

Aristotle and Woman

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A thorough analysis of Aristotle's idea of female human nature is in order,¹ for ultimately from "The Teacher" have come many of the standard Western arguments for the inferiority of womankind and for the political subordination of women to men in home and in society. Although Aristotle's empirical observation of women in Greece of the fourth century B.C. certainly influenced the "scientific" conclusions of his biological and political studies,² the historical importance of Aristotle is that in the medieval and early modern periods of Western civilization Aristotelian generalizations were set down and perpetuated as

1. Given the large amount of ink that has been expended by scholars on Aristotle, the dearth of discussion of this topic is revealing. This article is needed because Werner Jaeger, W. D. Ross, and others, have not dealt with it. See future notes for detailed studies of aspects of the topic. The most comprehensive study to date that focuses directly on the topic may be found in F. A. Wright, *Feminism in Greek Literature from Homer to Aristotle* (London: Kennikat Press, 1932), pp. 202-222.

2. Many of the documents on which historians have based their views of the position of women in ancient Greece are collected in Julia O'Faolain and Lauro Martines, *Not in God's Image: Women in History from the Greeks to the Victorians* (New York: Harper & Row, 1973), pp. 1-33. Nineteenth-century historiography defended the view that Athenian women led secluded lives, spending most of their hours in the "gynaeceum," the women's quarters of the house. See Alice Zimmern, *The Home Life of the Ancient Greeks*, trans. H. Blumner (London: Cassell and Co., 1910), chap. 4; and James Donaldson, *Woman: Her Position and Influence in Ancient Greece and Rome, and among the Early Christians* (London: Longmans. Green, 1907). The revisionist school, which views the Greek woman as having some social freedoms, was initiated by A. W. Gomme. "The Position of Women in Athens in the Fifth and Fourth Centuries B.C.," *Class.Philo.* 20 (1925), 1-25. Too frequently, followers of Gomme's revisionism have been apologists for both the ancient Greek and the twentieth-century English and American treatment of women. Blatant cases in point are H. D. F. Kitto, *The Greeks* (Harmondsworth, Eng.: Penguin Books, 1951), pp. 219-237 (the position of Greek slaves and Greek women are both excused); Charles Seltman, *Women in Antiquity* (London:

universal and natural truth.³

In this article I critically analyze Aristotle's view of woman with the hope of inspiring historians to elucidate the later influence of the Aristotelian brand of antifeminism.⁴ Only when that task is accomplished, a task requiring research by a variety of historical specialists, will the study of "Aristotle and Woman" be complete.⁵ A few examples with bibliographic notation will suffice to indicate the historical significance and ramifications of Aristotle's idea of woman and to suggest worthwhile areas of further research.

Aristotle's definition of a female as a "mutilated male" was transmitted into biological, obstetrical, and theological tracts and continues

Thames and Hudson, 1956), particularly p. 112 (the author, who finds his title "provocative," decorated his book with illustrations of dancing girls and flute-players); and Donald Richter, "The Position of Women in Classical Athens," *Classical Journal*, October-November 1971, pp. 1-8. The contemporary prejudice underlying the erudition of the last article has been properly pointed out by Marilyn B. Arthur. "Early Greece: The Origins of the Western Attitude toward Women," *Arethusa*, 6, no. 1 (Spring 1973), 53, n. 13. A recent balanced account may be found in W. K. Lacey. *The Family in Classical Greece* (Ithaca: Cornell University Press, 1968).

3. Recent research stresses the longevity of Peripatetic influence on the University curricula and in the mainstream of European thought. The greatest number of Aristotelian works were produced between 1150 and 1650. See Charles B. Schmitt, "Towards a Reassessment of Renaissance Aristotelianism," *Hist. Sci.*, 11 (1973), 159-193.

4. My use of the term "antifeminist" in relation to Aristotle might be questioned by those who associate the feminist movement only with the modern period. However, the limiting of the feminist movement to the nineteenth and twentieth centuries reveals the myth of "historical progress" at work, for the woman question has been a perennial question, rising in importance in particular historical epochs. One such epoch was Greece of the fifth and fourth centuries B.C. For evidence that the subject of woman's position was a lively topic for introducing a description of a foreign culture, see Herodotus, *History*, I, 1-4. For humorous, popular portrayals of the woman issue, see Aristophanes, *Lysistrata*, *Ecclesiazusae*, and *Thesmophorizusae*. In his defense of education, military service, and political leadership for a feminine and masculine elite, the Plato of the *Republic* was a feminist for his time. Aristotle, in Book II of the *Politics*, singled out the community of wives and children along with the community of property as the most objectionable notions of Plato's ideal state. He also objected to the Spartan constitution because it was too indulgent to women. Aristotle thus was "anti" the schemes of his day that were challenging the traditional position of women.

5. Such scholarship would parallel Lewis Hanke, *Aristotle and the American Indians: A Study in Race Prejudice in the Modern World* (Bloomington: Indiana

to have authoritative influence through St. Thomas Aquinas' *Summa Theologiae*.⁶ More pervasive still is the Aristotelian intellectual habit of describing the female body as a departure from the norm of the male body and of deducing a characterization of femaleness by lack of maleness.⁷ Many of the so-called Old Wives' Tales on such subjects as the differences between male and female embryos have their origin not in women's self-deprecation but in the embryology of Aristotle and his followers.⁸ Aristotle's belief that the male semen produces the form and impetus from which an embryo grows and the female womb contributes only the material nourishment discounted female importance in the one area where the primitive or uneducated mind suspects female

University Press, 1959). For references to later Aristotelians, see F. E. Peters, *Aristotle and the Arabs* (New York: New York University Press, 1968); and Charles H. Lohr, S.J., "Medieval Latin Aristotle Commentaries," *Traditio*, 23 (1967), 313-413; 24 (1968), 149-245; 26 (1970), 135-216; 27 (1971), 251-351; 28 (1972), 281-396; and "Renaissance Latin Aristotle Commentaries: Authors A-B," *Studies in the Renaissance* 21 (1974), 228-289.

6. Aristotle, *The Works of Aristotle*, ed. W. D. Ross (Oxford: Clarendon Press, 1908-1931), *G. A.*, II, 3(737a 27). References accord with the Oxford edition; the Greek text is in the Loeb Classical Library. For the dominant edition of Aristotle during the Renaissance and early modern periods, I have consulted *Operum Aristotelis*, ed. Issaac Casaubon, 2 vols. (Lugduni: G. Laemarium, 1590), which contains Theodore Gaza's Latin translation of the biological works. Unless otherwise indicated, translations are from the Oxford edition except for Ernest Barker, *The Politics of Aristotle* (Oxford: Clarendon Press, 1948). Thomas Aquinas, *Summa Theologiae*, I, q. 92, a. 1. Albertus Magnus, *De Animalibus*, book XXVI, ed. H. Stadler, 2 vols. (Munster, 1916-1921). Joseph Needham, *History of Embryology* (New York: Abelard-Schuman, 1959), pp. 86-114. Vern L. Bullough, "Medieval Medical and Scientific Views of Women," *Viator*, 4 (1973), 485-501.

7. Freud's influential theory of the female castration complex is one of the most blatant examples. See J. Chasseguet-Smirgel, *Female Sexuality* (Ann Arbor: University of Michigan Press, 1970); Clara Thompson, "Penis Envy in Women," *Psychiatry*, 1943, pp. 123-125; Karen Horney, "Distrust between the Sexes," in *Feminine Psychology*, ed. Harold Kelman (New York: Norton, 1967).

8. For examples, see notes 61, 62, 75, and 76 below. Albertus Magnus, O.P. of Cologne, *De Secretis Mulierum* (Strassbourg, 1601). *De Secretis Mulierum* was analyzed by Helen Rodnite LeMay (SUNY, Stonybrook) in "Some Thirteenth- and Fourteenth-Century Lectures on Female Sexuality," Third Berkshire Conference on the History of Women, Bryn Mawr College, June 1976. "Aristotle," *The Works of Aristotle, the Famous Philosopher, Containing His Complete Masterpiece and Family Physician, His Experienced Midwife, His Book of Problems and His Last Legacy* (London, 1976). The forged eighteenth-century work going under the name "Aristotle's Masterpiece," has been a major source for popular European and early American attitudes to sex and embryology: a part of it, "The

superiority.⁹

The rivalry between the Aristotelian one-semen theory and the Hippocratic-Galenic two-semen theory allowed the maternal contribution to embryology, the ovum, to remain unsuspected until the seventeenth century.¹⁰ Furthermore, Aristotle himself and later thinkers extended his biological-philosophical concepts of male and female into cosmic distinctions: maleness is active, femaleness is passive; maleness is spiritu-

Experienced Midwife" directly influenced views of childbirth. In 1931 D'Arcy Power estimated that 10,000 copies were still being sold yearly in England. Many of its ideas, such as the causes for a child becoming male or female, have their ultimate origin in Aristotle's *On the Generation of Animals*. D'Arcy Power, "Aristotle's Masterpiece," in *Foundations of Medical History* (Baltimore: Williams & Wilkins, 1931). Needham, *History of Embryology*, pp. 91-92. Vern L. Bullough, "An Early American Sex Manual, Or, Aristotle Who?" *Early American Literature*, Winter 1973, pp. 236-246. Currently more available sources of Aristotle's "Old Wives' Tales" are the *Problemata* IV (a pseudo-work derived from an original) and the authentic *Historia Animalium* VII.

9. Arthur William Meyer, *The Rise of Embryology* (Stanford: Stanford University Press, 1939), chap. 1. Bronislaw Malinowsky, *The Sexual Life of Savages in Northwest Melanesia* (Cambridge, Mass.: Harvard University Press, 1932). Malinowsky discovered that the Trobriand Islanders were unaware of any connection between the sex act and a woman giving birth, and attributed to the female the sole role in child-bearing. This view corresponds to early creation myths and early agricultural beliefs that identify the female with the life-producing forces in the universe. Historical speculation has been concerned with the possible causal link between the discovery of paternity and the emergence of patrilineal descent: Eva Figs, *Patriarchal Attitudes* (Greenwich, Conn.: Fawcett, 1970), pp. 33-36; and Simone de Beauvoir, *The Second Sex*, trans. H. M. Parshley (New York: Bantam Books, 1961), chaps. 4-6. By almost denying maternity, Aristotle represents an extreme position in the process of the masculinization of procreation. For Egyptian and Greek origins of Aristotle's theory of one seed, see Aeschylus, *Eumenides*, in *Aeschylus II*, Loeb Classical Library (Cambridge, Mass.: Harvard University Press, 1936), ll. 658-675, p. 335, n.

10. No one can fault Aristotle for his ignorance of the female ovum, which was not discovered until the microscopic studies of von Baer in 1827, but given Aristotle's problems in explaining the empirical observation of resemblances between mothers and offspring, one may well wonder at his lack of openness to the possibility of female formative influence on embryos.

Aristotelian embryology dominated in the medieval philosophical schools, while Galenic embryology, which utilized many Aristotelian principles, dominated in the medical schools. Aristotle's influence can be seen in no less a figure than William Harvey. See William Harvey, "On Conception," *Works of William Harvey*, trans. R. Willis, M. D. (London, 1847), pp. 575, 577-578. Howard B. Adelmann, ed., *The Embryological Treatises of Hieronymus Fabricius of Aquapendente* (Ithaca: Cornell University Press, 1942), "A Brief Sketch of the History

al, femaleness is material.¹¹

Just as Aristotle's biological sexism influenced many human beings' perceptions of themselves and their offspring, his political sexism influenced their beliefs on the proper distribution of roles in society. Secondhand from Aristotle, medieval thinkers learned to dismiss Plato's radical theory of the common education of women and men for military, intellectual, and political leadership by scoffing at the accompanying "community of women and children."¹² Aristotle's "proportionate justice," a justice that is applied not equally between persons but proportionately according to their worth, judged in practical terms by their position in natural and societal hierarchies, has given an "ethical" justification to the discriminatory policies that still pervade the West.¹³ By introducing his book on politics with an analysis of the patriarchal Greek household, Aristotle legitimized the patriarchy as the proper form of government for the family.¹⁴ When Christine de Pisan's feminist rebuttal to Jean de Meung's *Roman de la Rose* ushered into Europe a wave of polemical works on "la question des femmes," the passages in Aristotle discussed in this article were frequently quoted at length by

of Embryology before Fabricus," pp. 36-71. Carolyn Iltis (University of San Francisco), "Harvey and Bacon: Views of Nature and the Female during the Scientific Revolution," paper read at the American Historical Association meeting in Atlanta, December 1975. Needham, *History of Embryology*. O'Faolain and Martines, *Not in God's Image*, pp. 117-127. If historical studies of seventeenth-century science were to integrate biology with the physical sciences and mathematics, Aristotle would appear to have a greater role in the emergence of modern science. See Schmidt, "Towards a Reassessment of Renaissance Aristotelianism," p. 177.

11. *G.A.*, I, 20 (729a 24-32); II, 1 (732a 2-10). Aristotle's terms *arrēn* and *thēlu* are neuter in Greek, and sometimes may appropriately be translated as "male and female principles." However, he constantly supported the distinctions in principle with examples from the differences between male and female animals. Biology and philosophy were intertwined. For a criticism of Aristotle's terminology, see Anthony Preuss, "Science and Philosophy in Aristotle's *Generation of Animals*," *J. Hist. Biol.*, 3, no. 1 (Spring 1970), 4, 10, 18. See quotations in text at notes 38 and 28 below.

12. Aristotle, *Pol.*, II, 1-6. While Aristotle's *Politics* was a standard textbook in medieval and early modern universities, Plato's *Republic* was not widely read in the West until its translation from Greek to Latin during the early fifteenth century. Paul Kristeller, *Renaissance Thought: Classic, Scholastic, and Humanist Strains* (New York: Harper & Row, 1961), pp. 40, 58.

13. Aristotle, *Pol.*, III, 9 (1280a 1-1281a 10).

14. Aristotle, *Pol.*, I. Later political theorists defied Aristotle's attempt to view the state as something more than a large household and used the patriarchy,

disparagers of womankind.¹⁵ An indication of the consistent antifemini-
 nism of Aristotle is that while upholders of many sides of the woman
 question have used the Bible to support their cause, it was a rare defender
 of woman who managed to use Aristotle to bring credit to the female
 branch of the human race.¹⁶

Furthermore, Aristotle's belief in the mental and biological superio-
 rity of free men to both women and natural slaves, which was his
 ultimate justification for male rule in the household and state, gave
 sanction to a hierarchy of servitudes, including wifedom and slavery.¹⁷

sometimes Aristotle's model, as an analogy for the state at large. For the patriar-
 chal paradigm at work, see Jean Bodin, *Six Books of a Commonweale*, trans.
 Richard Knolles (Cambridge, Mass.: Harvard University Press, 1962), I, i-v; or
 Robert Filmer, *Patriarcha and Other Political Works*, ed. Peter Laslett (Oxford:
 Basil Blackwell, 1949), II, 1. Histories of Western political thought generally
 either ignore the patriarchy and the patriarchal paradigm or uncritically summa-
 rize the concepts when found in Aristotle or in later thinkers.

15. C. F. Ward, ed., "The Epistles on the Romance of the Rose and Other
 Documents in the Debate," Ph. D. diss., University of Chicago, 1911. Christine de
 Pisan, *City of Ladies*, trans. Bryan Anslay (London, 1521; British Museum Micro-
 film, C.13, a.18). For further discussion and references, see Emile V. Telle,
L'Oeuvre de Marguerite d'Angoulême, reine de Navarre et la querelle des femmes
 (Toulouse, 1937); Francis Lee Utley, *The Crooked Rib: An Analytical Index to*
the Argument about Women in English and Scots Literature to the End of the
Year 1568 (Columbus: Ohio State University Press, 1944); Lula McDowell
 Richardson, *The Forerunners of Feminism in French Literature of the Renais-
 sance from Christine of Pisa to Marie de Gournay* (Baltimore: Johns Hopkins
 Press, 1929).

16. For an example of the use of Aristotelian arguments to discredit women
 and of attempts to turn them to women's favor, see the debate between Gasparo and
 Giulano de Medici in Castiglione, *The Book of the Courtier*, trans. Charles S.
 Singleton (Garden City, N.Y.: Doubleday, 1959), III, 11-18.

17. The topic of Aristotle and slavery has had an extensive literature. Interes-
 tingly, given the critical attitude of much of the commentary and the presence in
 the crucial texts of statements about women's inferiority, the literature has side-
 stepped the woman question. For Aristotle and antique slavery, see Robert
 Schlaifer, "Greek Theories of Slavery from Homer to Aristotle," *Harvard Stud.*
Class. Phil., 47 (1936), 165-204, also in M. I. Finley, ed., *Slavery in Classical*
Antiquity: Views and Controversies (Cambridge: Heffer, 1968); Victoria Cuffel,
 "The Classical Greek Concept of Slavery," *J. Hist. Ideas*, 27 (July-September
 1966), 323-342; Ernest Barker, *The Political Thought of Plato and Aristotle* (New
 York: Dover Press, 1959), pp. 359-373. For the use of Aristotle in the justifi-
 cation of modern slavery, see Hanke, *Aristotle and the American Indian*; David
 Brion Davis, *The Problem of Slavery in Western Culture* (Ithaca: New York:
 Cornell University Press, 1966); and Harvey Wish, "Aristotle, Plato, and the
 Mason-Dixon Line," *J. Hist. Ideas*, 10 (1949), 254-266. An exceptional work that

When in the post-medieval world defenders of Indian and black slavery culled Aristotle for authority, they inevitably absorbed sexism as well; for Aristotle built his case for some human beings lordling over other human beings on his fundamental political analogy: “the relation of male to female is naturally that of the superior to the inferior – of the ruling to the ruled. This general principle must similarly hold good of all human beings generally.”¹⁸

An amusing example of the legendary philosopher caught not living up to his principle is the scene of Aristotle crawling on his hands and knees, mounted by Phyllis (Fig. 1). The tale, an attribution to Aristotle of a stock Indian and Arabic story, first appeared in the first half of the thirteenth century in a sermon by Jacques de Vitry and shortly after in a long poem by Henri d’Andely.¹⁹ In the sermon version, Aristotle rebuked Alexander the Great for doting on his wife and neglecting public affairs. Alexander’s wife, seeking revenge, sought Aristotle’s love. Victorious, she gained his agreement to give her a piggy-back ride before she granted him her favors. She told Alexander, who was there to witness Aristotle’s humiliation. In Henri d’Andely’s version, the woman is Alexander’s mistress, and the scene is witnessed in a garden by Alexander and his scribe.

“Phyllis Riding Aristotle” became a popular topos for sculpture, ivory carvings, “aquamanili,” drawings, and woodcuts, the most famous of which date from the sixteenth century. The theme was a two-edged sword, useful in counteracting the vogue of Aristotle and the vogue of courtly love. Sixteenth-century prints of Aristotle and Phyllis often appeared in a set of four, including Samson and Delilah, Solomon worshipping strange gods, and Vergil in the basket. The unifying theme

analyzes Aristotle’s views of women and slaves together is H. C. Baldry, *The Unity of Mankind in Greek Thought* (Cambridge: Cambridge University Press, 1965).

18. Aristotle, *Pol.*, I, 5 (1254b 12-16).

19. There is very little historical information about Aristotle’s relationship with women. The best up-to-date analysis of the bits of information on his mother, Phaestis, sister, Arimneste, wife, Pythias, daughter, Pythias, and mistress, Herpyllis, with whom he bore his son, Nicomachus, and to whom he willed a substantial income, is Anton-Herman Chroust, *Aristotle: New Light on His Life and on Some of His Lost Works* (Notre Dame: University of Notre Dame Press, 1973), I, chaps. 5 and 15. The fiction may be found in Joseph Greven, *Die Exempla aus den Sermones Ferales et Communes des Jakob von Vitry*, no. 15, and in Henri d’Andely, *Le lai d’Aristotle de Henri d’Andely: publié d’après tous les manuscrits par Maurice Delbouille*, (Paris: Société d’édition “Les Belles Lettres,” 1951).



Fig. 1. Aristotle ridden by Phyllis, as depicted in a 7 3/16 x 5 1/8" Renaissance engraving by Master M.Z. (Martin Zatzinger). (Photograph courtesy of Fogg Art Museum, Harvard University.)

was: beware the power of women. Literary support for this interpretation was Aristotle's supposed answer to Alexander's bewilderment at the conjunction of advice and example: "If a woman can make such a fool of a man of my age and wisdom, how much more dangerous must she not be for younger ones? I added an example to my precept, it is your privilege to benefit from both."²⁰

Lest any reader take the moral to heart, let me point out that the story in its literary and visual presentation was generally misogynist to the core, supporting masculine fears of womankind. The story could have been used just as easily to present the moral "Meddlers in marriage, beware!" or to refute Aristotle's view of woman, as I choose to do. The facts, which we all have experienced, that women sometimes do rule over men and that men and women sometimes rule jointly indicate that the relationship of male to female is not universally that of the ruling to the ruled. Furthermore, the story embodies the popular belief, based on folk experience and dynastic experience, that even the mightiest ruler, a man of the stature of Alexander the Great, needs advice and example in order not to be ruled by his wife.²¹ The moral is that the hierarchy of male over female is not a natural product of sex distinctions but is in the fullest sense of the word "manmade." Women are capable of putting themselves on top like Phyllis of legendary fame or of remaking relationships on egalitarian lines. Taking Martin Natzinger's print as the emblem of this paper, I retitle the print "Aristotle Gets His Due from Womankind."

20. The most thorough study of the legend is Jane Campbell Hutchison, "The Housebook Master and the Folly of the Wise Man," *Art Bull.*, 48, no. 1 (March 1966), 73-78. See also George Szabo, "Medieval Bronzes in Prodigious Variety," *Apollo*, May 1969, pp. 359-361; and George Sarton, "Aristotle and Phyllis," *Isis*, 14, no. 1 (May 1930), 8-19. The last quotation comes from Sarton, p. 9. Unfortunately, the latter article reveals what Sarton said of his account of the tale: "I have retold it partly in the spirit of those who told it before." I would like to thank Margaretta M. Salinger, Curator Emeritus, Metropolitan Museum of Art, for help on the "Aristotle and Phyllis" theme.

21. "Phyllis Riding Aristotle" prints, like "Lillith and Adam" stories, are literal presentations of the masculine fear of women. See Louis Ginzberg, *The Legends of the Jews*, trans. H. Szold (Philadelphia: Jewish Publication Society of America, 1946-1964), I, 64-69. Women's struggles for equality are all too frequently perceived by men as attempts to "be on top." Contemporaneously with the "Aristotle and Phyllis" prints that showed Phyllis carrying a whip, men who had been "beaten by their wives" were led through their town sitting backward on an ass in ridiculing ritual. See Natalie Z. Davis, "Youth Groups and Charivaris in Sixteenth-Century France," *Past and Present*, 50 (February 1971), 45, 65-66.

Fortunately for the historian and unfortunately for the women whose lives have been adversely affected by his influence, Aristotle the taxonomist was skilled in the art of making distinctions between kinds of life. In the *Historia Animalium* and in the *De Generatione* Aristotle precisely distinguished between male (*arrên*) and female (*thêlu*) among animals that possess locomotion.²² Difference of sex has a physical basis, namely, the greater heat of the male. Unlike the medical school of Hippocrates, Aristotle taught that *sperma*, in its narrow sense as the seed from which an embryo grows, is secreted only by males. Lack of heat explained why females secrete instead *catemenia*, identified with menstrual discharge: the colder body of the female prevents the blood from completing the transformation into semen. Aristotle, in fact, sometimes used the generic term *sperma* for both male seed and female catamenia, for both were viewed as surplus useful nutriment. However, he was very clear in declaring that sperm differs from catamenia in that it is the completed form.²³ In the following influential definition of "woman," one can see the far-ranging implications of his embryology: "woman" (*gyne*) is as it were an impotent male, for it is through a certain incapacity that the female if female (*thêlu*), being incapable of concocting the nutriment in its last stage into semen."²⁴ On account of their lack of semen, Aristotle at several points compared women to

22. Aristotle's biology has been treated with concern for its impact on women generally only in books on the history of women. For an example of what may occur without that perspective, see G. Pouchet, *La biologie Aristotélique* (Paris: Germier Baillière, 1885), chaps. 8-10. Pouchet's analysis of Aristotle's genetics and embryology is filled with praise for Aristotle's genius and with questionable, oversimplified confirmation by science of Aristotle's theories. For example, on p. 86 we find: "Pour nous, modernes, les produits sexuels male et femelle portent en eux les deux choses: un substratus material dominant dans l'oeuf, un principe d'énergie dominant dans le spermatozoïde. Nous n'avons rien ajouté, comme on le verra à la science d'Aristote." Aristotle's biology continues to gain praise for its overall contribution. Prominent examples are D'Arcy Wentworth Thompson, *On Aristotle as a Biologist* (Oxford: Clarendon Press, 1913); and J.M. Oppenheimer, "Aristotle as a Biologist," *Scientia*, 65 (1971), 649-658.

23. *H.A.*, 1, 3; III, 1 and 22; V-VIII; IX, 1. *G.A.* For a thorough discussion of the nature and role of "sperma," see Preuss, "Science and Philosophy."

24. *G.A.*, I, 20 (728a 18-20). *Arren agonos* may be rendered "impotent male" or "infertile male." Gaza's translation discussed woman's "impotentia," impotence.

For support that Aristotle's head differential between male and female was the starting point of the logic justifying antifeminism, see Clarence Shute, *The Psychology of Aristotle: An Analysis of the Living Being* (New York: Columbia University Press, 1971), p. 37. Given the topic of his book, I was surprised to see Shute summarizing rather than critically analyzing the Aristotelian inequality of

young boys.²⁵

While recognizing the necessary role the female plays in bearing the young, Aristotle went about as far as one can in attributing fertility exclusively to the male sex. Basic to his philosophy was his theory of causation. There are four factors that make a thing what it is: the material cause — the material from which it is made; the efficient cause — that which gives impetus; the formal cause — that which gives form (*eidos* or *logos*); and the telic cause — the goal (*telos*) toward which it strives. In natural processes, as in the developing of a human embryo, the formal and telic causes are the same; the “telic” is the temporal term for expressing the striving of an embryo to become a fully developed human being, and the “formal” is the term indicating the potential humanity within the embryo.²⁶ As it turns out, three of the four causes for the embryo’s coming into being Aristotle attributes to the semen; only one cause, a necessary one but one of least importance in the hierarchy of being, does he attribute to the catamenia. Woman’s role in the creation of offspring is limited to the contribution of the material for the embryo’s growth and nourishment.²⁷

For a human embryo to be created, a male is needed to initiate growth and to direct development toward the human form. Holding a common Greek philosophical belief that matter is of much lower importance than form or spirit, Aristotle was adamant in denying that the semen contributes any material component to the embryo. Viewing the male and female as combined in plants and viewing the Divinity as pure spirit, Aristotle was able to justify the superiority of the male and the inferiority of the female on the basis of his theory of reproduction:

... as the first efficient or moving cause, to which belong the definition and the form, is better and more divine in its nature than the material on which it works, it is better that the superior principle should be separated from the inferior. Therefore, wherever it is possible and so far as it is possible, the male is separated from the female. For the first principle of the movement, or efficient cause, whereby that which comes into being is male, is better and more divine than the material whereby it is female.²⁸

the male and female *psyches* in their generative capacities (see p. 15, for example). There are several starting points for Aristotle’s views on woman.

25. *G.A.*, I, 20 (728a 17), and V, 3 (784a 4-7).

26. *Physica*, II, 3. *G.A.*, I, 1 (715a 1-11).

27. See, for example, note 28 below. Also, *G.A.*, I, 20 (729a 9-11).

28. *G.A.*, II, 1 (732a 3-10). Preuss, “Science and Philosophy,” rightly sug-

The passage seems to imply that because in procreation male contributes form and female contributes matter, Aristotle identifies maleness with form and femaleness with matter. Could it be instead that because Aristotle associated females with material activities (providing food and clothes) and males with the spiritual activities (scholarship and government), these distinctions became embodied in his embryology?

The material contribution of female catamenia had social implications as well. In the *Politics*, Aristotle advised pregnant mothers to eat well and to exercise, both items recommended by modern science. However, he also added a qualification that easily may be interpreted as eliminating pregnant women – in his time, most women during their prime of life – from challenging rational activity, the activity of Aristotle’s fully developed human being: “Their minds, unlike their bodies, should be kept free from exertion; for children evidently draw on the mother who carries them in her womb, just as plants draw on the soil.”²⁹ The plant analogy is most meaningful in an Aristotelian context, for the matter that the females contribute to their embryos has only the vegetative soul allowing for growth. It lacks in both potentiality and in actuality the sensitive soul, which distinguishes animals from plants, and the rational soul, which is the characteristic possession of humanity.³⁰

On account of misreadings of Aristotle, it should be pointed out that when he talked of the female lacking *psyche* (soul), he was referring to the female principle as it reflects itself in the potential to implant *psyche* in offspring. He quite clearly stated that females have souls; in fact, this recognition provided him with an essential problem: “And yet the question may be raised why it is that, if indeed the female possesses the same soul and if it is the secretion of the female which is the material of the embryo, she needs the male besides instead of generating entirely from herself.”³¹ His answer was that the male alone had the potential to create the sensitive and rational souls; this assertion was supported by his observation of unfertilized bird eggs.³²

He was trying to allay the masculine fear that “the male would exist

gests that this passage is rhetorically designed to appeal to a male audience. This passage is based on a disputed text.

29. *Pol.*, VII, 12 (1335b 17-19).

30. *G.A.*, II, 5. For a more subtle presentation, see *De Anima*, II, 2-5; III.

31. *G.A.*, II, 5 (741a 5-10). For other differences between the souls of males and females, see quotation at note 84 below.

32. *G.A.*, II, 5 (741a 20-33).

in vain."³³ From a feminine or human point of view, he did not explain why one soul has generative capacities and why another does not. The material differences between the sexes would not be a sufficient explanation, and Aristotle did not attempt to use it. Instead, he included the male production of the sensitive soul as part of his definition of male animals.³⁴ In effect, because the sensitive soul is that which imparts locomotion, its existence in the semen is implicit in the identification of semen with the efficient or moving cause.³⁵ The rational soul of the human animal that is divine poses a more difficult issue. Because the rational soul is not connected with bodily activity, Aristotle did not even bother to explain that it could not be part of the female contribution; as one might suspect, he viewed it as a principle spiritually imparted by semen in its purest state.³⁶ Aristotle held to this viewpoint despite his observation that offspring often resemble their mothers in form, movement and character.³⁷ Given Aristotle's distinctions between the nutritive, sensitive, and rational capacities of the male and female generative secretions, we shall see that Aristotle failed to explain how female generative matter could carry with it any more than nutritive or material resemblances to the mother.

The distinctions between activity and passivity accompanied the distinctions between form and matter. The activity of the semen involved its soul-giving and formative capacities. Aristotle's reasoning was as follows:

For there must needs be that which generates and that from which it generates; even if these be one, still they must be distinct in form and their essence must be different; and in those animals that have these powers separate in two sexes the body and nature of the active and the passive sex must also differ. If, then, the male stands for the effective and active, and the female, considered as female, for the passive, it follows that what the female would contribute to the semen of the male would not be semen but material for the semen to work upon.³⁸

33. *G.A.*, II, 5 (741b 4-5).

34. *G.A.*, II, 5 (741a 13-16). Peck's translation makes the definition explicit; it is at least implicit. The argument was built up in *G.A.*, II, 4. Particularly see (733a 33-733b 1), (734b 20-24), (735a 8-9), and the definition in (738b 18-27).

35. See note 24 above.

36. *G.A.*, II, 3 (736b 26-29); (737a 6-11).

37. *G.A.*, I, 15-18.

38. *G.A.*, I, 20 (729a 25-35).

From his original distinction between the sex that generates in another and the sex that generates in itself, on which he based his explanation of the differentiation of body parts,³⁹ Aristotle built a case that by definition one sex must be active and one sex passive. The activity attributed to the male is his contribution of the initial movement to an embryo's growth. But the distinction between male and female implied therein derives from Aristotle's general viewpoint and has general implications:

The female, as female, is passive, and the male, as male, is active and the principle of the movement comes from him. Therefore, if we take the highest genera under which they fall, the one being active and motive and the other passive and moved, that one thing which is produced comes from them only in the sense in which a bed comes into being from the carpenter and the wood, or in which a ball comes into being from the wax and the form.⁴⁰

The craftsman analogy vividly combined the association of maleness with activity and form and the association of femaleness with passivity and matter, and in so doing displaced any notion that the female is the procreator. The male, or nature working through the male, is analogous to the craftsman.⁴¹ One might have expected that since pure semen was to Aristotle the source of man's superior generative capacities, that semen would be analogous to the craftsman. However, Aristotle did not observe semen in some insects and wanted through this analogy to clarify that the observable material presence of semen is not what is important.⁴² The analogy implied the following: utilizing the female

39. *G.A.*, I, 2 (716a 13-716b 1).

40. *G.A.*, I, 21 (729b 12-21).

41. "Male" is implied by the passage in note 38. *G.A.*, I, 22, clearly refers to "nature." The analogy of a craftsman making a bed appears in Plato, *Republic*, trans. and ed. F. M. Cornford (London: Oxford University Press, 1941), X (596-598); Aristotle transmitted the analogy from the context of the theory of ideas to the context of biological reproduction.

42. *G.A.*, I, 21 (729b 22) – I, 22 (730b 30). Aristotle also felt compelled to explain away what appeared to him to be a female organ inserted in the male, and regarded such male insects, which needed their material to be brought to them, as weak males. This indicates that Aristotle to some extent did associate male activity with the visible activity during intercourse. Preuss, while rightly criticizing Peck's translation of the quotation in note 34, does not give sufficient credence to the sexual overtones of Aristotle's "male activity." (Preuss, "Science and Philosophy," pp. 10-15). Of all the items he might have given his carpenter to build, Aristotle chose a bed.

body as a workplace containing raw material, nature through the male takes the female generative matter, activates it, and makes of it a human life. Implicit in this view is that the male is generative even after his offspring's birth, for it is then that the sensitive and rational faculties gradually develop to fulfill the form given the offspring by the father. Through this analogy, the male becomes the procreator *par excellence*.

Furthermore, the distinctions between procreation and creation, which in the *Symposium* Socrates' wise woman had seen as the distinction between creativity of the body and creativity of the soul, are blurred for the male procreator.⁴³ The male in taking a woman for the begetting of offspring is involved in an art, that of creating a human soul. The observable pregnancy of women is pregnancy of the body; the unobservable pregnancy of men is the generative force of the soul of man. The most creative aspects of procreation have thus been discounted in woman and attributed exclusively to man.

It is implied in Aristotle's view that the female is in the fullest sense of the word a "laborer."⁴⁴ She passively takes on her task, laboring with her body to fulfill another's design and plan, and consequently her contribution to the product is of a secondary nature. The product of her labor is not hers.⁴⁵ The man, on the other hand, does not labor but works. In the craftsman analogy, Aristotle implied that the male is *homo faber*, the maker, who works upon inert matter according to a design, bringing forth a lasting work of art. His soul contributes the form and model of the creation. Out of his creativity is born a line of descendants that will preserve his memory, thus giving him earthly immortality.⁴⁶

43. Diotima's speech in Plato, *Symposium*, Loeb Classical Library (New York: G. P. Putman's Sons, 1925), 208 D-209 B.

44. The distinction between "labor" and "work" is that of Hannah Arendt, *The Human Condition* (Chicago: University of Chicago Press, 1958), chaps. 3-4.

45. It was a common practice in ancient Greece for the male parent to decide by the fifth day after birth whether to expose to death a deformed or otherwise unwanted child. Alfred Zimmern suspects that exposure fell more often on females, while Lacey suspects it fell more often on males. Both agree that the evidence from the Hellenistic period indicates that by then the abandoned pot most frequently contained baby girls. Alfred Zimmern, *The Greek Commonwealth: Politics and Economics in Fifth-Century Athens* (London: Oxford University Press, 1969), pp. 330-334; Lacey, *The Family in Classical Greece*, pp. 165-167.

46. *G.A.*, II, 1 (731b 30-732a 1); *De Anima*, II, 4 (415b 1-9). A common fear

A problem in applying this work-labor distinction to Aristotle's theory of procreation is that the design for the offspring is carried by the semen and is not a conscious product of the father's mind. That is why Aristotle recognized that it is nature working through the sexes that brings forth offspring. Nevertheless, one intention of Aristotle's works was to bring the design of offspring more fully under the conscious control of man. This intention was reflected most clearly in his treatment of marriage and procreation ages and of resemblances between parents and offspring.

Recognizing that children born of parents very old or very young are more often born imperfect, Aristotle suggested that women procreate between ages eighteen and thirty-six and men procreate between ages thirty-seven and fifty-four. The appropriate age differential between husband and wife would then be twenty years, increasing by a few years the pattern typical for Aristotle's time.⁴⁷ Besides his ostensible reason, that of allowing for a simultaneous development through the procreative age (ending at fifty and seventy, respectively), Aristotle, I think, found this age differential useful for backing up the appropriate power relationship of the spouses and for giving the male a greater

of Greeks was that after death the rites would not be performed for them, and that in consequence their souls would wander around restlessly. The happiness of the dead was dependent on the continuity of descendants who would guard and respect the household hearth and ancestral tomb. A female on marriage left her father's hearth for her husband's; fathers sought sons to perpetuate their line. The importance of preventing extinction of the family is indicated by the fact that if the only legitimate heir was a daughter, even if she were married she would be brought home, the marriage would be dissolved, and she would then be married to the nearest male relative. The object was to continue the line through her son. Fustel de Coulanges, *The Ancient City*, trans. W. Small (New York: Doubleday, 1956), pp. 1-85. A pertinent case in point of a father whose only legitimate child was female was Aristotle. See his "Last Will and Testament" with commentary in Chroust, *Aristotle: New Light on His Life*, I, chap. 15. While disregarding the Greek superstitions on the dead, Aristotle agreed to some extent that the fortune and virtue of one's descendants had an effect on one's life. *Ethica Nicomachea*, I, 11 (1101a 22-1101b 10).

47. *Pol.*, VII, 16. The little legal and literary evidence we have indicates that in Athens men aged about thirty married girls aged fourteen to sixteen. Contrary to Wright's view, Aristotle was not completely conforming to custom, but was pushing the age a few years later in order to increase the number of women surviving childbirth and the number of births of tall, healthy males. Wright, *Fem-*

chance for providing the active, formal element in procreation.⁴⁸

It is difficult to understand how by Aristotle's theory offspring can resemble the mother unless one recognizes that male "activity" is more precisely a normative than an empirical principle. The semen does not potentially contain within it the parts of the embryo; the parts are instead potentially present in the catamenia.⁴⁹ What is supposed to happen is that the movement of the semen will prevail, shaping the embryonic parts on the model of the male parent: "If, then, the male element prevails it draws the female element into itself, but if it is prevailed over it changes into the opposite or is destroyed."⁵⁰ Two Aristotelian principles work to explain the result of lack of dominance of the male semen: (1) "everything changes not into anything haphazard but into its opposite," and (2) "the agent is itself acted upon by that on which it acts."⁵¹ The first principle explains that if the embryo does not resemble the father's line it will most likely resemble the mother's. The second principle allows for some activity of the female generative matter. This framework is successful in explaining the birth of female offspring. Because the female is the opposite of the male, if the male does not prevail a female will be born. In such cases, instead of the catamenia being heated by the semen, the semen is cooled by the catamenia, and as a result body parts appropriate to a female are formed.⁵² A male accepting Aristotle's theory would have good reason to feel chagrin at the birth of a female child: his maleness had not acted but had been acted upon.

In discussing the resemblances between father and child, Aristotle indicated that the individual characteristics of the man have more force in generation than his more general characteristics as a human being or as a male.⁵³ Given the soul-giving force of his semen, the transmission of individual traits to male and female offspring is understandable. However, the argument becomes strained when Aristotle tries to extend

inism in Greek Literature, p. 213; Lacey, *The Family in Classical Greece*, pp. 106-107, 163. Given that a major reason for marrying daughters off young was to insure virginity, Aristotle was clever in arguing that girls who marry young develop less sexual restraint. A wife's adultery and hidden bastards were major societal fears.

48. *Pol.*, I, 12. *G.A.*, IV, 2 (767a 13-27).

49. *G.A.*, II, 6 (741b 6-10).

50. *G.A.*, IV, I (766b 15-16).

51. *G.A.*, IV, 3 (768a 1 and 768b 16-17).

52. *G.A.*, IV, I (766b 15-26); IV, 3 (768a 6-7).

53. *G.A.*, IV, 3 (767b 24 - 768a 8).

it to resemblances to the mother. The assumption is that just “as ‘father’ and ‘mother’ are opposed as general terms, so also the individual father is opposed to the individual mother.”⁵⁴ This theory would seem to apply successfully only to those psychological characteristics that are biologically determined by sex differences; for example, Aristotle contended that women are more compassionate, more querulous, more void of shame, and so on.⁵⁵ Even these traits are expressed in relative terms, and it would be hard to convert them into clear-cut opposites. Furthermore, if sex-related characteristics are what he meant to imply, then Aristotle made it even harder to explain the resemblances of male children to their mothers. In those cases, he contended that the male principle prevailed while the principle coming from the individual man did not.⁵⁶

His theory needed bolstering, and Aristotle added this explanation: “Some of the movements exist in the semen actually, others potentially; actually, those of the father and the general type, as man and animal; potentially, those of the female and the remoter ancestors.”⁵⁷ Since telic and formal elements have been given to this male procreator from his father, and his father’s from his father, and so on, one can understand the passing down of the traits of paternal ancestors. But how does the semen potentially carry the female mate’s characteristics or, even more difficult, how does it carry her mother’s characteristics?

In referring to the semen in the embryonic state, where it is activating the female generative matter, Aristotle often used the analogy of fig juice coagulating milk. Like the fig juice or rennet, the semen activates the matter, causing it to react vigorously. In the process, the active agent “sets” the reacting passive agent.⁵⁸ Given Aristotle’s view that the catamenia is the source of embryonic body parts, it is understandable that if the semen does not dominate, it releases the physical characteristics of the mother, such as height or eye color. However, in the act of the “setting” (*synistasis*) of the catamenia, how might the semen potentially release a mother’s unique spiritual traits, such as a calm temperament broken only by extreme bursts of religiosity or a remarkable ability to imitate and hum a tune? For such traits to be activated, must not the catamenia have some telic or formal factors,

54. *G.A.*, IV, 3 (768a 8-9).

55. *H.A.*, IX, I (608a 22 - 608b 18).

56. *G.A.*, IV, 3 (768a 28-31).

57. *G.A.*, IV, 3 (768a 12-14).

58. *G.A.*, I, 20 (729a 12-16), 21 (729a 25-35); IV, 4 (771b 26-28). I thank Marilyn Arthur of Columbia University for her stimulating dialogue with me on Aristotle’s theory of resemblances.

some nonmaterial potential of its own? If the female can also pass down individual spiritual traits, then there are a craftsman and a crafts-woman combining their designs for the modeling of their joint creation.

Aristotle's *a priori* assumptions on the unequal contribution of the male and female to generation necessitated his development of a complex theory of resemblance, one that is not fully satisfactory. Another alternative existed for him: his observation of the parallel occurrences of offspring resembling mother and offspring resembling father might have led him to question his assumption that the father alone has a formative influence in the process of generation. Likewise, his observation of the parallel births of males and females might have led him to view the birth of females as a "normal" phenomenon; instead, he viewed females as "monstrosities" and built a theory of family resemblances that was primarily suitable for explaining the one phenomenon of sex resemblance.

Despite the recognition that the two sexes serve the telic end of preserving the species,⁵⁹ the "norm" for Aristotle was that the active principle dominates the passive principle. His practical task was to help fulfill desires for male offspring, a task that still brings forth books today. His concern for reducing the phenomena of female births contributed to his prescription to avoid possible pregnancy when either mate was under or over age.⁶⁰ If one were to accept the admonition in the *Politics* to avoid situations that produce weak or female children and his suggestion to consult a natural philosopher who would give such advice as "the north wind is better than the south,"⁶¹ one would learn on consulting *On the Generation of Animals* to choose a female of appropriate age, to avoid cold weather and drinking cold water, and to abstain while the south wind blew.⁶² Such suggestions would help one to have intercourse "in the right place, and at the right time."⁶³ But Aristotle also had a theoretical reason for treating the birth of females as abnormal: he needed to accommodate phenomena of females to his telic view of the nature of each individual seed.

59. *G.A.*, II, I (731b 24 - 732a 12); IV, 3 (767b 9-13).

60. See note 46. *Pol.*, VII, 16 (1335a 11-14). "In the whole of the animal world the descendants of young parents have imperfections. They tend to be of the female sex, and they are diminutive in figure." Also *G.A.*, IV, 2 (766b 28-32).

61. *Pol.*, VII, 16 (1335a 40-45).

62. *G.A.*, IV, 2 (766b 28 - 767a 35). The statements are worded as observations, not as prescription.

63. *G.A.*, II, 4 (740b 21-25).

For Aristotle, each seed has within it the potentially to develop into a completed member of its species. The final end not only is a purpose to which the seed moves but actually preexists in the parent animal.⁶⁴ (In discussing teleology, Aristotle referred to "parent" in the singular.) Thus, reproduction maintains the *eidos* of each species. From several of his definitions of the female, we have seen that she is defined by her incapacities, that is, her inability to fulfill ends that are in fact fulfilled by the male. Complete development of a particular human seed thus would necessitate that the seed become male.

Aristotle defended this view when he declared that when the male principle was appropriately active, an embryo would emerge hot enough to concoct nourishment to its final stage, thus producing semen and the accompanying male organs. This explanation accorded with Aristotle's observation that the heart was the first organ formed. Viewing it as the source of blood and of vital heat, and also as the central, most important organ, he deduced that with the development of the heart, the sex of the embryo was determined.⁶⁵ This deduction, however, depended on his introductory definition of "catamenia." The principle that the female was a male whose surplus blood was stunted at an early state of development combined very neatly with Aristotle's observation of the embryonic heart. Since his view that the semen was the high point on a continuum extending across blood and catamenia and his view that females have less vital heat than males were both originally declared as *a priori* principles, for which the empirical proof given was indirect, one would have reason to believe that these principles were in fact partly derived from his view of embryonic development.⁶⁶ Consistent as it is, his reasoning is thus circular and self-supporting.

Among the deviations from an exact replica of the male parent, the worst was the procreation of a monstrosity. The context in which Aristotle discussed monstrosities is important. "For even he who does not resemble his parents is already in a certain sense of monstrosity; for in these cases Nature has in a way departed from the type. The first departure is indeed that the offspring should become female instead of male; this, however, is a natural necessity."⁶⁷ It is not mere coincidence that females were discussed in this passage along with monstrosities; the two phenomena were related in Aristotle's science. Animals with

64. *De Partibus Animalium*, I, 1 (640a 23-28; 641b 24-35).

65. *G.A.*, IV, 1 (766a 30 - 766b 2); II, 1 (734a 18-33); *P.A.*, III, 4.

66. See note 24. *G.A.*, I, 18-20.

67. *G.A.*, IV, 3 (767b 6-10).

extra parts, animals missing parts, and females reveal different degrees to which the semen may fail to properly guide the catamenia. They show what occurs when the female principle dominates in procreation.⁶⁸ The association of female infants with defective infants was an inauspicious one, for in ancient Greece defective children were usually left in a pot to die.⁶⁹

While in the above passage Aristotle felt it necessary to explain how the male parent could fail to produce a replica of the male parent, in the following one he felt it necessary to explain how a male child could emerge from a female parent: "Just as the young of mutilated parents are sometimes born mutilated and sometimes not, so also the young born of a female are sometimes female and sometimes male instead. For the female is, as it were, a mutilated male, and the catamenia are semen, only not pure; for there is only one thing that they have not in them, the principle of soul."⁷⁰ This passage again makes clear the cumulative nature of Aristotle's antifeminism. Again we find a misleading, easily overextendible definition of female derived from what Aristotle considered to be characteristics of menstrual fluid. Linking together the material deficiency of the catamenia with its spiritual deficiency, he deduced another devastating catchphrase: the female is a mutilated male.

The literal intent of this definition is proved by the fact that his discussion of embryology led him to bring up "the case of eunuchs, who, though mutilated in one part alone, depart so much from their original appearance and approximate closely to the female form."⁷¹ In another passage discussing baldness, he acutely observed that women do not grow bald. Interestingly, this capacity to retain hair he viewed as a deficiency. Eunuchs also do not lose their hair for "this mutilation is a change from the male to the female condition."⁷² Aristotle put it very bluntly: women are at birth castrated men.

One consolation remains to a father whose offspring, despite all efforts to the contrary, emerges from the workshop female. This daughter's menstrual fluid, the mark of her congenital deficiency, contains

68. *G.A.*, IV, 3 (767b 10-15).

69. Records from the Hellenistic period indicate that females were frequently left exposed, as were deformed children. One might speculate on the possibility that Aristotle's views of mutilation were known beyond the Lyceum and that at the least they made parents more open about the exposure of female infants. See note 45.

70. *G.A.*, II, 3 (737a 25-30).

71. *G.A.*, IV, 1 (766a 25-30).

72. *G.A.*, V, 3 (784a 5-11).

the *telos* by which his form can again have a chance for duplication. "Then Nature, aiming at the best and the end, uses it up in this place [releases menstrual blood] for the sake of generation, that another creature may come into being of the same kind as the former was going to be, for the menstrual blood is already potentially such as the body from which it is discharged."⁷³ While the daughter can not completely fulfill nature's goal, through her an offspring can be born that will complete itself into the male form. Interestingly, Aristotle's genetics increased the practicality of the Greek custom of marrying such a daughter to a male relative, for such mating would increase the probability that the traits of the sought-after grandson and heir would be similar to those of the grandfather.⁷⁴

While taking Aristotle's ideas about woman seriously, in the sense of seeking out their implications and the fundamental biological observations and principles upon which they were based, I think that it is time for us to recognize that infiltrating Aristotle's erudition was a very common prejudice, one that we shall see again in his political and social theories: an unquestioned belief that the female sex is inferior to the male sex. Further proof comes from the fact that he very cleverly argued to explain away apparent female superiorities. He observed that in the human species, unlike other species, males are more often born defective than females. Instead of using this fact to modify his previous statements on the "mutilated sex," he managed to explain it away by the assertion that the heat of male embryos makes them move more and thus makes them more liable to damage.⁷⁵ His observations also led him to conclude that females develop more slowly in the womb, but that after birth they pass more quickly through the stages of puberty, prime,

73. *G.A.*, II, 4 (738b 1-4).

74. See note 46. If more biographical information were available, Aristotle's personal feelings about his own line of descent would be an interesting topic for a psychoanalytical historian to study. I would guess that Aristotle believed that biologically he had continued his line through his son, Nicomachus. However, since an illegitimate son even if adopted could legally acquire only a life estate, he must have looked forward to the birth of heirs through his daughter, Pythias. Aristotle's will did not indicate whether the men chosen by him as prospective mates for his daughter were relatives or friends; given his biological views, I think that if there were relatives available, Aristotle would have chosen them. It would be fascinating to know whether or not Aristotle, his father, Nicomachus, the namesake, and the daughter Pythias resembled one another. If they all did, then Aristotle's biological treatises would serve to "prove" that maleness dominated in Aristotle's family.

75. *G.A.*, IV, 6 (755a 5-10).

and old age. Slowness in the womb, resulting from coldness, is interpreted as a defect, despite his recognition that colder embryos are less damaged. Quickness out of the womb is also interpreted as a defect, resulting from female weakness: "after birth it [a female] quickly arrives at maturity and old age on account of weakness, for all inferior things come sooner to their perfection or end, and as this is true of works of art so it is of what is formed by Nature."⁷⁶ Women can't win with the supposed "empiricist;" all apparent differences between male and female are attributed to the "natural deficiency" of the female sex.⁷⁷

To draw scholarly attention to the evidence of sex prejudice in Aristotle's works is not to assert that such prejudice was the determining motivation of his system or that his works were mere rationalizations of common prejudice. The complexity and accomplishment of Aristotle indicate his overriding concern for scientific and philosophical truth. What we must recognize is that the truth discovered was not neutral, but value-ridden. The inferiority of the female sex was not in Aristotle's works an explicit end-point, a doctrine to be proved or justified, but was rather a value-ridden premise underlying his logical arguments on other topics.

Aristotle's view that the inherent goal of each human seed is to become a male had one good consequence for his view of womankind: he conceded that men and women are of the same species. This was no small concession, for in the creation account of Plato's *Timaeus* "men who proved themselves cowardly and spend their lives in wrong-doing were transformed, at their second incarnation, into women."⁷⁸ In the *Metaphysics* Aristotle brought up the question "why woman does not differ from man in species, when female and male are contrary and their difference is a contrariety."⁷⁹ He concluded that their difference is not one of essence, but rather a difference of matter or body. This conclusion was correlated with the fact that the same seed, depending

76. *G.A.*, IV, 6 (775a 18-23).

77. *G.A.*, IV, 6 (775a 16); also see *H.A.*, VII, 3 (583b 2-29).

78. Plato, *Timaeus*, trans. R. G. Bury, Loeb Classical Library (New York: G. P. Putnam's Sons, 1929), 91 A. While recent research has questioned the attribution of this work to Plato, and his dialogues are of more current interest, in the formative medieval period the *Timaeus* meant Plato. In fact it was the only work of Plato available in Latin before 1100. This partly explains Plato's medieval reputation for misogyny. R. R. Bolgar, *The Classical Heritage and its Beneficiaries* (Cambridge: Cambridge University Press, 1954), p. 175.

79. *Met.*, X, 9 (1058a 29-31).

on circumstances, can grow to be either male or female.⁸⁰ Making an analogy between the material differences of sex and the material differences of color, Aristotle concluded that black men and white men, as well as males and females, are all part of the same human species.⁸¹

While pleased that he drew this conclusion, I must admit that in doing so he ignored some of his own definitions of the form and the essence of males and females.⁸² Furthermore, despite the fact that historical studies cannot undo what has already been done to and by previous generations, I wonder what was the combined impact of the *Timaeus* and Aristotle's biology on men's and women's conception of life. Aristotle's ideas on the hierarchy of species, together with those of Plato's *Timaeus*, played the formative role in the development of the idea of the great chain of being.⁸³ Among Aristotle's contributions was the notion that each of the lower species (plants and some animals in which male and female are combined) takes up one link on the chain, while each of the higher species takes up two links. While one might portray Plato's hierarchy of being as a chain of single links, the links alternating in the animal region between male and female, one might portray Aristotle's hierarchy of being as a chain of single links which at the point of sex differentiation merges into a chain two links wide, with one link weaker and hierarchically below the other one.

The weaker link in the human couple is weaker not only in the capacity to generate offspring but also in the capacity to generate decisions. For Aristotle, woman needs man not only to form her children but also to form her decisions. The intermingling of Aristotle's arguments that woman is subordinate to man with his arguments that woman should be subordinate to man is nowhere more apparent than in his first book of the *Politics*:

... the freeman rules over the slave after another manner from that in which the male rules over the female, or the man over the child; although the parts of the soul are present in all of them, they are

80. *Met.*, X, 9 (1058b 22-24).

81. *Met.*, X, 9 (1058b 1-15).

82. See, for example, note 38.

83. Arthur O. Lovejoy, *The Great Chain of Being: A Study of the History of an Idea* (Cambridge, Mass.: Harvard University Press, 1936). The topic of sex differentiation is not mentioned in this superb work. Nor has it been followed up by researchers who continued Lovejoy's *topos*. This paper suggests that later believers in the great chain of being need to be studied to determine the impact on them of Plato's and Aristotle's views on the hierarchy of sex.

present in different degrees. For the slave has no deliberative faculty (bouleutikon) at all; the woman has, but it is without authority (akuron), and the child has, but it is immature. So it must necessarily be supposed to be with the moral virtues also; all should partake of them, but only in such manner and degree as is required by each for the fulfillment of his duty.⁸⁴

That woman's deliberative faculty is *akuron* is Aristotle's most explicit statement on woman's mental or spiritual inferiority, yet it is cryptically ambiguous. The passage deserves to be explicated⁸⁵ since it reveals the convergence of Aristotle's biological and political sexism. As we shall see, Aristotle used the adjective *akuros* both as a political term implying lack of legitimate power or authority and as a biological and medical term implying inadequacy of capacity.

He may have meant, "A woman has no right to deliberate." Aristotle used the term *akuros* to refer to "fraudulent" legal proceedings, "invalid" contracts, decrees declared "void";⁸⁶ and he used the term *kurios* to refer to "binding" contracts, constitutional schemes actually "in power," and government "according to the law."⁸⁷ On the macropolitical level of the city-state, deliberative acts have authority when they conform to the legitimate constitution; likewise, on the micropolitical level of a marriage, deliberative acts have authority when they conform to the legitimate constitution. While Aristotle recognized several alternate legitimate constitutions for the city-state, he recognized only one legitimate form for a marriage. The constitution is an aristocracy, a government by the best for the benefit of all. Unlike macropolitical aristocracies, where there is an interchange of the roles of ruler and ruled, in the family the husband permanently rules over the wife, allocating to her the sphere of activity proper to a woman. The ruler needs practical wisdom; the ruled need only true opinion.⁸⁸ It is right for the wife to accept and enact the deliberations of her husband.

84. *Pol.*, I, 13 (1260b 28-31), translation of B. Jowett in the Oxford edition.

85. Recent scholars have rarely quoted this passage in full or commented upon it at length; even articles on Aristotle's concept of the "natural slave" discreetly pass over the point about women (see note 17 above).

86. *De Rhetorica ad Alexandrum*, 36 (1443b 28); *Rhet.*, I, 15 (1376b 27 and 12).

87. *Rhet.*, I, 15 (1376b 27); *Pol.*, II, 12 (1274b 27); *Pol.*, V, 6 (1306b 20).

88. *Pol.*, I, 12 (1259a 39 - 1259b 10); III, 4 (1277b 8-30); *E.N.*, VIII, 11 (1160b 32-37).

Indeed, Aristotle's assertion that woman's deliberative faculty lacks authority was part and parcel of his assertion that woman possesses moral goodness to the extent required to discharge her function.⁸⁹ The conventional female functions during Aristotle's lifetime influenced his prescriptions on the proper use of woman's deliberative faculty. A conventional Greek, Aristotle limited his perspective of women's service to the state to her fulfillment of functions within the family. The family is that part of the state which perpetuates citizens and provides for recurrent daily needs.⁹⁰ Within that institution, man's role is to beget offspring, woman's role is to bear and nurture offspring; man's role is to acquire household goods, woman's role is to take care of household goods.⁹¹ The separate spheres of man and woman necessitate different virtues. Man needs the courage of a ruler; woman needs the modesty and silence of one who obeys.⁹² Just as Aristotle thought it was improper for a freeman to understand how to do the physical labor of a slave or the productive work of a craftsman or mechanic, he considered it improper for a freeman to understand how to do the housework of a woman. Too much useful knowledge on menial subjects degrades the mind, making it unfit for the higher liberal tasks of governing.⁹³ A freeman commands that tasks be done and lets his subordinates give instruction on how such tasks are to be done.⁹⁴ It would be illegitimate rule for the husband to take authority on all household matters; he appropriately allocates to his wife a limited sphere of decision making in the execution of the housework.⁹⁵

Aristotle was able to justify the authority of husband over wife on the basis of his principles of distributive justice and distributive friendship. Justice is giving each his due: equals should receive equal, and unequals should receive unequal. Offices should be distributed so that the better do more of the ruling and the inferior do more of the obeying.⁹⁶ Likewise, affection in friendship is appropriately proportionate to worth: the better partner should receive more affection than he gives.⁹⁷ "The friendship of man and wife, again, is the same that is

- 89. See quotation in note 84 above.
- 90. *Pol.*, I, 2 (1252a 26-31, 1252b 12-15).
- 91. *Pol.*, VII, 16 (1335b 27-29); III, 4 (1277b 24-25).
- 92. *Pol.*, I, 13 (1260a 20-30); III, 4 (1277b 21-25).
- 93. *Pol.*, I, 7; III, 4-5; VIII, 2; II, 5 (1264b 4-6).
- 94. *Pol.*, III, 4 (1277a 30 - 1277b 6).
- 95. *E.N.*, VIII, 11 (1160b 34-36).
- 96. *Pol.*, III, 9, 12; *E.N.*, V, 3.
- 97. *E.N.*, VIII, 7.

found in an aristocracy; for it is in accordance with virtue — the better gets more of what is good, and each gets what befits him; and so, too, with the justice in these relations.”⁹⁸ While viewing the marital friendship as an unequal friendship, in which the female loves the male more than he loves her, and as a relationship of proportional justice, in which she recognizes in him more honor and authority than he recognizes in her, Aristotle did think man and woman could achieve the highest form of friendship: that based on admiration for each other’s virtue. The marital friendship exists for pleasure — companionship and the union for procreation; for utility — the distribution of labor for maintaining life; and in its perfected form, for the common good of both. In such a marriage, each partner fulfills his respective virtue and delights in the excellence of the other partner.⁹⁹ Practical wisdom, the virtue produced through deliberation, is a virtue a wife should enjoy in her husband. If the wife also had practical wisdom, the hierarchy of the marital government and marital virtue would be overthrown.¹⁰⁰ The husband enjoys in his wife the virtue of the ruled.

Aristotle also may have doubted woman’s decision-making capacities. He distinguished a deliberative person, one who chooses the means to intrinsically good ends, from the clever person, one who chooses the means to good or bad ends.¹⁰¹ There is strong evidence that he considered cleverness to be a biologically based female trait. He referred to males in general as less cunning than females, and explicitly said that “in the Laconian breed of dogs the female is cleverer than the male.”¹⁰² The psychological differences between the sexes are most developed in the human species, where the female in comparison to the male is “more void of shame and self-respect, more false of speech, more deceptive, and of more retentive memory.”¹⁰³

That the weakness of woman’s deliberative faculty is its tendency to cleverness is also supported by Aristotle’s use of the term *kurios* for distinguishing between cleverness and practical wisdom: “as practical wisdom is to cleverness — not the same, but like it — so is natural virtue to virtue in the strict sense (*kurian*).”¹⁰⁴ He explained further that

98. *E.N.*, VIII, 11 (1161a 23-28).

99. *E.N.*, VIII, 12 (1162a 16-27).

100. *Pol.*, I, 13 (1260a 18-20); III, 4 (1277b 25-30).

101. *E.N.*, VI, 12.

102. *H.A.*, IX, 1 (608a 26; 608b 16-17).

103. *H.A.*, IX, 1 (608b 16-17).

104. *E.N.*, VI, 13 (1144b 1-4).

“both children and brutes have the natural disposition to these [moral] qualities but without reason these are evidently hurtful.”¹⁰⁵ The crucial ingredient that turns “natural virtue” into “virtue which has authority” is grasp of the rational principles underlying proper conduct.

Another way in which a deliberative faculty may lack authority is in its control over the lower portions of the soul.¹⁰⁶ Aristotle built his analogy of the authority of man over slave and man over wife on the analogy of the authority of soul over body and reason over appetite.¹⁰⁷ The comparisons consistently carried over into his analysis of the proper forms of government within the household. Rule of soul over body is despotic, as is rule of master over slave; rule of reason over appetite is aristocratic, as is rule of husband over wife, or royal, as is rule of father over children.¹⁰⁸ The appetites of both women and children seem to interfere with their moral behavior; and thus both should be deterred from moral weakness by husband and father.

Aristotle used the term *kuria* to describe the “control” deliberative desire exercises over action,¹⁰⁹ and he did describe a person deficient in the capacity to exert self-control over pains originating in appetite as “soft and effeminate.”¹¹⁰ There is some evidence that Aristotle thought there was a biological basis for woman’s incapacity to exercise control over her own behavior: “the female is softer in disposition than the male.”¹¹¹ The “softness” of a man unable to withstand normal pleasures and pains is analogous to the “softness ... which distinguishes the female sex from the male.”¹¹² Thus, in the *Rhetorica*, Aristotle mentioned “self-control” as a distinguishing trait of women of good birth.¹¹³ In the *Nicomachean Ethics* as in the *Politics*, woman’s failing derives not from the quantity of her appetites in relation to her reason but from the qualitative lack of control her reason exercises over her appetites.¹¹⁴

105. *E.N.*, VI, 13 (1144b 9).

106. *E.N.*, VII.

107. *Pol.*, I, 5 (1254b 2-9); I, 13 (1260a 4-8).

108. *Pol.*, I, 12 (1259a 36 – 1259b 10).

109. *E.N.*, VI, 2 (1139a 17-18).

110. *E.N.*, VII, 7 (1150b 1-5).

111. *H.A.*, IX, 1 (608a 35 - 608b 2).

112. *E.N.*, VII, 7 (1150b 12-16).

113. *Rhet.*, I, 5 (1361a 5-12).

114. *E.N.*, VII, 7-8; *Pol.*, I, 13 (1259b 35-38). Christine Garside, “Can a Woman Be Good in the Same Way as a Man?” *Dialogue: Canadian Philosophical Review*, 10 (1971), 534-537, interprets the lack of authority in woman’s deliberative faculty as a lack of self-control derived from an excess amount of irrational

The terms *kurios* and *akuros* appear in Aristotle's biological writings to contrast strength with weakness, capacity to function with incapacity to function, and potency with impotency.¹¹⁵ Woman's supposed inability to produce seed, from which Aristotle derived his view that woman is an "impotent male," parallels woman's supposed inability to produce deliberative action, from which he derived his view that she has an "impotent (*akuron*) deliberative faculty."¹¹⁶ The craftsman analogy, through which Aristotle attributed to the male the rational principle that guides the procreation of a child within a female, appears again in the *Politics* in order to substantiate the view that the male's rational principle guides the production of good deeds within slaves, women, and children: "The ruler, accordingly, must possess moral goodness in its full and perfect form [i.e., the form based on rational deliberation], because his function, regarded absolutely and in its full nature, demands a master-artificer, and reason is such a mater-artificer."¹¹⁷

One might speculate in accord with Aristotelian principles that the impotency of the female in producing the rational principle of her offspring and the impotency of the female in producing the rational principle of her deeds have a common organic source. Aristotle considered the heart, not the brain, to be the seat of sensation; the heart plays the central role in an individual's experience of pleasure and pain and in his accumulation of sense knowledge.¹¹⁸ The vital heat of the heart, which gives an embryo the future potential to concoct generative seed, might also give an embryo the future potential to deliberate. In any case, the deficiency in vital heat is the physical source for the development of a female, and in the *Metaphysics* Aristotle did claim that the distinction between male and female is a difference of matter.¹¹⁹

In the *Politics*, Aristotle declared that there is a biological basis for inferiority and superiority: "There are species in which a distinction is

faculty and a deficient amount of rational faculty.

115. *G.A.*, V, I (778a 1); IV, 4 (772b 27-33); fragment 426 (1548b 33, 4). For a defense of the biological basis of Aristotle's philosophy, see Marjorie Grene, *A Portrait of Aristotle* (Chicago: University of Chicago Press, 1963).

116. Garside, "Can a Woman Be Good," p. 536. See also note 24 above.

117. *Pol.*, (1260a 16-19). See notes 40-46 above.

118. *P.A.*, III, 4 (665b 28-35; 666a 10-20). Benjamin Farrington, *Science in Antiquity*, 2nd ed. (London: Oxford University Press, 1969), pp. 93-95.

119. See Notes 23, 24, 65, and 80 above.

already marked, immediately at birth, between those of its members who are intended for being ruled and those who are intended to rule.”¹²⁰ He did not argue at length to apply his dictum to the distinction between males and females, for what distinction is more conspicuous at birth? Aristotle could assume that his students in ancient Athens were familiar with the Greek preference for male offspring, and that they “knew” that the best women were those who conformed to their father’s and then their husband’s decisions and who spent their days far from the assembly, the marketplace, the gymnasia, and the schools, dutifully occupied in the women’s quarter of their household.¹²¹ Aristotle judged his immediate audience well when he anticipated no objection to his theoretical association of slaves, women, and children (the three groups were the only ones in an Athenian household during the day) or to his assertion that women were intended to be ruled by men (with little opposition, men ruled both Greek society and Greek households). The assumed biological basis of the institution of wifedom was one of the premises upon which Aristotle built his general dictum on the biological basis of rulership.

Aristotle’s biological and psychological ideas about women parallel his political and ethical ideas about women. Together, these ideas are circular, self-supporting, and antifeminist to the core. On the one hand, woman’s alleged inadequacies of body and mind backed up his general dictum that men naturally rule over women. On the other hand, Aristotle’s unwillingness to view women as potential voting and ruling citizens and his unwillingness to recognize alternatives to the political and ethical hierarchy of husband over wife limited his viewpoint on female capacities. From his teleological perspective, “all things derive their essential character from their function and capacity.”¹²² In the case of women, Aristotle may have derived his view of essential character and capacity from his view of appropriate function. His belief that it is the nature of a husband to provide the rational principle for the behavior of his wife may have led him to the parallel belief that it is the nature of a husband to provide the rational principle for the procreation of a child. Throughout Aristotle’s corpus, the alleged deficiencies of women served to enlarge the capacities and powers of men.

120. *Pol.*, I, 5 (1254a 20-24).

121. See note 2 above. Also Sarah B. Pomeroy, *Goddesses, Whores, Wives, and Slaves: Women in Classical Antiquity* (New York: Schocken Press, 1975), pp. 57-92.

122. *Pol.*, I, 2 (1253a 23-24).

But perhaps I am giving Aristotle too much credit when I seek out the logical basis for his ideas of woman. Maybe Candidus in Thomas Elyot's *Defence of Good Women* better captured the essential point:

For Poetes wrate agaynste women in wanton ditties, to content men with newe fangled devises. But the reproche to women, given by Aristotel, was in treatynge of matter wayghty and seriouse, whereby it appereth, that the saide words so spytefully spoken, proceeded only of cankred malyce.^{1 2 3}

Phyllis has whipped a horse dead over two millennia. However, there are still a few live descendants to subdue: the notion that the female body is castrated, the notion that woman's role in child-bearing should inhibit her accomplishments in other spheres, the notion that women cannot be trusted with high government position, and the general suspicion that women are not as good as men. It is not enough that Aristotle gets his due from womankind, womankind must also get her due.

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123. Thomas Elyot, *The Defence of Good Women* (London: Thomae Bertheleti, 1540) sig. C4^v. In the dialogue between Candidus and Caninus, a purported Aristotelian, Aristotle's view of woman is dismissed rapidly. This is particularly apparent in Caninus' agreement that Aristotle thought that women have reason and practical wisdom (sig. D3 - D5).