, and a number of informal reading groups; he has taught and co-taught seminars on Aristotle's biological works and served on dissertation committees of students working on Aristotle. One serendipitous consequence of his joining the faculty in Pittsburgh was that he was able to serve on the dissertation committee of his most



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promising undergraduate at TCNJ, Greg Salmieri, who joined Pittsburgh's graduate program in philosophy a year before his former teacher took up his Fellowship in HPS. Allan is hopeful that within a year of this collection of essays in his honor appearing in print, a collection of his papers, including some not previous published, scheduled for publication by Oxford in their Oxford Aristotle Studies series, will also appear.



#### Note on abbreviations

Abbreviations of ancient works correspond to those used in H. G. Liddell, R. Scott, and H. S. Jones, *A Greek–English Lexicon*, 9th edn., Oxford, 1996.