

BOOK REVIEW

Aristotle on Female Animals: A Study of the Generation of Animals. By SOPHIA M. CONNELL. Cambridge, UK: Cambridge University Press, 2016. Pp. 437. Hardcover, \$120. ISBN 978-1-10713630-4.

In *Aristotle on Female Animals: A Study of the Generation of Animals*, Sophia Connell rehabilitates Aristotle's reputation from two sets of scholars: feminists, whom she argues traditionally reject Aristotle as the "arch-misogynist" (19), and scholars of classical antiquity, who pass over Aristotle's theories on generation as too inconsistent or incoherent to be useful. Through a close reading of the text, Connell attempts to reinterpret Aristotle's *Generation of Animals* in light of these criticisms. In defense of Aristotle and his work on gender, she argues that Aristotle's views on female animals should be read exclusively within the context of his zoological works, not our modern cultural or intellectual biases.

Based on Aristotle's own methodology, the book is organized into four parts beginning with a general discussion of Aristotle on females and ending with the practical applications of Aristotle's theory on "lower" (i.e. non-human) animals. In chapters one and two, Connell discusses how Aristotle's methodology contributes to the marginalization of his scientific treatises. Because feminist and other scholars have traditionally passed over later books, where most of Aristotle's work on gender reside, on the grounds that they are misogynistic, Connell argues that they miss Aristotle's own analysis of his theories.

Building on this criticism, part two dismisses Aristotle as a "one-seed" theorist. In chapter three, Connell argues that defining Aristotle against Hippocrates and Galen oversimplifies and suppresses the more descriptive parts of Aristotle's text. Keeping this in mind, Connell then discusses the female contribution (matter) to generation in chapter four, where she dissects the craft analogies Aristotle uses to describe it.

Expanding her analysis of gender in part three, Connell considers various interpretations of the male role in Aristotle's theory of generation. Chapter five discusses how these interpretations have contributed to our misunderstanding of the female role. Chapter six then debunks two approaches to Aristotle's theory of generation, theological vitalism (i.e. that semen possesses a divine agent) and materialism (i.e. *pneuma* and heat) in favor of Aristotle's own vitalism and interest in non-

material, non-divine principles of production.

Part four focuses on the practical application of Aristotle's theories and any other comments Connell has that do not fit elsewhere in the book. Chapter seven begins with a brief overview of Aristotelian teleology and its implication for "lower" animals, then discusses three cases where the tenets of generation are used but do not necessarily hold true throughout: bees, wind-eggs, and invertebrates. Chapter eight argues that Aristotle views both sexes as functional wholes and discusses Aristotle's interpretation of the female as both a successful and failed being. In chapter nine, Connell looks at heredity and argues that Aristotle's sexism is integral to his theory that heredity comes from both parents due to certain generative residues. Finally, chapter ten considers the different kinds of teleology and necessity not previously treated in Connell's book.

In order to engage with the feminist and academic critiques of Aristotle's theory of generation, Connell spends the majority of her work parsing out the complicated, often frustrating nuances of Aristotle's scientific theories. This exercise fulfills the promise of the second part of her title, that this book will be a "study of *Generation of Animals*." Due to the nature of Aristotle's work, Connell must analyze both gender roles, but she does so by emphasizing the female role and its activity, rather than passivity, in Aristotle's theory. She constantly argues that our evaluation of Aristotle must be within the context of his own work, and she criticizes scholars who have focused on the early, more general books of the *Generation of Animals*. By passing over the later books as more complicated and, consequently, harder to comprehend, generations of scholars have failed to notice how Aristotle applies and, more importantly, revises his theories according to specific animals. The later books, particularly those on "lower" animals like birds and invertebrates, allow Aristotle to put his theories into practice—and to acknowledge that his theories do not hold true for all animals, even female ones.

Where the book succeeds is also where it falters. Connell's extended, careful analysis of *Generation of Animals* assumes a certain familiarity with the Aristotelian corpus, terms, and methodology. While this assumption allows her to dive deeply into Aristotle's theories on generation, it leaves the general, academic audience behind. Scholars unfamiliar with ancient scientific theory and/or not trained in Aristotle's technical language will find the book difficult to follow.

Structurally, the book is dense and formulaic with sections numbered ad nauseam. While this provides a useful reference tool for the reader, it makes the act of reading the book a little boring. Likewise, Connell relies heavily on charts and outlines to parse Aristotle's more difficult theorems, but these charts are complicated

and often referenced several pages or chapters later, with no footnote or reference guiding the reader back to the original. Readers unfamiliar with Greek will be happy to note that any excerpts from Aristotle are presented in translation (the original is occasionally included in the footnotes) and any Greek terms are transliterated. A glossary of more unusual or unfamiliar scientific terms such as “hylo-morphism” or “superfoetation” would have been helpful.

The book itself seems to respond to the issues raised in the contributions to Cynthia Freeland’s *Feminist Interpretations of Aristotle* (Pennsylvania State University Press, 1998) as well as build on the dearth of feminist Aristotelian scholarship—particularly on the scientific treatises—since the 1980s and 90s. Disappointingly, Connell relegates most of her conversations with Luce Irigaray, Martha Nussbaum, Cynthia Freeland, et al., to the footnotes. Helen King is mentioned only once and in passing (265). The rigid dichotomy Connell presents between feminists and scholars in the text itself is surprising given the relative fluidity between the two in her footnotes.

Overall, Connell provides a precise and detailed rereading of Aristotle’s theory of generation with an eye towards the female role. She succeeds not in defending Aristotle’s misogyny but in placing his theories squarely in the context of his corpus. In doing so, she highlights the active rather than passive role of the female in Aristotelian generation and provides the groundwork for further feminist reinterpretations of Aristotle’s scientific works.

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