# EXPLANATION AND TELEOLOGY IN ARISTOTLE'S SCIENCE OF NATURE

In Aristotle's teleological view of the world, natural things come to be and are present for the sake of some function or end (for example, wings are present in birds for the sake of flying). Whereas much recent scholarship has focused on uncovering the (meta-)physical underpinnings of Aristotle's teleology and its contrasts with his notions of chance and necessity, this book examines Aristotle's use of the theory of natural teleology in producing explanations of natural phenomena. Close analyses of Aristotle's natural treatises and his *Posterior Analytics* show what methods are used for the discovery of functions or ends that figure in teleological explanations, how these explanations are structured, and how well they work in making sense of phenomena. The book will be valuable for all those who are interested in Aristotle's natural science, his philosophy of science, and his biology.

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## EXPLANATION AND Teleology in Aristotle's Science of Nature

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### Abbreviations

#### ARISTOTLE'S WORKS

| APo    | Analytica Posteriora (Posterior Analytics)         |
|--------|--|
| APr    | Analytica Priora (Prior Analytics)                 |
| Cael   | De Caelo (On the Heavens)                          |
| DA     | De Anima (On the Soul)                             |
| EE     | Ethica Eudemia (Eudemian Ethics)                   |
| GA     | De Generatione Animalium (Generation of Animals)   |
| GC     | De Generatione et Corruptione (On Generation and   |
|        | Destruction)                                       |
| HA     | Historia Animalium (History of Animals)            |
| IA     | De Incessu Animalium (On Animal Progression)       |
| Juv    | De Juventute et Senectute (On Youth and Old Age)   |
| MA     | De Motu Animalium (On Animal Motion)               |
| Meta   | Metaphysica (Metaphysics)                          |
| Meteor | Meteorologica (Meteorology)                        |
| NE     | Ethica Nicomachea (Nicomachean Ethics)             |
| PA     | De Partibus Animalium (On the Parts of Animals)    |
| Ph     | Physica (Physics)                                  |
| Pol    | Politica (Politics)                                |
| Resp   | De Respiratione (On Respiration)                   |
| Rh     | Rhetorica (Rhetoric)                               |
| Sens   | De Sensu et Sensibilibus (On Sense and Sensibilia) |
| Somn   | De Somno et Vigilia (On Sleep and Waking)          |
| Тор    | Topica (Topics)                                    |

#### WORKS BY OTHER GREEK AUTHORS

| Euclid (Euc.) |          |
|---------------|----------|
| El            | Elements |

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| List of abbreviations |   |  |
|-----------------------|---|--|
| Galenus (Gal.)        |   |  |
| Meth Med              | Methodus Medendi (On the Therapeutic Method)    |  |
| Philoponus (Phlp.)    |   |  |
| In APo                | In Aristotelis Analytica Posteriora commentaria |  |
| Plato (Pl.)           |   |  |
| R                     | Republic  |  |
| Smp                   | Symposium                                       |  |
| Ti                    | Timaeus   |  |
| Simplicius (Simp.)    |   |  |
| In Cael               | In Aristotelis de Caelo commentaria             |  |
| In Ph                 | In Aristotelis Physica commentaria              |  |
| Xenophon (X.)         |   |  |
| An                    | Anabasis  |  |
| Cyr                   | Cyropaedia                                      |  |

#### OTHER ABBREVIATIONS

DK H. Diels, rev. W. Kranz (1961), *Die Fragmente der Vorsokratiker*, 10th edn. Berlin.
Fr. Fragment

The texts cited in this book are all taken from the *Thesaurus Linguae Graecae Canon of Greek Authors and Works* (*TLG*), 3rd edn. (1990), Oxford. All translations are mine.

References to Plato follow the Stephanus pagination as found in the Oxford Classical Texts (OCT), J. Burnet (ed.) (1900–22), *Platonis Opera*, 5 vols., Oxford.

References to Greek Commentators are to H. Diels (ed.), *Commentaria in Aristotelem Graeca (CIAG)* (1892–1909), Berlin.

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