

THE PROCREATIVE POWERS OF THE WIND

A STUDY OF THE CONCEPT OF WIND IMPREGNATION

ACCORDING TO GRAECO-ROMAN AND OTHER TRADITIONS

by Janis Rowan Blayney

Submitted for the degree of Doctorate in Classics  
at the Victoria University of Wellington.

1 October 1982

for my family and friends



ABSTRACT

The central topic of this thesis is the concept of wind impregnation (Motif T524 Conception from wind) as found in Greek and Roman thought and life.

It is suggested that the concept exists in a variety of forms, distinguished by the six different animate beings with which the wind is linked, namely, mares, hens, tigers, vultures, sheep, and (mythical or legendary) women. The nature, development and transmission of these six traditions are discussed : it is demonstrated that all six traditions concerned persist beyond the fall of the Roman empire, with three continuing in existence until the seventeenth century; and that four out of the six traditions provide evidence of a concurrent oral tradition.

In an effort to counteract the suggestion that the Graeco-Roman concept of wind impregnation is to be attributed to a lack of understanding of the prerequisites for procreation on the part of the ancients, the various theories of conception proposed by Greek and Roman scholars in the period from the early fifth century BC to the late second century AD are examined. This survey demonstrates that the ancients in fact took a considerable interest in, and had a detailed knowledge of the process of conception.

The thesis concludes that there is no one explanation for the existence of the ancient concept of wind impregnation; rather, it is to be attributed to the combination of a number of factors, most notably, the nature of the individual winds, and ancient attitudes towards them; the ancient connection of wind and soul; the nature of the animals with which the wind is linked, and the associations of those winds for the ancients.

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### ACKNOWLEDGEMENTS

I should like to take this opportunity to thank all those who have given their assistance during the preparation of this dissertation.

To my supervisor, Alex Scobie, who has been a constant source of help and encouragement, I offer my sincerest thanks. Without his guidance and support, this thesis could not have been completed.

To the many other scholars - too numerous to name - who have provided their assistance, I likewise extend my heartfelt gratitude. For their help in bibliographical matters, in the translation of foreign texts, and in the drafting and redrafting of the thesis, I am extremely grateful.

For their financial support, I extend my thanks to the University Grants Committee, and also to the Internal Research Grant Committee at Victoria University of Wellington. I particularly wish to acknowledge a generous grant made by the I.R.G. Committee to Christiana Bäuerle for her exceptional translation of a lengthy German text.

In addition to the above, it is my pleasure to thank all those members (both past and present) of the Reference Department in the Victoria University Library who have processed innumerable interloans on my behalf; Pat McArthur who has devoted many hours to the typing of this thesis; Patrick Conway and Arthur Pomeroy who have kindly assisted with the proof-reading of the final draft; and last but not least my family and friends who have provided support and encouragement throughout this undertaking.

To all those mentioned I am immensely grateful for their generous assistance. It need hardly be added that any errors in the thesis are entirely my own, and are to be attributed to no one other than myself.

# ABBREVIATIONS

- Austin                      Austin, Colin (ed.) Comicorum Graecorum Fragmenta in Papyris Reperta, Walter de Gruyter, Berlin, 1973.
- Bergk                      Bergk, Theodorus Poetae Lyrici Graeci, Leipzig, Teubner, 1866.
- Bidez                      Bidez, Joseph Vie de Porphyre, le philosophe néo-platonicien, avec les fragments des traités Περὶ ἀγαθῶν et De Regressu Animae, Georg Olms, Hildesheim, 1964 (repr.).
- Dübner                    Lehrs, F.S. and Dübner, F. (eds.) Hesiodi Carmina... <et> Asii, Pisandri, Panyasidis, Choerili, Antimachi Fragmenta, Paris, Firmin Didot, 1862.
- Edmonds                  Edmonds, John M. The Fragments of Attic Comedy, 3 vols in 4, Leiden, E.J. Brill, 1957-1961.
- Jacoby                    Jacoby, Felix (ed.) Die Fragmente der griechischen Historiker, Leiden, E.J. Brill, 1954-
- Lewis and Short          Lewis, Charlton T. and Short, Charles A Latin Dictionary, Oxford, Clarendon Press, 1975.
- Liddell and Scott       Liddell, Henry G. and Scott, Robert A Greek-English Lexikon, Oxford, Clarendon Press, 1977.
- Lobel and Page          Lobel, Edgar and Page, Denys Poetarum Lesbiorum Fragmenta, Oxford, Clarendon Press, 1955.
- Mette                    Mette, Hans J. Die Fragmente der Tragödien des Aischylos, Berlin, 1959.
- P.W.                      Wissowa, Georg (ed.) Paulys Real-Encyclopädie der Altertumswissenschaft, J.B. Metzler, Stuttgart, 1894-
- Pearson                  Pearson, A.C. The Fragments of Sophocles, 3 vols, Cambridge University Press, 1917.

Roscher

Roscher, W.H. Ausführliches Lexikon der griechischen und römischen Mythologie, 7 vols, Georg Olms, Hildesheim, 1965 (repr.).

Schwyzler

Schwyzler, Hans-Rudolf Chairemon, Leipzig, Otto Harrassowitz, 1932.

## I INTRODUCTION

The main subject of this thesis is the concept of wind impregnation (Motif T524 Conception from wind)<sup>(1)</sup> as found in Greek and Roman thought and life.

That this concept was of considerable significance in classical antiquity is attested by the numerous allusions to wind impregnation in ancient literature. An examination of the relevant evidence reveals that the concept existed in a variety of forms, distinguished by the particular animate being with which the wind was associated. The creatures concerned are six in number : mares, hens, tigers, vultures, sheep and (mythical or legendary) women.<sup>(2)</sup> To each of the six categories into which the ancient material falls, it is appropriate to apply the term 'tradition'. The main body of this thesis will be devoted to a discussion of these six traditions, all of which will be examined individually, with one chapter being devoted to each. In each chapter, particular attention will be paid to

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### (1)

See Stith Thompson, Motif-Index of Folk-Literature, Indiana, 1955-1958, vol.V, p.394. Only one item of any length has ever been published on the subject of wind impregnation, namely, Conway Zirkle, Animals impregnated by the wind, Isis 25 (1936), pp.95-130. Although useful, this article is merely a compilation of pertinent data, with little if any annotation, and it is marred by a number of bibliographical and other errors.

### (2)

Eugene McCartney, Spontaneous Generation and Kindred Notions, Transactions and Proceedings of the American Philological Association LI (1920), p.110 states that partridges were likewise thought to be impregnated by the wind. However, in all the passages cited by him as supportive evidence, it is not so much the wind that is said to impregnate the female partridge as the breath of the male, or the sight or sound or smell of the same.

the essential character of the tradition, to its chronological development, and to the nature of its transmission.

Since, however, the concept of wind impregnation persisted beyond the fall of the Roman empire, and because the motif is found in many other parts of the world, this study will not be exclusively confined to a consideration of Greek and Roman evidence. To have narrowed the scope of the enquiry in this way would have limited its usefulness, for discussion of the classical material helps to illuminate the non-classical material, and vice versa. Thus, although there will be a concentration on Greek and Roman evidence throughout, material from other cultures will also be introduced whenever it is appropriate and helpful.

Moreover, since certain scholars have insisted that the Graeco-Roman concept of wind impregnation is to be attributed to the fact that the ancients lacked a scientific interest in the process of conception,<sup>(3)</sup> and that in classical antiquity the prerequisites for procreation were not always recognised,<sup>(4)</sup> it will be profitable to begin this study with a survey of the various theories of conception proposed by Greek and Roman scholars in the period from the early fifth century BC through to the late second century AD. This survey will demonstrate that the ancient Greeks and Romans in fact possessed a detailed knowledge of the process of conception; and, in addition, it will

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(3)

Cf E.S. Hartland, Primitive Paternity, London, 1909, vol.I, p.150 who states: 'The ancient nations of the Mediterranean basin, accomplished as they were in the arts of life, had imbibed very little of the true scientific spirit that searches out the facts of nature, whether in immediate relation to themselves or not.'

(4)

Cf Zirkle, op.cit., p.126.

serve to provide the contextual background for the subsequent discussion of the several traditions concerning wind impregnation.

If the ancient concept of wind fertilisation in all its various forms cannot be attributed to an ignorance or misunderstanding of the process of conception, to what, if anything, can it be attributed? This thesis aims to show that there is no one response to this question. Any explanation of the concept must take into account a number of different factors, for instance, ancient attitudes towards the wind, and, in particular, towards the individual winds; the ancient connection of wind and soul; the nature of the various animals with which the wind is linked, and the associations of these animals for the ancients; and so on. It will be appropriate to discuss these factors as they arise during the thesis, and then to consider them in their total perspective in the final chapter. The main function of this chapter will in fact be precisely this : to provide a detailed insight into the Graeco-Roman concept of wind impregnation.

Only one further point remains, and that concerns the role of the appendices incorporated in the study. Because of the nature of the thesis, it has been necessary to examine a relatively large number of often obscure texts, many of which are in languages which may possibly be unfamiliar to some readers. Accordingly, all texts discussed in the main body of the thesis have been assigned to one of six appendices (each of which corresponds to one of the six traditions under study), numbered for easy reference from main text to appendix, and, if cited in the original language,<sup>(5)</sup> also translated

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(5)

Only Greek, Latin, French, German and Italian texts are given in the original. All others are recorded in English only.



into English. This arrangement of the source materials has the added advantage that it avoids overloading the individual chapters of the dissertation with extensive quotations from primary texts.

## II GRAECO-ROMAN THEORIES OF CONCEPTION

Certain scholars have claimed (see Introduction, above) that the Graeco-Roman belief in the procreative powers of the wind may well be attributable to a lack of appreciation in ancient times of the essential prerequisites for generation. In order to refute this claim, it is necessary to examine the various theories of conception proposed by ancient scholars in the period from the early fifth century B.C. through until the late second century A.D. Such a survey will demonstrate not only that the ancient Greeks and Romans took a lively interest in the process of conception, but that they also possessed a detailed knowledge of that subject, and in particular were fully aware of the complementary nature of the male and the female contributions to procreation.<sup>(1)</sup>

It was the Presocratic philosophers who first attempted to define certain aspects of conception. The four main areas of concern which they delineated (and which subsequently served as a focus for discussion in medical and philosophical writings) are as follows:

1. the nature of the male and the female contribution to the offspring;
2. the nature and/or origin of semen;
3. the determination of the sex of the offspring; and
4. the transmission of hereditary characteristics.

These four areas of concern provide an excellent framework for a chronological examination of ancient Graeco-Roman theories of conception.

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### (1)

Unless otherwise stated, the theories of conception discussed in this chapter may be understood to refer not merely to the human species but to the higher viviparous animals as well.

## The Presocratics<sup>(2)</sup>

As has been indicated, the earliest theories about the process of conception derived from the pen of the Presocratic philosopher, Alcmaeon of Croton. So far as can be ascertained from the incomplete evidence which has survived,<sup>(3)</sup> three facets of conception captured Alcmaeon's attention: the male and the female contribution; the origin of semen; and the determination of sex.

If the testimony of Censorinus V.4 (D/K 24 A13) is accurate, then Alcmaeon believed that the offspring was formed not only from the seed of the father but also from the seed of the mother. That is to say, he considered that both the male and the female parent produced their own individual seed, thereby making an equal contribution to the offspring.<sup>(4)</sup>

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(2)

Owing to the fragmentary nature of extant evidence on the Presocratics, it is possible to do no more than establish a general outline of their views; and even this is at times a difficult task.

(3)

Recorded in Hermann Diels und Walther Kranz, Die Fragmente der Vorsokratiker, Berlin, 1960-61 reprint (hereafter D/K).

(4)

Kathleen Freeman, The Pre-Socratic Philosophers, Oxford: Basil Blackwell 1966, p.138, appears to have misinterpreted the evidence of Censorinus V.4 (...utrumne ex patris tantummodo semine partus nascatur..., an etiam ex matris, ut... Alcmaeoni... visum est) for she states that Alcmaeon 'was of the school that believed the offspring to come from the female ovum, as opposed to those who thought it came from the male spermatozoon'. Not only does this statement fail to understand the dual role of the male and the female in Alcmaeon's system, but it also makes anachronistic use of the terms 'ovum' and 'spermatozoon'.

On the question of the origin of semen, Aëtius V.3.3 (D/K 24 A 13) informs us that, in Alcmaeon's view, semen derived from the brain. Aëtius' testimony is supported by the fact that Alcmaeon likewise assigned central importance to the brain in his theories concerning embryology (D/K 24 A 13), and the perception of the senses (D/K 24 A 11)<sup>(5)</sup>. Moreover, Alcmaeon was in close contact with the Pythagoreans, certain of whom subscribed to the very same idea that the brain was the original source of semen.<sup>(6)</sup> This being the case, it seems possible that the concept was essentially a Pythagorean one, which Alcmaeon simply adopted and incorporated into his own physiological doctrine.

As for the differentiation of sex, it is evident from Censorinus VI.4 (D/K 24 A 14) that Alcmaeon attributed this to the prevalence of the paternal or the maternal seed. In other words, if the father contributed more seed, the offspring would be male, but if the mother contributed more, the offspring would be female. Although somewhat lacking in sophistication, this system is remarkable for its ingenuity.

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(5)

For this reason alone, the testimony of Aëtius is to be preferred to that of Censorinus V.2-3 (D/K 24 A 13), which attributes a different theory of the origin of semen to Alcmaeon. For a detailed discussion of this whole question, see Dr Erna Lesky, Die Zeugungs- und Vererbungslehren der Antike und ihr Nachwirken, Akademie der Wissenschaften und der Literatur, Mainz, Abhandlungen der Geistes- und Sozialwissenschaftlichen Klasse, Jahrgang 1950, Nr.19, pp.1233-1237.

(6)

Cf. Lesky, ibid. Lesky assumes that Alcmaeon was himself a Pythagorean, but it is more probable that he was simply in contact with the Pythagorean School. (See, for instance, G.S. Kirk and J.E. Raven, The Presocratic Philosophers, C.U.P., 1975 reprint, pp.232-235.)

Alcmaeon was but the first of a series of Presocratics who took an interest in the process of conception. Subsequently, Parmenides, Empedocles, Hippon of Samos, Anaxagoras, Diogenes of Apollonia, and Democritus all presented their theories on the subject.

Extant evidence on the stance adopted by Parmenides is notable for its complexity, but although problematic, it does not preclude us from drawing certain general conclusions about his approach.<sup>(7)</sup>

Two pertinent fragments of Parmenides have been preserved, one by Galen (In Hippocr. Epid. VI.48 (D/K 28 B 17)), and the other by Caelius Aurelianus (Morb. Chron. IV.9 (D/K 28 B 18)). If the second of these, fragment 18, is authentic, then it would appear that Parmenides adhered to the theory of the two seeds, for the first line of the fragment describes the act of conception in terms of a man and a woman mixing the seeds of love. Additional proof that Parmenides supported the existence of two seeds, the one produced by the male and the other by the female, is to be found in Censorinus V.4 (D/K 24 A 13). Here it is stated that according to Parmenides the offspring was born of both the paternal and the maternal seed. It thus seems to have been Parmenides' view that the male and the female contributed equally to the offspring.

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(7)

For a discussion of some of the difficulties involved in interpreting extant data on Parmenides, see Owen Kember, Right and Left in the sexual theories of Parmenides, Journal of Hellenic Studies XCI (1971), pp. 70-79.

Fragment 17, recorded by Galen, is brief and enigmatic; it reads: 'On the right, boys; on the left, girls ...'. Although the exact application of these words is uncertain,<sup>(8)</sup> they reveal one important point, namely that Parmenides made an association between right and male, and left and female. That the opposites right/left, and their associated opposites male/female, played a significant role in Parmenides' sexual theories, is shown by testimonies concerning both the origin of semen and the transmission of hereditary characteristics.<sup>(9)</sup>

On the subject of the origin of semen, we find in Censorinus V.2 (D/K 28 A 53) the statement that, in Parmenides' opinion, semen derived from both the right and the left parts (of the body). Although no explicit connection is made here between right and male or left and female, such a connection is to be assumed, as is proved by

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(8)

Taken as it stands, the fragment lends itself to several possible interpretations, for which see Kember, op.cit., pp.75-76. Galen in fact introduces the line as an illustration that certain of the ancients believed that the male was conceived in the right part of the womb, an interpretation which is followed by Lesky, op.cit., p.1265. Indeed, Lesky goes one step further and proposes a system of sex determination for Parmenides whereby the right and left sides of the uterus determined the male and female sex respectively. Since, however, it is possible that Galen may have imposed an incorrect interpretation upon the fragment, it is preferable to isolate the line from Galen's introductory comments, and to interpret it in its own right.

(9)

Aëtius V 7.4 (D/K 28 A 53) attributes to Parmenides a theory of sex determination involving the opposites left and right. This theory should, however, be regarded with suspicion, for although it underlines the importance of right and left in Parmenides' system, the method of sex determination which it proposes runs counter to Parmenides' association of right with male, and left with female.

Censorinus' subsequent testimony about Parmenides' theory of heredity. In Censorinus VI.8 (D/K 28 A 54), Parmenides is said to have believed that whenever the seeds derived from the right parts, then offspring were born similar to the father, but whenever the seeds derived from the left parts, then offspring resembled the mother.<sup>(10)</sup> A similar, though not identical, statement is to be found in Aëtius V.11.2 (D/K 28 A 54). Here, Parmenides is recorded as having believed that whenever the seed derived from the right part of the womb, offspring were born similar to their fathers, but whenever the seed derived from the left part of the womb, offspring resembled their mothers.

It is thus to be concluded that the associated pairs, right/male and left/female, were of prime significance in Parmenides' theories of the origin of semen and the transmission of hereditary characteristics. There is, however, no extant evidence which convincingly connects the name of Parmenides with a theory of sex determination based on a right/left distinction.<sup>(11)</sup>

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(10)

Censorinus VI.5 provides what appears to be a second theory of heredity for Parmenides. This statement is suspect for two reasons: 1. because it in fact occurs in Censorinus' section on sex determination; and 2. because it conflicts with Censorinus VI.8 where Parmenides' theory of heredity is outlined in its appropriate place.

(11)

A very different opinion is expressed by G.E.R. Lloyd, both in *Right and Left in Greek Philosophy*, J.H.S. LXXXII (1962), p.60, where he states: 'Parmenides apparently held that the sex of the child is determined by its position on the right or left side of the mother's womb (males on the right, females on the left)', and in *Polarity and Analogy*, C.U.P. 1966, p.17, where he makes the identical statement, but replaces the original 'apparently' with the more definitive 'probably'. Cf Kember, op.cit., p.70.

Further to his support for the existence of two seeds, and to his insistence on a relationship between male and right, and female and left, Parmenides appears to have distinguished the two sexes on the basis of their constitution. According to Aëtius V.7.2 (D/K 28 A 53), Parmenides was of the opinion that the male was of a denser texture than the female, and therefore first arose in the northerly regions of the world, whilst the female, being of a rarefied texture, first arose in the south. If Aëtius' testimony is accurate, then it would seem that, for Parmenides, the male was to be linked with the qualities dense and cold, and the female with the qualities rare and hot; an association which is, in fact, verified by Aristotle, De Part. Anim. 648 a 25 (D/K 28 A 52), where Parmenides is attributed with the belief that women were hotter than men. Whether Parmenides actually developed this approach to the point where he proposed a theory of sex determination based on the opposites hot/cold, is debatable. The context of Aëtius seems to imply this possibility, but the text nowhere makes it explicit. (12)

Ancient evidence on Empedocles is fortunately less problematic than that on Parmenides, with the result that it is possible to construct a more cohesive picture of Empedocles' sexual theories than was possible in the case of his predecessor.

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(12)

For a rather unsuccessful attempt to assimilate the opposites attested for Parmenides into a tabulated system, see W.K.C. Guthrie, A History of Greek Philosophy, Vol.II, C.U.P., 1974 reprint, pp.77-80.



That Empedocles continued to support the theory of the two seeds (following Alcmaeon and Parmenides before him), is suggested by Censorinus V.4 (D/K 24 A 13), where he is said to have believed that the offspring was born not only of the seed of the father but also of that of the mother. The testimony of Censorinus is confirmed by two surviving fragments of Empedocles, both preserved by Aristotle. The first of these, fragment 63 (Aristotle, De Gen.Anim. 722 b 10 (D/K 31 B 63)), states that the substance of <the child's> limbs is divided <between the male and the female> , part in the man's <body and part in the woman's> , thus indicating that, for Empedocles, the maternal and the paternal seeds were necessarily complementary and that only by their combination was a complete child able to be formed. The second fragment in question, number 65 (Aristotle, De Gen.Anim. 723 a 23 (D/K 31 B 65)), begins by making a reference to <the male and female seeds> being poured into the pure parts, i.e. the womb. This rather graphic description adds further convincing proof of Empedocles' belief in the doctrine of the two seeds.

Fragment 65 also introduces us to Empedocles' theory of sex determination, for it continues by saying that, once the seeds are in the womb, those which encounter cold produce females <whilst, conversely, those which encounter hot produce males>. Statements to the same effect may be found in Aëtius V.7.1 (D/K 31 A 81); and also in Aristotle, De Gen.Anim. 764 a 1 (D/K 31 A 81), where it is not only stated that, in Empedocles' view, semen coming into a warm womb formed males, whilst that coming into a cold womb formed females, but it is added that the reason for this was the menstrual flow, according

as it was colder or hotter, older or more recent. Whether or not this last mentioned explanation formed part of Empedocles' original theory, it is clear that for this particular Presocratic, the differentiation of sex occurred in the womb, the decisive factor being the temperature therein (hot creating males, and cold, females). (13)

Empedocles' theory that heat and cold created the male and the female respectively, gave rise to his concept of the origin of the sexes. According to Aëtius V.7.1 (D/K 31 A 81), Empedocles held that the first males were born from the land in the eastern and southern regions of the world, whilst the first females arose in the northern regions of the world. Fragment 67 of Empedocles, recorded by Galen, In Hippocr. Epid. VI.48 (D/K 31 B 67) makes the very same point. Here, it is stated that in the warmer part of the earth, the male arose, and that for this reason men were swarthy, more heavily built and

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(13)

In sharp conflict with this main body of ancient evidence which convincingly proves that Empedocles' notion of sex differentiation centred around the forces of hot and cold within the womb, is Censorinus VI.6 (D/K 31 A 81), which attributes a right/left theory to Empedocles. Censorinus records that, in the view of both Anaxagoras and Empedocles, males were born if the semen derived from the right-hand parts, whilst females were born if the semen originated from the left-hand parts. Since Censorinus' statement runs counter to other extant evidence, it should probably be discounted. Cf Owen Kember, *Anaxagoras' Theory of Sex Differentiation and Heredity, Phronesis* XVIII (1973), p.5; and also, Lloyd, *Right and Left in Greek Philosophy*, p.60, n.19.

more hairy.<sup>(14)</sup> If it was indeed Parmenides' view that males were originally born in the north, and females in the south, then Empedocles' theory of the origin of the sexes may well have been formulated in reaction to that of his predecessor.

On the question of heredity, Aëtius V.11.1 (D/K 31 A 81) informs us that Empedocles attributed similarities between children and their parents and grandparents to the prevalence of the seeds, but related dissimilarities to the evaporation of the heat in the seed. If Aëtius' statement is accurate, Empedocles was the first of the Presocratics to emphasise the principle of predominance as the significant factor in the transmission of hereditary characteristics.<sup>(15)</sup>

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(14)

The edd. of Galen read γαῖης (earth), but Diels emended this to γαστήρ (stomach, i.e. womb). Since, however, the fragment coincides closely with Aëtius V.7.1 if γαῖης is retained; and since, if γαστήρ is read, Empedocles' theory of sex determination would apply not to the whole womb (as is intended), but merely to parts of it, it seems pointless to emend the original reading. Cf Guthrie, *op.cit.*, p.218, n.5; and also James Longrigg, Galen on Empedocles (Fragment 67), *Philologus* 108 (1964), p.298. Diels' emendation is unfortunately accepted by Freeman (*op.cit.*, p.194) who mistakenly says that, in Empedocles' view, the sex of the child 'is decided according to the part of the womb into which the seed falls : if into the warmer part, the result is a male, if into the colder, a female...'.

(15)

Censorinus VI 6-7 (D/K 31 A 81) gives an alternative theory of heredity for Empedocles, but as this is incompatible with Empedocles' theory of sex determination, it must be regarded with suspicion.

The views of the Pythagorean, Hippon of Samos, provide an interesting contrast with those of his contemporary, Empedocles.

In the first instance, Hippon believed that the offspring was born, not of two seeds, but of the seed of the father alone (Censorinus V.4 (D/K 24 A 13)). He did not deny the existence of the maternal seed; but felt that the seed produced by the female was unsuitable for reproduction on account of the fact that it fell outside the womb. (Aëtius V.5.3 (D/K 38 A 13)). For Hippon, then, it was the male who fulfilled the major role in procreation.

As for the problem of the origin of the seed, Censorinus V.2 (D/K 38 A 12) records that, in Hippon's view, semen was produced by bone-marrow. Since there is no reason to doubt the evidence of Censorinus, Hippon's attribution of the source of semen to marrow must be accepted as an alternative Pythagorean viewpoint to that mentioned earlier in relation to Alcmaeon, namely, that semen originated in the brain. It is to be assumed that these two Pythagorean concepts were coexistent and complementary. (16)

In addition to his belief that the paternal seed alone was effective, Hippon appears to have distinguished two different types of seed, a superior one from which males derived, and an inferior one from which females derived. According to both Aëtius V.7.3 and Censorinus V.4 (D/K 38 A 14), Hippon believed that compact and strong seeds

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(16)

Cf Lesky, *op.cit.*, pp.1233-1237, 1251-1253, where she treats both Alcmaeon and Hippon as representatives of what she terms the 'enkephalo-myelogenic' approach.

gave rise to males, whilst fluid and weaker seeds gave rise to females. The emphasis here lies rather on the existence of the distinct types of seed (classified in accordance with Hippon's notion of male superiority/female inferiority), than on a theory of sex differentiation, as some have thought. (17)

Indeed, on the subject of sex determination, we are explicitly told by Aëtius V.7.7 (D/K 38 A 14) that, in the opinion of Hippon, male offspring would be born if the seed prevailed, whereas female offspring would be born if the nourishment prevailed. This concept of sex differentiation is not only interesting in itself, but also illuminating in that it reveals a new approach to the respective roles of male and female in procreation. Briefly, it would appear that, in Hippon's view, the male was the one who provided the seed, whilst the female was the one who provided the nourishment essential for the growth of that seed.

Extant evidence on Anaxagoras and his sexual theories is unfortunately as problematic as that which has survived for Parmenides. (18) In the case of Anaxagoras, two separate traditions have been handed down, neither of which can be satisfactorily reconciled with the other.

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(17)

Cf Freeman, op.cit., p.210; and also Guthrie, op.cit., p.357.

(18)

For a discussion of some of the problems involved, see Owen Kember, Anaxagoras' Theory of Sex Differentiation and Heredity, Phronesis XVIII (1973), pp.1-14. (This article is valuable in that it raises a number of important issues, but its conclusions are open to dispute).

The first of these traditions is preserved by Aristotle De Gen. Anim. 763 b 30 (D/K 59 A 107). Here, Anaxagoras (along with other unnamed physiologists) is said to have believed 1. that the male provided the sperm, whilst the female provided the place for it; 2. that the male <offspring> derived from the right-hand parts (i.e. testicle?), whilst the female <offspring> derived from the left-hand parts (testicle?); and 3. that the male <offspring> was located in the right-hand parts of the womb, whilst the female <offspring> was located in the left-hand parts of the womb. This system attributed to Anaxagoras by Aristotle ascribes to the male and the female reproductive roles which closely resemble those proposed by Hippon, but combines with that a right/left theory of sex determination centred upon the paternal testicles (?), together with a right/left distinction within the maternal womb. Verification of Anaxagoras' association of right testicle (?)/male and left testicle (?)/female may be found in Diogenes Laertius II.9 and possibly in Censorinus VI.6 (D/K 59 A 111).<sup>(19)</sup> Similarly, his association of right testicle (?)/right side of womb and left testicle (?)/left side of womb is confirmed by Hippolytus VIII.12<sup>(20)</sup> and possibly also by

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(19)

Censorinus VI.6 can only be used in support of Aristotle if its statement to the effect that, for Anaxagoras, males were born from seed produced by the right-hand parts, and females from seed produced by the left-hand parts, is understood to refer to the paternal seed alone, and not to a maternal seed as well. Cf below.

(20)

See Hermann Diels, Doxographi Graeci, Berlin, 1958 (repr.), p.563.

Aëtius V.7.4 (D/K 59 A 111). (21)

The second tradition concerning Anaxagoras has been handed down by Censorinus. In a number of separate passages, Censorinus attributes to Anaxagoras the belief that the offspring was born of both the paternal and the maternal seed (Censorinus V.4 (D/K 24 A 13)); that the seed derived not only from marrow but also from fat and flesh (Censorinus V.2 (D/K 24 A 13)); that males were born from seed produced by the right-hand parts, and females from seed produced by the left-hand parts (Censorinus VI.6 (D/K 59 A 111)); and that offspring resembled whichever parent contributed more seed (Censorinus VI.8 (D/K 59 A 111)). The major point of difference between the testimony of Aristotle and that of Censorinus is that the latter consistently ascribes to Anaxagoras the theory of the two seeds. On the other hand, the one point of contact between the two sets of evidence is Censorinus' description of Anaxagoras' theory of sex determination, a description which could be interpreted as referring merely to the left or right-hand parts of the male parent (thus involving only the paternal seed), but could also be understood to refer to the left or right-hand parts of both the male and female parents (thus involving the maternal as well as the paternal seed).

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(21)

Aëtius V.7.4 (which states that, in Anaxagoras' view, seeds from the right-hand parts were deposited in the right-hand parts of the womb, and seeds from the left-hand parts, in the left-hand parts of the womb, but that if this order was changed, a female would be born) can only be accepted as supporting evidence if the clause appended at the end is considered corrupt.

Given the existence of two such distinct traditions, it is unwise to propose a single unified system for Anaxagoras, for this could only be done by dismissing or adapting certain of the testimonies. (22) It is preferable to acknowledge the two separate traditions, at the same time noting their one point of agreement, namely, that the associations of right/male and left/female were of vital importance in Anaxagoras' theories.

Little evidence has survived concerning the sexual theories of the late fifth century B.C. Presocratic, Diogenes of Apollonia. The only information we possess relates to the male and female contribution to conception and to the origin of semen.

According to Censorinus V.4 (D/K 64 A 27), Diogenes supported the view that the offspring was born of the seed of the father alone. If Censorinus is correct, then Diogenes assigned the major role in procreation to the male, as Hippon and (possibly) Anaxagoras had done before him.

On the question of the source of semen, Diogenes appears to have adopted a new approach, quite distinct from that of his predecessors. Vindicianus q.f.3 (D/K 64 B 6) records that, in Diogenes' view, semen

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A different approach is taken by Freeman, op.cit., p.272, Guthrie, op.cit., p.317, and Lloyd, Right and Left in Greek Philosophy, p.60 (cf Polarity and Analogy, p.17), all of whom simply ignore or dismiss the evidence of Censorinus.



was essentially the foam of blood; for air, introduced into the body by breathing, loosened the blood, one part of which was absorbed by the flesh, whilst the remaining part passed down into the seminal ducts and became semen, which was none other than the foam of blood that had come into contact with air. The testimony of Vindicianus both supports and clarifies the final few lines of fragment 6 of Diogenes, preserved by Aristotle, Hist. Anim. 511 b 30 (D/K 64 B 6), where it is said that the thickest blood was absorbed by the flesh, whilst the remainder, passing into the seminal ducts, became fine and warm and foamy.<sup>(23)</sup> It is evident, then, that blood was the substance which Diogenes envisaged as the original source of semen.

Diogenes' contemporary, the Atomist, Democritus, likewise developed a new theoretical approach to the subject of conception. Democritus' innovation comprised the formulation of a comprehensive doctrine known as pangenesis, a doctrine which provided the basis for all his sexual theories, from the male and female contribution and the origin of semen, through to sex differentiation and heredity.

One of the essential features of pangenesis was that both the male and the female were thought to produce seed (Aëtius V.5.1 (D/K 68 A

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(23)

Cf, too, Simplicius, Phys. 153, 13 (D/K 64 B 6) which refers to the belief that semen contained air; and Clement of Alexandria, Paedag. I 6.48 (D/K 64 A 24) which also associates Diogenes with the opinion that semen was the foam of blood, but suggests that the essential factor in the formulation of semen was the inborn heat of the male rather than air.

142)), <sup>(24)</sup> and, moreover, a seed which contained the life-force, pneuma or air (Aëtius V.4.3 (D/K 68 A 140)). This theory, supporting the existence of both the maternal and the paternal seed, was closely related to that concerning the source of semen, for in Democritus' view, semen derived from the whole body, particularly the important parts such as bones, flesh and sinews (Aëtius V.3.6 and Censorinus V.2-3 (D/K 68 A 141)). To be more explicit, Democritus envisaged the paternal and maternal seeds as consisting of small particles or atoms drawn from every part of the male and female body respectively. This meant, in effect, that each seed contained within it a complete set of those parts necessary for the development of the embryo. <sup>(25)</sup>

Democritus' concept of semen and its origin shaped his theory of the differentiation of the sexes. According to Aristotle, De Gen. Anim. 764 a 6 (D/K 68 A 143), Democritus taught that the differentiation of the male and the female took place in the mother; that it did not, however, occur as a result of heat and cold; but that it depended on whether the portion of the maternal seed deriving from the mother's sexual organ, or the portion of the paternal seed deriving

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For this reason, Nemesius, De Nat. Hom. 247, which suggests that Democritus believed the female seed to be ineffective in the birth of offspring must be dismissed as inaccurate.

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Cf Lesky, op.cit., pp.1294-1296. Fragment 32 of Democritus (D/K 68 B 32), to the effect that coition is a slight attack of apoplexy, whereby one being gushes forth from another, and is separated by being torn apart with a kind of blow, is to be interpreted in this light; that is, as an indication that the seed contained within it a human being in a preformed state.

from the father's sexual organ, prevailed. For Democritus, then, it was the principle of predominance which was the vital factor in sex determination : not, however, the predominance of the whole seed (as had earlier been suggested by Alcmaeon), but rather of that particular part of the seed which had been contributed by the sexual organs. (26)

It would appear, moreover, that the prevalence of the respective parts of the seed depended on the speed with which they moved. In Censorinus VI 5 (D/K 68 A 143), Democritus is said to have believed that whichever parent's principle occupied its place first, that parent's sex would come into existence. In other words, if the atoms corresponding to the male sexual organ reached a certain place within the womb before those corresponding to the female sexual organ, then a male offspring would be born, and vice versa. (27)

According to Aëtius V.7.6 (D/K 68 A 143), Democritus distinguished between the heredity of sex and the heredity of bodily characteristics.

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(26).

Aristotle's testimony appears to have been misunderstood by Freeman, op.cit., p.307, and Guthrie, op.cit., p.467, both of whom insist that, in Democritus' opinion, sex determination depended on the preponderance of the maternal or paternal seed. The Greek does not allow for this interpretation.

(27)

Mistranslation of the term 'naturam' in Censorinus VI.5 has led to the suggestion that the passage refers, not to the determination of sex, but to the heredity of physical traits (see, for example, H. De Ley, Pangenesis versus Panspermia. Democritean Notes on Aristotle's Generation of Animals, Hermes 108.2 (1980), pp.129-153 and espec.p.143). Given the obvious agreement between Aristotle De Gen.Anim. 764 a 6 and Censorinus VI.5 if 'naturam' is translated as 'sex', and the fact that a separate theory of heredity is recorded by Aëtius (see below), it is inordinately preferable to interpret Censorinus' evidence as relating to sex differentiation.

Aëtius' testimony suggests that in Democritus' opinion, the parts which both sexes had in common were handed down from one or other of the parents quite accidentally, while the parts which were peculiar to each were inherited according to the principle of predominance. Thus, all bodily features shared by both male and female derived from either the maternal or the paternal seed in a completely random fashion.

To summarise : extant evidence concerning the sexual theories of the Presocratics indicates that, essentially, there were two separate approaches to the question of the male and female roles in procreation. On the one hand, there were those who supported the doctrine of the two seeds, believing that both the male and the female produced seed, and that their two seeds came together in the womb. On the other hand, there were those who suggested that the male alone contributed semen, whilst the female provided the receptacle in which that semen could be nourished.

On the question of the nature and origin of semen, a variety of theories were proposed. The seed was described in terms of opposites such as compact/fluid, strong/weak, etc; then again, it was defined as fine, warm, and foamlike, due to the influence of air; and similarly, it was envisaged as pneumatic, that is, as containing air within it. A number of different parts of the body were considered to be the source of semen: the brain; bone-marrow; the right and left sides; blood; and indeed, according to the doctrine of pangenesis, the entire body.

As for sex determination and heredity, the former was attributed to a number of factors, including the prevalence of the male or female seed, or of parts of those seeds; the temperature within the womb

(according as it was hot or cold); the predominance of the male seed or the female nourishment; and the derivation of the male seed from the right or left parts of the body (testicle?). Similar factors were thought to operate in the transmission of hereditary characteristics, namely, the derivation of the maternal and paternal seeds from the right and left-hand parts of the body; the prevalence of the male or female seed; and finally, random selection.

One of the most outstanding features of these Presocratic teachings is their constant appeal to pairs of opposites. Again and again, they refer to polar opposites such as male/female, right/left, hot/cold, and compact/loose, all of which appear to assign a superior role to the male. This predilection for pairs of opposites is not uncharacteristic of early Greek thought. Indeed, as has been ably demonstrated by Lloyd (Polarity and Analogy, p.7 (et passim)), early Greek cosmological theories and accounts of natural phenomena contain a striking number of allusions to polar opposites. It is clear, then, that this particular feature of the sexual teachings of the Presocratics is best considered in the wider fifth century context, as a product of a pattern of thought predominant at the time.

#### Aeschylus and Euripides

If we turn now to the genre of tragedy, we discover that both Aeschylus and Euripides found an opportunity to make a strong statement in their tragic verse about the nature of the male and female roles in procreation. In his Eumenides, presented in 458 B.C., Aeschylus attributed to the god Apollo (as proof that Orestes, who had killed his own mother, was innocent of blood-guilt) the following words:

οὐκ ἔστι μήτηρ τοῦ κεκλημένου τέκνου  
 τοκεύς, τροφὸς δὲ κύματος νεοσπόρου ·  
 ἴνικται δ' ὁ θρόσκιων ἢ δ' ἄτερ ξένῳ ξένη  
 ἔωσεν ἔρνος, οἷσι μὴ βλάβῃ θεός

(Eumenides 658-661)

The mother is not the true parent of the child  
 Which is called hers. She is a nurse who tends the growth  
 Of young seed planted by its true parent, the male.  
 So, if Fate spares the child, she keeps it, as one might  
 Keep for some friend a growing plant.

(Translation by Philip Vellacott)

In his Orestes, completed in 408 B.C., Euripides ascribed a parallel statement, not to Apollo, but to Orestes himself:

πατήρ μὲν ἐφυτευσέν με, σὴ δ' ἔτικτε παῖς,  
 τὸ σπέρμ' ἄρουρα παραλαβοῦς' ἄλλου πάρα  
 ἄνευ δὲ πατρὸς τέκνον οὐκ εἶη ποτ' ἄν.  
 ἐλογισάμην οὖν τῷ γένους ἀρχηγέτῃ  
 † μᾶλλον μ' ἀμῦναι † τῆς ὑποστάσεως τροφάς.

(Orestes 552-556)

... my father planted me,  
 Your daughter bore me - a field sown with another's seed.  
 Without the father there can be no child; therefore,  
 I reasoned, the prime author of my life must have  
 My loyalty, more than she who supplied care and food.

(Translation by Philip Vellacott)

The view of conception expounded by Aeschylus and Euripides emphasises the major role of the male : the male was the one who provided the seed from which the child grew, whilst the female merely supplied the nourishment which promoted that growth (and by extension, the father was therefore the true parent of the child, whereas the mother was simply its nurse).<sup>(28)</sup> This viewpoint corresponds closely with the concept of male seed/female nourishment assigned to the Presocratic philosophers, Hippon of Samos and Anaxagoras, both of whom were approximately contemporary with Aeschylus. As elaborated

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It is difficult to determine whether both Aeschylus and Euripides actually subscribed to this view of conception, or whether they simply incorporated it in their text because of its appropriateness to the argument. It is worth pointing out, however, that this particular view whereby the male supplied the seed and the female the place for that seed, may well have been the view that was most widely accepted amongst the Greek populace (for the male seed was, after all, the only visible contribution to conception).

To this concept of the male as the superior partner in procreation, Joseph Needham, A History of Embryology, C.U.P., 1959, p.44 gives the label 'the denial of physiological maternity', on analogy with Malinowski's doctrine of 'the denial of physiological paternity' as related to the Trobriand Islanders. Needham's label is unsatisfactory on two counts. In the first place, it implies that the same ignorance of the significance of coition ascribed by Malinowski to the Trobrianders, is also applicable to the Ancient Greeks. This is certainly not the case. Secondly, it assumes the validity of Malinowski's theories which have been brought into question by a number of scholars, including Edmund Leach, who in an essay entitled Virgin Birth (in Genesis as Myth, and other essays, London, 1969, pp.85-112) states 'Despite the fame of Malinowski the Trobriand Islands do not provide a supporting case illustrating the possibility of total ignorance of the facts of life.' (p.91). For these reasons, it is wise to dismiss the parallel set up by Needham.

in Aeschylus and Euripides, however, the concept gains a forcefulness and impact which is absent in the Presocratic testimonies.

One of the factors which distinguishes the Aeschylian and Euripidean passages and contributes to their effectiveness is their introduction of the 'plant analogy', that is, the analogy between human procreation and the cultivation of plants. Thus, the mother is equated with the earth or nourishment, the father with the sower of seed, and the child with the resulting plant. As has been adequately demonstrated by Lloyd (Polarity and Analogy, passim), the use of analogy, whereby one rather obscure phenomenon is clarified by comparison with another more definite and familiar object, is a common type of argumentation in early Greek thought; it serves an important role not only as a source of theories concerning phenomena which cannot be investigated directly, but also as the basis for the justification of these theories. Accordingly, the analogy drawn from the plant world provides both a theory of human reproduction, and the reason for recommending that theory.

One further factor which distinguishes the statements found in Aeschylus and Euripides is their explicit reinforcement of the notion of the superiority of the male. The respective roles of the male and female in reproduction are delineated expressly for the purpose of proving the prime significance of the male, as opposed to the lesser importance of the female. Whilst this male/female distinction was evident in the sexual theories of the Presocratics, it was nowhere underlined as explicitly as it is in these two passages from tragedy.



Here, we have the obvious intrusion of social values into matters of a strictly physiological nature. The theory of conception expressed by Aeschylus and Euripides reflects the strongly ingrained notions of male and female status characteristic of fifth century Athenian society. (29)

### Plato

If we examine the Timaeus, one of Plato's later works composed in the decade or so prior to 350 B.C., we find that Plato introduced matters relating to the subject of procreation on three separate occasions. When the details recorded in these three passages are assembled, they provide an adequate, although rather sparse, outline of Plato's attitude towards two aspects of conception : the male and female contribution, and the nature and origin of the seed.

In the first of the passages concerned, Timaeus 50 C-D, the relations between the eternal Form, the Receptacle, and Becoming are compared, for the purposes of illustration, with those between the father, the mother, and the child. From this comparison, we learn that, in Plato's view, the father provided the model or form for the child, and the mother the place of nourishment. Timaeus 50 C-D is corroborated by Timaeus 91 A-D, where the original differentiation of the sexes is described. Indeed, here, the terms used are those of male seed/female receptacle, terms which correspond even more

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For a discussion of the social, economic and political position of the female in relation to that of the male in fifth century Athens, see Sarah B. Pomeroy, Goddesses, Whores, Wives, and Slaves, London, 1975, pp.57-119.

closely to the concept of procreation attributed to Hippon and Anaxagoras, and dramatised by Aeschylus and Euripides, than do those found in Timaeus 50 C-D. These two passages confirm that for Plato, just as for his fifth century predecessors, the male was the one who played the major part in procreation.

The third passage is Timaeus 73 B-D, where the formation of the human race is discussed. Here, we are informed that the common seed for the race of mortals was marrow which formed the foundation of bones, flesh, and all such things; that this marrow was imbued with soul; and that the brain, which was marrow shaped in a spherical form, was the source of the divine seed. From this, we can conclude that Plato believed the paternal seed to possess soul, and to originate in the brain or marrow. Confirmation of Plato's theory of the origin of semen is found in Timaeus 91 A-D, where it is suggested that the passage for the paternal seed lay in the column of marrow running from the head down the neck and along the spine (whence a tube led to the urinary tract). Plato's belief in the brain or marrow as the source of semen recalls the earlier theories of the Presocratics, Alcmaeon and Hippon. Indeed, these theories receive clarification from the description found in Timaeus 91 A-D.

#### The Hippocratic Writings

The Hippocratic writings provide proof of an upsurge of interest in the problem of generation. The topic is alluded to in a number of treatises, but receives particular attention in a group of three treatises, The Seed, The Nature of the Child, and Diseases IV.

These three, known as the embryological treatises, were compiled by the same fourth century writer, and may originally have been composed as a unity. Their significance lies in the fact that they attempt a systematic discussion of the subject of generation, drawing upon empirical evidence, as well as analogy.<sup>(30)</sup> Of these three works, the one which is of particular relevance to this study is The Seed, for it contains details of the male and female contribution to conception, the nature and origin of the seed, sex differentiation, and heredity.

It is evident from recurrent statements throughout The Seed that its author believed in the existence of both the paternal and the maternal seed (cf The Seed, passim). In his mind, it was not only the male who was able to produce sperm, but also the female. Indeed the female released sperm sometimes into the womb, which then became moist, and sometimes externally as well, if the womb was open wider than normal (The Seed, 4).

As for the nature and origin of semen, the author of The Seed contended that it consisted of the most potent part of the bodily fluid, being, in effect, the foam produced by that fluid when it became agitated during intercourse (The Seed, 1).<sup>(31)</sup> This concept

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Cf G.E.R. Lloyd (ed.), Hippocratic Writings, Pelican Books, 1978, Introduction, pp.45-46.

(31)

The text of The Seed in fact suggests that this was the origin of the male seed, but makes no parallel comment of any length concerning the female seed. However, thanks to the opening comment of chapter 8 of The Seed, to the effect that sperm was a product deriving from the whole body of each parent, we can deduce that the author envisaged both seeds as originating in the same manner.

of the seed as foam shows some resemblance to the theory proposed by the Presocratic, Diogenes of Apollonia, although the latter attributed the origin of semen, not to fluid, but to blood.

On the question of sex determination, the Hippocratic writer put forward the view that both partners emitted both a stronger and a weaker seed, the former being productive of a male, the latter of a female. Thus, if both partners produced a stronger sperm, a male was the result, whereas if both produced a weak sperm a female was the result. If, however, one partner produced one kind of sperm, and the other another, then the resultant sex was determined by whichever sperm prevailed in quantity (The Seed, 6). In the eyes of the author, then, sex differentiation centred upon the production of stronger and/or weaker sperm by the two partners concerned. His association of male/female and stronger seed/weaker seed may be compared with the pairs of opposites so prevalent in the theories of the Presocratic philosophers; yet his notion that both the male and the female could produce the two different types of seed, is, as far as can be ascertained, completely unprecedented.

If we turn to the problem of heredity, we find in the text of The Seed the statement that since sperm was a product which came from the whole body of each parent, weak sperm coming from the weak parts, and strong sperm from the strong parts, the child necessarily had to correspond. Thus, if from any part of the father's body a greater quantity of sperm was derived than from the corresponding part of the mother's body, the child would in that part, bear a closer

resemblance to its father; and vice versa. That is to say, the child would resemble in the majority of its characteristics that parent who had contributed a greater quantity of semen from the greater number of bodily parts (The Seed, 8).

This theory of heredity confirms that the approach adopted by the Hippocratic writer of The Seed was based on the doctrine of pangenesis, whereby both the male and the female seed were drawn from the entire body of each parent respectively, and therefore contained, albeit potentially, all those bodily parts necessary for the development of a child. Comparison of the theories found in The Seed with those formulated by Democritus, the initiator of the pangenetic doctrine, demonstrates, however, that the Hippocratic author introduced a number of innovations particularly in the sphere of the nature and origin of the seed, and the determination of sex.

### Aristotle

Aristotle, in his De Generatione Animalium (composed during the latter part of the fourth century B.C.), reacted against the sexual theories of his predecessors and produced an excitingly new and highly sophisticated analysis of generation. This analysis is characterised by its typically Aristotelian reliance on hylomorphic and teleological concepts, its frequent use of dialectical argument, and its repeated introduction of analogies and empirical evidence. Of the numerous topics covered in exhaustive detail by Aristotle, it is those discussed in Book I, and in parts of Books II and IV, that is,

those relating to the process of conception, which concern us here. (32)

On the subject of the male and female contribution to conception, Aristotle proposed that the male provided the movement and generation, whilst the female supplied the matter; and that the truth of this statement could only be proved by an examination of the origin and formation of the seed (De Gen. Anim. I. 716 a 5-8).

If we turn, then, to the question of the seed, we find that Aristotle believed semen to be the final residue of the useful nutriment, that is, the final residue of that nutriment which went to all the bodily parts and contributed to their growth. Furthermore, since semen was a residue of nutriment in its last stage, and the last stage of nutriment was blood, the seed (in its unconcocted form) was necessarily a residue of the nutriment which had become blood and was being distributed to the parts in its final stage. This in Aristotle's view was why offspring resembled their parents; for what had gone to the parts resembled what was left over, and consequently the seed was potentially what the parent was in actuality (De Gen. Anim. 724 b 23 - 726 b 18). The approach adopted here by Aristotle clearly opposes the pangenetic doctrine proposed by both Democritus and the Hippocratic writer, for it involves the notion that the seed

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Given the length of Aristotle's work, and the sophistication of his argument, it is difficult in a survey such as this, to convey the nuances of his analysis. However, even a mere outline of his theories (which is all that can be given here) serves to show the advances which he made over his predecessors.

was that which naturally went to, rather than came from all the parts.

On the problem of whether or not the female emitted seed, Aristotle argued as follows. Since the weaker animal necessarily produced a residue which was more abundant and less concocted, and which accordingly consisted of a blood-like fluid; and since the weaker was that which by nature had the smaller share of heat, and the female was such; then, the bloodlike secretion produced in the female was necessarily a residue too. Thus, the menstrual discharge was a residue, and it was the analogous thing in females to the semen in males (De Gen. Anim. 726 b 30 - 727 a 4). Moreover, since two spermatric secretions could not be produced at once, and since menstrual fluid in females was the equivalent of semen in males, then it naturally followed that the female did not contribute seed to generation (De Gen. Anim. 727 a 25 - 30). The theory proposed here, namely that the female contribution to generation consisted not of semen, but of menstrual fluid, is notable for its innovation: so far as can be ascertained, none of Aristotle's predecessors had offered any such solution to the question of the female contribution.<sup>(33)</sup> One notable aspect of Aristotle's argument is not, however, unprecedented: his assumption that the female was cooler, and therefore weaker than the male, recalls the concept of superior male/inferior female adhered to by a number of his forerunners.

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Needham, op.cit., p.40 incorrectly claims that "This was not a new idea, but had already been suggested by the author of the Hippocratic περὶ γυνῆς. No such concept is, in fact, to be found in The Seed; the pangenetic doctrine expounded in that work precludes it.

If, in Aristotle's view, the male contribution to generation was semen, whilst that of the female was menstrual fluid, what, in his belief, was the relationship between these two contributions? Given that the male was the one who generated, and the female the one out of whom the male generated; and given that the male was naturally the active partner, whilst the female was the passive partner, then, in Aristotle's mind, it was only reasonable that the male provided the movement and form, the female the body or matter (De Gen. Anim. 729 a 20-33).<sup>(34)</sup> Moreover, since it was the male who originated movement and form, and the female who provided the matter to be endowed with movement and form, it was evident that the body of the male seed merely provided the vehicle for the movement and capability within it : it did not mingle with the female and become part of the body which was being produced. Thus, in the change from potential to actual parts, the male was the moving or efficient cause, the female the material cause (and for this reason the female could not generate on her own) (De Gen. Anim. 729 b 1-21; 730 a 27-30). Here once again, the male and the female are presented as polar opposites, the male being the active partner, the female the passive. This particular contrast supplements the earlier pairs of opposites, strong/weak and hot/cold, likewise applied to the male and female, and thus reinforces the fact that, for Aristotle, it was the male who fulfilled the superior role in procreation.

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For a discussion of the influence of Aristotle's hylomorphic and teleological views on the formulation of this particular theory, see D.M. Balme, Aristotle's De Partibus Animalium I and De Generatione Animalium I, Oxford : Clarendon Press, 1972, pp.151-152.



If we examine the early chapters of Book II, we find clarification of certain aspects of the nature and role of semen. We learn that, in Aristotle's view, semen was foam, consisting of a combination of water and pneuma (hot air); that semen contained soul, although potentially, rather than in actuality; and that the pneuma was the vehicle for soul. We also discover that, on account of its fluid and watery nature, the body of the seed simply dissolved and evaporated, without contributing anything to the foetus; whilst, on the other hand, the movement conveyed by the seed instigated movement in the female residue, thus enabling the latter, which contained all the bodily parts potentially, to acquire soul and become a foetus (De Gen. Anim. II. 735 a 29 - 737 a 34). There can be no doubt that Aristotle's concept of the nature and role of semen displays a sophistication which is lacking in earlier attempts to define this subject.

On the determination of sex, Aristotle made a number of innovative suggestions. He argued that sex differentiation was caused neither by the operation of the left or right testicle, nor by the difference of temperature within the womb, nor by the predominance of the male or female seed (De Gen. Anim. IV. 763 b 27 - 765 a 34). Rather, sex was determined in the following fashion: when the movement derived from the male was unable to prevail and effect concoction owing to a deficiency of heat, and did not succeed in reducing the material into its own proper form, then the material necessarily changed over into the opposite form, namely, that of the female (De Gen. Anim. 766 a 14 - 24). At the same time, however, the ultimate source of sex was, in fact, the heart: given that the male was distinguished by a particular ability to effect concoction of

the final nutriment (i.e. food→blood→semen), and the female by an inability to do so; and given that the reason for this lay in that part of the body which possessed the principle of the natural heat, namely, the heart, then the heart was necessarily that which ultimately determined sex (De Gen. Anim. 766 a 30 - 766 b 4). Aristotle's theory of sex determination is characteristically more complex than those of his predecessors, but it appears to make the same assumptions concerning the relative significance of the male and female as are found in certain of the earlier theories and in other parts of his own work.

Closely linked to Aristotle's theory of sex differentiation is his concept of heredity. He suggested that just as the sex of the offspring depended on whether the male sex predominated in the process of generation, so too, did the individual characteristics of the offspring depend on whether or not that male as an individual predominated. Thus, if the movement which determined the male characteristics was mastered, the offspring, whether male or female, took on the characteristics of its mother. It was, however, more usual for male offspring to resemble the father, and female offspring the mother. (De Gen. Anim. 767 a 36 - 768 a 15)

Furthermore, if the same movement of the individual male, whether or not it gained mastery, relapsed, then the offspring would resemble not its father or mother, but its grandfather or grandmother, great-grandfather or great-grandmother, and so on. This scheme held good for all the various parts of the body (De Gen. Anim. 767 a 36 - 768 b 6). The theory of heredity proposed by Aristotle

is the earliest in the tradition of writings on generation to attempt to explain the inheritance of ancestral characteristics. Previous theories had concentrated on the explanation of the transmission of parental characteristics, and had made very little attempt to go beyond that.

In conclusion, Aristotle developed a sophisticated set of theories concerning the male and female contribution to generation, the nature and origin of semen, sex determination, and heredity. Most notably, he argued that the male alone contributed semen, that the female equivalent of semen was menstrual fluid, and that, as far as the respective roles of the male and the female were concerned, the former was the one who provided the form and movement, the latter the one who provided the body or matter. Aristotle's suggestion that semen was the male contribution is by no means unprecedented, but his proposal that the menses formed the analogous substance in females is most certainly innovative. As for the roles which Aristotle attributed to the male and the female, whereby the one provided the more significant form and movement, the other the less significant material, we have here an indication of the general attitude adopted by Aristotle throughout the De Generatione Animalium: in his view, the male was superior, stronger, and hotter, the female, inferior, weaker, and cooler. This polarity which permeates Aristotle's sexual theories is, of course, reminiscent of that which pervades the views of his predecessors. (35)

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(35)

For a detailed discussion of Aristotle's attitudes towards the female sex, see Maryanne Cline Horowitz, Aristotle and Woman, Journal of the History of Biology IX.2 (1976), pp.183-213.

### Lucretius

So far as can be ascertained, the earliest Roman author to discuss the subject of generation was Lucretius. Included in his De Rerum Natura - a didactic poem written with the purpose of expounding the atomic view of the universe taken over by Epicurus, with some modification, from the Atomist Democritus - we find a twenty to thirty-line discussion of the transmission of hereditary characteristics. From this discussion it is possible to compile a general outline of the approach adopted by Lucretius (and the Epicureans) towards generation.

On the question of the male and female contribution, Lucretius proposed that both parents produced semen, and that, since every child was fashioned from the two seeds, a female child could derive from the paternal seed, and, conversely, a male child from the maternal seed (De Rerum. Nat. IV. 1209-1232). Lucretius' support of the doctrine of the two seeds recalls the theories of certain of the Presocratics, especially Democritus, as well as that of the Hippocratic writer of The Seed. Likewise, his additional comment concerning the fusion of the maternal and paternal seeds to produce either a male or a female child, can profitably be compared with both the Democritean and the Hippocratic viewpoints. Unfortunately, the text does not go so far as to describe the exact mechanism of sex determination, so we are left without a theory of sex differentiation for Lucretius.

It is to the heredity of bodily characteristics that we must now turn our attention, for it forms the central focus of the passage

under study. According to Lucretius, if the female seed prevailed over the male seed, then the child would resemble the mother, and similarly, if the paternal seed prevailed, then the child would resemble the father. If, however, neither seed prevailed, but both seeds mixed equally, then the child would resemble both parents (De Rerum Nat. IV. 1209-1217). There can be no doubt that Lucretius viewed the principle of predominance as the major factor in the transmission of hereditary characteristics, just as the author of the Hippocratic treatise, The Seed, had done before him. (36)

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(36)

Cyril Bailey, Titi Lucreti Cari De Rerum Natura Libri Sex, Vol.III (Commentary, Books IV-VI), Oxford : Clarendon Press, 1963 (repr.), pp.1313-1314, states : "The theory that the child resembled the parent whose seed prevails in the union is attributed to Parmenides, to Anaxagoras, and to Democritus.... from Democritus the theory doubtless passed to Epicurus and so to Lucretius... there can be no doubt that Lucretius is reproducing the orthodox tradition of the Atomists and Epicurus." However, in the case of both Parmenides and Anaxagoras, the supporting evidence cited by Bailey is very much open to dispute (see relevant sections above); and in the instance of Democritus, the testimony cited by Bailey in fact refers to sex determination, not heredity (cf section on Democritus above, where it is stated that Democritus believed the male and female sexual parts to be transmitted according to the principle of predominance, but other bodily characteristics to be transmitted in a haphazard fashion, from either the mother or the father). It is thus incorrect to claim, as Bailey does, that the theory of heredity based on the principle of predominance must have passed from the Atomist Democritus, via Epicurus, to Lucretius. It seems more probable that Epicurus altered Democritus' theory of heredity on analogy with the latter's theory of sex determination, and that Lucretius then followed Epicurus.

Lucretius' theory of heredity did not end there : he suggested that children sometimes resembled their grandparents or more distant ancestors because ancestral characteristics were transmitted (in atom groups within the seed) from generation to generation, surfacing haphazardly from time to time. Thus, children might resemble their ancestors in face or body or limb, look or voice or hair (De Rerum Nat. IV 1218-1226). Here we have a theory of heredity which attempts to explain the similarities between children and their grandparents or more remote ancestors, just as that of Aristotle had attempted previously. The explanation offered is significant for the fact that it highlights Lucretius' atomic approach, an approach ultimately derived from Democritus.

Given Lucretius' debt to Epicurus and Democritus and his agreement on individual points with the Hippocratic writer of The Seed, it seems reasonable to suggest, in conclusion, that Lucretius - even as his predecessors - subscribed to the doctrine of pangenesis. Lucretius' views on the maternal and paternal contribution to generation, and on the transmission of bodily characteristics, show no disagreement with the pangenetic approach; indeed, they could easily be interpreted as the product of such an approach. (37)

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(37)

Cf Lesky, op.cit., pp.1316-1317

### Seneca

At the end of Book III of the Quaestiones Naturales, in a discussion of the fated deluge which would destroy the earth's inhabitants, the Stoic philosopher, Seneca, introduced the following general observation:

... sive animal est mundus, sive corpus natura gubernabile, ut arbores, ut sata, ab initio eius usque ad exitum quicquid facere quicquid pati debeat, inclusum est. Ut in semine omnis futuri hominis ratio comprehensa est et legem barbae canorumque nondum natus infans habet. Totius enim corporis et sequentis actus in parvo occultoque liniamenta sunt....

(Quaestiones Naturales III.29.2-3)

Whether the world is an animated being, or a body governed by nature, like trees and plants, there is incorporated in it from its beginning to its end everything it must do or undergo. <Similarly> in the semen there is contained the entire record of the man to be, and the not-yet-born infant has the laws governing a beard and grey hair. The features of the entire body and its successive phases are there, in a tiny and hidden form.

(Translation by Thomas Corcoran)

From this passage, we learn that for Seneca (and the Stoics), the world contained within it, in potential form, all that it endured from beginning to end. Similarly, semen determined the

entire development of the somatic features of the individual, for contained within it, in potential form, were the characteristics of the body in all its various stages.

Here, we have, in effect, a theory of heredity, a theory which stresses the deterministic development of bodily characteristics. Unfortunately, as a result of the context in which it occurs, and the fact that it is introduced by way of an analogy, Seneca's statement concerning heredity is necessarily incomplete. It gives no indication as to whether the paternal seed was paralleled by a maternal seed, nor, if this was the case, as to how characteristics were transmitted from one, or both, of the parents.

The absence of such information renders difficult any attempt to draw specific conclusions about the approach of Seneca and the Stoics towards generation. Examination of extant evidence relating to the Stoics provides some clarification, but this evidence is itself problematic for it is fraught with contradictions.<sup>(38)</sup> We must therefore be content with the small insight into Seneca's view of heredity provided by the passage just discussed.

#### Galen

Our final source for ancient theories of conception is the late second century A.D. medical writer, Galen. Of the numerous works

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For a valiant attempt to reconcile extant evidence concerning aspects of the Stoic outlook on generation, see Lesky, op.cit., pp.1387-1397.



produced by this prolific writer, it is the De Usu Partium (or more precisely, the fourteenth book thereof) and the De Semine which contain material of particular importance to this study. Both works bear witness to the anatomical advances made by Galen, and to his preference for empirical evidence rather than philosophical speculation.

The first point which we should note is that Galen made an anatomical discovery which undermined Aristotle's concept of form and matter : he determined that from the female testes (i.e. ovaries) - discovered in the post-Aristotelian period by the Alexandrian anatomist, Herophilus - spermatic ducts led directly to the sides of the uterus, and that because of the connection testes → ducts → uterus, female semen necessarily passed straight from the testes through the spermatic ducts to the uterus, where it contributed to the generation of the offspring (cf De Usu Part. XIV.11; De Semine I.7; II.1). By thus supporting the doctrine of the two seeds, Galen distanced himself from the Aristotelian viewpoint, and adopted a similar solution to the problem of the male and female contribution to generation as that proposed by a number of his predecessors, most notably, the Hippocratic author of The Seed.

Although Galen acknowledged the existence of both a maternal and a paternal seed, he believed that the former was less perfect than the latter; due to the female's lesser supply of heat, her seed was necessarily less substantial, colder, thinner, and weaker than that of the male (cf De Usu Part. XIV.6; De Semine II.5). Moreover, the main function of the female seed, in the early stages after its fusion with the male seed, was to provide the latter with nourishment;

a function which, in the later stages of embryonic growth, was taken over by the menstrual blood (cf De Semine I.7; II.1; II.4). Here, Galen's debt to the Hippocratic system is again evident, but what is particularly striking is the influence of Aristotle. Characteristically Aristotelian is Galen's insistence on the lesser significance of the female, his ascription of a smaller share of heat to the female, and his attribution of a nutritive role to menstrual blood.

On the question of the production of semen, Galen suggested that in the numerous windings of the vessels that led to the male and female testes, blood was transformed into a semen-like liquid, and that this liquid was in turn transformed into real semen by the testes themselves (cf De Usu Part. XIV.10; De Semine I.16; II.5). Thus, although Galen could not isolate himself from the traditional theory - espoused, above all, by Aristotle - that blood formed the origin of semen, he nonetheless attributed a major role in the production of semen to the testes.

If we turn to the matter of sex differentiation, we find that Galen posited heat as the determining factor. He argued that since the spermatic vessels leading to the right male and female testes and to the right side of the womb had a different origin from those on the left, and therefore carried warmer blood than the left-hand vessels, the right male and female testes and the right side of the womb were necessarily warmer than the left, which, in turn, meant that the male and female semen deriving from the right testes and

arriving in the right side of the womb was warmer and would produce males, whilst females were engendered on the left (De Usu Part. XIV.7). In suggesting warmth as the essential factor in the differentiation of sex, Galen was undoubtedly inspired by the Empedoclean theory of sex determination, whereby a warm womb produced male offspring, a cold womb, female offspring. Yet, the Empedoclean theory was not the only one which influenced him : Galen also adopted elements of the right/left theory of sex differentiation attributed to Anaxagoras, thus creating a composite theory which equated male/female with both hot/cold and right/left. His original contribution, however, was to substantiate his arguments with anatomical data, data which provided the empirical evidence so necessary in his view.

The mechanism proposed by Galen for the transmission of individual characteristics relied on the principle of predominance. Galen suggested that different portions of the male and female semen contained different qualities of semen : thus, the first portion ejected might be of a thicker substance, whilst the second or third portions might be thinner, colder, or weaker; and vice versa. When the two seeds combined, the male seed prevailed in some portions, the female seed in others, in accordance with the quality of those portions, and, as a result, the offspring resembled the father in some parts of the body, and the mother in others (De Semine II.5). The mechanism devised by Galen differs from that found in the Hippocratic work, The Seed, in that the latter involves the predominance of certain portions of the male or female seed in accordance with their quantity, whilst, with the former, it is a question of the quality

of the portions concerned. It is notable that the viewpoint expressed by Galen does not entirely concord with his own general description of the nature of the maternal and the paternal seed. (39)

In conclusion, the theories formulated by Galen contained both traditional and original elements. He drew heavily on the work of his predecessors, often adopting or adapting their views, but at the same time he added his own personal insights, frequently derived from his more extensive knowledge of anatomy. Of the numerous advances made by Galen, the most significant (from the point of view of this study) was undoubtedly his anatomical substantiation of the existence of an effective female seed.

When we review the various theories of conception proposed by Greek and Roman philosophers, tragedians and medical writers between the early fifth century B.C. and the late second century A.D., we cannot help but note the significant advances that were made during that period. The Presocratic philosophers were the first to delineate and explore the four main areas of concern, viz. the nature of the male and the female contribution to the offspring, the nature and origin of the seed, the determination of the sex of the offspring,

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(39)

This contradiction is, in fact, but one of many which may be found in the material relating to heredity in Galen's De Semine. Not only did Galen propose an alternative theory for the heredity of individual characteristics, but he also evolved a theory for the heredity of the species, both of which depended on the Aristotelian concepts of form and matter. For a discussion of Galen's eclecticism, and his apparent lack of success in formulating a theory/theories of heredity which accorded with the theory of the two seeds, see Lesky, op.cit., pp.1410-1417; cf, too, A. Preus, Galen's Criticism of Aristotle's Conception Theory, Journal of the History of Biology X.1(1977), pp.65-85 and espec. p.84.

and the transmission of hereditary characteristics. In subsequent times, these earlier theories were re-examined, revised and refined. The comprehensive Hippocratic doctrine set forth in The Seed, and the much more complicated hylomorphic theory of Aristotle - both of which were utilised and developed by Galen - provide proof of the considerable progress that was made. In view of this, it must be concluded that the state of knowledge attained in Graeco-Roman society on the subject of conception was quite advanced, especially when the techniques available at that time are taken into consideration. The ancient writers and thinkers who explored the early stages of generation produced a set of detailed theories which are evidence of considerable interest in and knowledge of the subject in question.

That the ancients possessed such a detailed knowledge of the process of conception and that they appreciated the complementary nature of the roles of the male and the female in generation is proof of the inadequacy of the claim that the Graeco-Roman concept of wind impregnation is attributable to an ignorance of the prerequisites for procreation. Such a claim is misleading and inaccurate, and cannot be supported by the facts.

But if this view is unacceptable, what explanation can be given for the ancient belief in the fertilising powers of the wind? In order to answer this question, it is necessary to turn to the individual traditions concerning wind impregnation, in the expectation that a detailed discussion of each will provide an insight into the complex of ideas underlying them. The following chapters are therefore devoted to an examination of the six traditions concerned.

### III THE WIND IMPREGNATION OF MARES

The best known of all the ancient traditions concerning wind impregnation is that which focuses on the wind fertilisation of mares. This tradition owes its reputation to the fact that it is recorded by some of the most significant Graeco-Roman authors : Homer, Aristotle, Virgil, Pliny... to name but a few. One point about the tradition which seems to have been overlooked thus far<sup>(1)</sup> is that it comprises two distinct - although at times intertwining - strands. The first of the two strands concentrates on the wind-sired horse and the supernatural qualities of such a horse. Found initially in Homer, it can subsequently be traced through Greek, Roman, French, German and Italian literary epic, and for that reason may conveniently be labelled the "epic sub-tradition". The second of the two strands focuses, on the other hand, on the act of impregnation itself. It is first recorded in Aristotle and can then be pursued through a series of authors, many of whom are writers on agriculture or natural historians. It may thus appropriately be named the "zoological sub-tradition".

In the following pages these two sub-traditions will be discussed in some detail. Particular attention will be given to their individual development, to their mutual interrelationship, to the question of transmission (oral as well as literary?) and to the central ideas inherent in each.

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(1)

Cf Zirkle, op.cit., pp.97-104

The epic strand of the ancient tradition concerning the wind impregnation of mares has its beginning - as was indicated above - in Homer. Homer's Iliad, an oral epic poem first recorded in the eighth century BC, contains two passages of specific interest to this study. In the first of these passages, located in Iliad XVI (see Appendix I, passage no.1), Achilles horses Xanthos and Balios are described as being wind-swift, a trait which they owe to their immortal parentage, having been sired by the West wind Zephyrus out of the Harpy-mare Podarge, beside the stream of Ocean. Here, special emphasis is placed on the exceptional swiftness of the two horses of Achilles, Xanthos and Balios. This characteristic is attributed to the fact that they are the offspring of the union of the West wind Zephyrus (in the form of a stallion?)<sup>(2)</sup> and the Harpy Podarge (metamorphosed into the shape of a mare).<sup>(3)</sup> Since Podarge, in her capacity as a Harpy, is essentially a Storm-wind in nature, the

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(2)

Although it is not explicitly stated that Zephyrus takes on the form of a stallion to couple with Podarge, such a metamorphosis is probably envisaged here. Cf the metamorphosis of Boreas in Iliad XX.219-229, discussed below.

(3)

There have been varying interpretations of the identity of "Ἀρπυία Ποδοργή"; cf Julius von Negelein, Das Pferd im arischen Altertum, Königsberg i.Pr., 1903, p.68; Jane Harrison, Prolegomena, C.U.P., 1903, pp.178-179; Edouard Délebèque, Le cheval dans l'Illiade, Paris, 1951, p.242. However, it seems best to regard her as one of the traditional Harpies or Storm-winds who at the time of her union with Zephyrus was in the form of a horse and was grazing in a meadow alongside the stream of Ocean; cf Roscher III.2.2591-2592, s.v. Podarge.

the outstanding speed of Xanthos and Balios may be said to derive not merely from one but from both of their parents.<sup>(4)</sup>

The wind-like swiftness with which Xanthos and Balios are endowed, thanks to their parentage, is complemented by their amazing, almost human capabilities : following the death of Patroclus, the two horses stand motionless, weeping profusely (Iliad XVII.426-440); and when Achilles is driven by Patroclus' death to re-enter the fighting, Xanthos takes on the power of speech to inform Achilles of his destiny (Iliad XIX.404-417). It has been stated that, in heroic epic, an outstanding hero requires an outstanding team of horses, a team whose qualities reflect and/or enhance his own.<sup>(5)</sup> There can be no doubt that the remarkable abilities of Achilles' horses, Xanthos and

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(4)

It is worth noting here that amongst the ancient Greeks Harpies or Storm-winds were generally seen as destructive forces: their function was that of carrying away the souls of the dead (see Roscher I.2.1841-1847, s.v. Harpyia). The creative forces were the Tritopatores, ancestral spirits or winds, whose task was to bring souls into the world (see P.W. I.2178, s.v. Anemoi). The role fulfilled by the Harpy Podarge in Iliad XVI is thus one that comes closer to that of the Tritopatores than to that of the Harpies, but it nonetheless serves to remind us of an association that was particularly strong in the minds of the ancients, namely, that between winds and souls (see Erwin Rohde, Psyche, New York, 1972 repr., passim; id., Paralipomena, Rheinisches Museum für Philologie 50(1895), pp.1-30 (espec.1-5); Jane Harrison, op.cit., pp.179-180; Anna Sacconi, Anemoi, Studi e Materiali di Storia delle Religioni 35(1964), pp.137-159; and refs cited therein). This association will be discussed more fully in chapter IX, below.

(5)

Cf C.M. Bowra, Heroic Poetry, London, Macmillan & Co. Ltd., 1964, p.157ff.



Balios - and in particular their ability to match the speed of the winds - render them perfect companions for their "swift-footed" master, Achilles.

The second of the two Homeric passages relating to wind impregnation is to be found in Iliad XX (see App.I, no.2).<sup>(6)</sup> It forms part of the description given by Aeneas of his lineage immediately before his battle with Achilles. Aeneas mentions King Erichthonius, the son of Dardanus, adding that he was the wealthiest of mortals and that he possessed a herd of three thousand prize mares : so attractive were these mares that the North wind Boreas took on the form of a stallion and mated with them, producing twelve foals that had the ability to skim over the tops of corn-fields and along the crests of waves. Here, in contrast to the previous passage discussed (and to later examples of the epic sub-tradition), equal attention is given to the union of Boreas with the mares of Erichthonius and to the wind-sired horses that are the result of that union. Nonetheless, these wind-sired horses are likewise said to inherit the powers of the wind : they can travel with facility over land and sea. Given their exceptional powers, the horses are an undoubted asset to the herd of Erichthonius. As has been stated elsewhere,<sup>(7)</sup> one of the functions of the horse in heroic epic - and specifically in the Iliad -

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(6)

Some doubt has been expressed concerning the authenticity of the lines in question (see, for instance, Ernst Heitsch, Aphroditehymnos, Aeneas und Homer, Vandenhoeck and Ruprecht, Göttingen, 1965, pp.87-89). However, for the purposes of this study, it seems preferable to regard the passage as genuine.

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Cf Bowra, op.cit., p.157; Kenneth Atchity, Homer's Iliad. The Shield of Memory, London and Amsterdam, 1978, Appendix 2 : Horses in the Iliad, passim.

was as an article of wealth : the status of a person was judged according to the quantity and the quality of his horses. This being the case, the wealth and nobility of Erichthonius cannot but be enhanced by the addition to his herd of the horses sired by Boreas.

The two Homeric passages just examined thus give evidence of two significant aspects of the horse in the Iliad : firstly, as an appropriate battle-companion for the hero; and secondly, as a status symbol. As will be seen, both these aspects - and particularly the first - are likewise evident in the remainder of the epic sub-tradition. More important, however, is the fact that these two Homeric passages provide an insight into ancient patterns of thought. In the first instance, they demonstrate the close association in the minds of the ancients between wind and horse.<sup>(8)</sup> Such was the speed of the horse that it could readily be compared with the wind and, by extension, could even be said to be the offspring of the wind. This particular association was complemented by a second : that between wind and soul.<sup>(9)</sup> Not only were the winds believed to be the carriers of souls (both the souls of the dead and those of the newborn) but, by extension, they were also considered to be souls. These twin associations of wind/horse and wind/soul may be said to be the central ideas underlying the concept of the wind-sired horse as portrayed in Homer.

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(8)

For relevant Graeco-Roman evidence plus comparable material from other cultures, see Negelein, op.cit., pp.64-70.

(9)

For references, see n.(4) above.

The epic concept of the wind-sired horse was one which, so far as can be ascertained, did not reappear in ancient literature until the time of the Roman epic writer, Silius Italicus (first century AD). Extant evidence is such that it is difficult to tell whether this concept was transmitted orally in the period subsequent to Homer even as it must have been in the period prior to his recording of the Iliad. It seems reasonable to suppose that many Greeks in later times were familiar with the concept through reading or listening to a performance of the Iliad, but they may well have been little more than passive bearers of the tradition. There can be little doubt, however, that the associations that apparently formed the basis of the tradition, namely, those of wind/horse and wind/soul, persisted for centuries following.<sup>(10)</sup> As will become evident, the relationship between wind and soul is one that is of particular importance in this study.

It is now appropriate to turn to the second strand of the Graeco-Roman tradition about wind impregnated mares, that is, to the zoological sub-tradition. This sub-tradition was first recorded - in the fourth century BC - by Aristotle. In Book VI of his Historia Animalium, during a general discussion of the sexual appetite and frenzy of domestic and wild animals, Aristotle isolates the mare as the most eager of all female animals for sexual intercourse. To illustrate his point, he gives the following account of the behaviour of mares during the mating season (see App.I, no.3): mares (if frustrated in their desires) are said to "become filled with wind" at this season,

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See references cited in nn.4 and 7 above.

and this is the reason why, in Crete, the stallions are never separated from the mares, for when the latter get into this state, they shun all other horses, they insist on running either in a northerly or a southerly direction, and they allow no one near them until they are exhausted or have reached the sea, at which point they discharge that mysterious substance called hippomanes.

Aristotle's account raises a number of interesting questions : what was the origin of his information? Did he derive it from written or from oral sources? Whether written or oral, can such sources be specified? What is the exact meaning of ἐξανεμοῦσθαι? Does it have the full sense of "impregnation", or does it mean something less than that? And what about the specific reference to Crete? - does that have any particular significance?

On the question of the origin of Aristotle's information, it seems not unreasonable to suggest that he relied, not on literary, but on oral sources. It is, of course, impossible to make a definitive statement on this matter; but certain aspects of Aristotle's account lend support to the suggestion that he utilised oral evidence. In the first instance there is his use of the word λέγονται to introduce the account. Admittedly, this and other such "anonymous" terms are used by Aristotle to refer to written as well as to oral sources;<sup>(11)</sup> but given that Aristotle is known to have spoken with animal breeders on other occasions,<sup>(12)</sup> it is possible that on this particular occasion

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(11)

See Anthony Preus, Science and Philosophy in Aristotle's Biological Works, Georg Olms, Hildesheim, New York, 1975, p.22.

(12)

See Preus, op.cit., pp.36-40

the term λέγονται is meant to imply that he has been in conversation with horse breeders. This may well be confirmed by the fact that Aristotle's account reads as though he is recording something that he has heard rather than read. What is more, the account itself is characterised by its preference for minute and vivid detail, and is imbued with a certain hint of the marvellous. These features serve to reinforce the suggestion of an oral source. Most significant of all, however, is the fact that Aristotle refers at the outset of the account to Crete, and writes as though his information is derived from Cretan sources. It thus seems highly probable that he has spoken personally with Cretan horse breeders, and that they have provided him with the information that he records.

But what of the question of ἐξανεμοῦσθαι and its meaning? Did Aristotle understand this term to mean "to be filled with wind", or did he use it in the stronger sense of "to be impregnated by the wind"? And if the latter, how can this be reconciled with Aristotle's views on conception (see above, chapter II)? Before attempting to answer these questions, it is worth noting that the account supplied to Aristotle by the Cretan horse breeders seems to have its origin in a phenomenon common amongst mares in the mating season, namely, "wind-sucking". It is an accepted fact that mares in heat commonly suck wind into their bodies (via the vulva), and receive immense pleasure from that action.<sup>(13)</sup> It seems likely that the account

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Cf Ann C. Leighton Hardman, The Amateur Horse Breeder, London, Pelham Books, 1970, p.18. It is interesting to note that although I have received verification of this phenomenon from horse-breeders, I have found very little reference to it in books on horse-breeding.

transmitted by the horse breeders is nothing other than a rather elaborate version of this particular phenomenon. Thus, the running of the mares in either a northerly or a southerly direction (as depicted in the account) can be interpreted as the equivalent of the running and frolicking of mares in heat, and the substance hippomanes discharged by the mares (vividly described in the account) can be equated with the vaginal discharge normally emitted by mares in heat.

This being the case, how should we interpret ἐξανεμοῦσθαι? Given that the account is apparently based on the phenomenon of wind-sucking, and that Aristotle may well have understood it in this light, it seems reasonable to suggest that he used the term ἐξανεμοῦσθαι in the simple sense of "to be filled with wind", or rather, "to be aroused by the wind". Such an interpretation does not in any way detract from Aristotle's use of the account as an example of the eagerness of the mare for sexual intercourse, for the essential point about wind-sucking is that it takes place when the mare is unsatisfied in its sexual desires. Moreover, such an interpretation avoids the need to reconcile, on the one hand, the highly sophisticated theory of conception developed by Aristotle, and on the other, his supposed belief in wind impregnation.

One further question remains to be asked : if Aristotle understood ἐξανεμοῦσθαι in the manner suggested above, can we assume that the horse breeders who transmitted the account to Aristotle also understand the term in this way? Once again, this is a question that is difficult to answer, given the state of our evidence. However,

I should like to suggest that the breeders amongst whom the account would have circulated, would in all probability have envisaged the phenomenon of wind-sucking as a possible mechanism for impregnation, and that they thus would have utilised the term ἐξανεμοῦσθαι in its stronger sense of "to be impregnated by the wind". My reason for suggesting this is that Crete appears to have been a place where, from very early times, the winds were held in high regard. Evidence on Mycenaean tablets from Knossos reveals that there was a priestess, and thus a cult, of the winds (Anemoi) on Crete as early as the Mycenaean period. As has been convincingly demonstrated,<sup>(14)</sup> the Anemoi in question are best interpreted, not so much as atmospheric winds, but rather as wind-spirits, namely, Harpies and Tritopatores. The existence of such a cult on Crete suggests that the inhabitants of the island saw winds and souls as being in close association. This being the case, it is not unreasonable to conclude that the local horse breeders connected wind-sucking with impregnation, and accordingly believed that when a mare was "filled with wind" it could possibly also be fertilised by that wind.

Given the meaning attributed to ἐξανεμοῦσθαι by Aristotle, it is ironical that his passage about mares in heat effectively initiated the second strand of the Graeco-Roman tradition concerning wind-impregnated mares. The reason for this was that the passage in question was adopted by Virgil as the basis for a vivid and unforgettable passage about the sexual fury of mares and their fertilisation by the wind. Virgil's description, found in Book III of the Georgics (see App.I, no.5), comes as the climax to a lengthy discussion of

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See Anna Sacconi, op.cit., passim.

the passion and blinding lust of animals in their sexual frenzy : when in heat - he says - mares range over Mt.Gargara and across the roaring Ascanius river; in spring, above all, they turn to face the west wind high up there on the rocks; they sniff the light breezes, and - amazingly - are made pregnant by the wind; then, they gallop over rocks and cliffs and down deep valleys, either in a northerly or a southerly direction, whereupon a clammy fluid called hippomanes drips from their loins.

Virgil's debt to Aristotle is unmistakable. He introduces the example of the mares in an almost identical context to that found in Aristotle; and he relies on his predecessor for the details of their flight towards north or south and their production of hippomanes. At the same time, he has adapted and expanded his source, creating by means of his poetic imagination a highly evocative and effective passage. Thus, he introduces a precise setting, namely, the Troad; (15) he emphasises the importance of the spring season; he portrays the mares as facing into the wind when they conceive (thereby implying that the wind enters their bodies via the mouth and nostrils; (16) and he specifies the impregnating wind as the gentle westerly breeze, Zephyrus. Moreover, he deliberately highlights the marvellous aspect of his subject : he dwells on the magical qualities of hippomanes; he adopts an almost incredulous tone when

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The influence of Homer is possibly to be detected in this detail.

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Even as a soul might be thought to enter the body? The ancient concept of the soul being carried into the body on the winds may well have influenced Virgil here; cf Rohde, op.cit., *passim*.



describing the wind impregnation of the mares (hence the use of the phrase 'mirabile dictu'); and by naming Asia Minor as his setting he distances the entire phenomenon. Clearly, then, Virgil's contribution to the zoological sub-tradition is a polished, literary version, a version that corresponds in many respects to that on which it is modelled, but that - unlike its predecessor - has little if any connection with oral tradition.

The very same emphasis on the marvellous that is evident in Virgil is also evident in an account produced shortly before that of Virgil by Varro (see App.I, no.4). Varro introduces his account during a discussion of animal husbandry in his agricultural handbook, the Res Rusticae. It is a conscious attempt on his part to enliven an otherwise rather serious and routine text. He begins with the enticing words : 'On the subject of breeding there is something incredible, but nonetheless true, which happens in Spain...', and continues to tell of certain mares on Mount Tagrus (near the town of Olisipo by the ocean in Lusitania) that conceive by the wind at a certain time of the year, but whose offspring do not live more than three years.

There can be no doubt that Varro's account differs in a number of respects from those of Aristotle and Virgil. As in the case of Aristotle, certain vital questions may be asked : Where did Varro derive his information? Was it from oral or from literary sources? What is the significance of the Spanish setting? Is there any connection between the Aristotelian and Varronian versions?

The question of the origin of Varro's information is a difficult one. Not only is Varro's account the earliest extant version in

this form, but there is very little additional evidence available to us. Fortunately, however, these problems do not preclude us from drawing tentative conclusions concerning the sources utilised by Varro.

An examination of the evidence at hand - both internal and external - leads to the suggestion that Varro - even as Aristotle before him - may well have been dependent on oral sources for his information. In the first place, there is the fact that Varro's account is the earliest of its type in extant literature. Admittedly, this may simply mean that earlier versions have not survived; but on the other hand it could well be an indication of a lack of any previous literary records concerning wind-impregnated Spanish mares. This fact is complemented by another : the fact that Varro's account displays a number of oral characteristics. Thus, it is remarkable for its preoccupation with the marvellous and for its attempt to provide the precisest of details regarding the location of the phenomenon in question. Two further points worth noting are firstly that it was only in 61 BC that the area of Lusitania from Olisipo and the river Tagus northward was effectively pacified,<sup>(17)</sup> thus promoting greater opportunity for contact between the Lusitani and the Romans; and secondly, that Varro himself served as a military commander in Spain in 76 and again in 49 BC.<sup>(18)</sup> Varro's account

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See, for instance, J. Alarcão and R. Etienne, Conimbriga, ville de Lusitanie, *Latomus* XXXVIII.4(1979), pp.877-890 and espec. p.879.

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Cf W.D. Hooper and H.B. Ash, *Cato and Varro. De Re Rustica* (Loeb), 1967 repr., Introduction, p.xiv, and the references cited therein.

of the wind impregnation of Spanish mares in the vicinity of Olisipo may therefore owe its origin to his own personal experience in Spain. Alternatively, as his work, the Res Rusticae, was not written until the end of his life, Varro may - in the intervening years - have received the information from a person or persons visiting - or returning to - Italy. Whatever the case, it seems reasonable to conclude that Varro's sources may well have been oral rather than literary.

But what of the fact that the account is set in Spain and that it apparently originated there? Does that mean it was a local development? - or could it have arisen under the influence of the ancient Greek belief? Here, we are treading on even more tentative ground. It is not impossible that the account of the wind impregnation of Spanish mares near the town of Olisipo in Lusitania arose amongst the local inhabitants of that area. One fact that possibly points to this conclusion is that from as early as the fourth century BC a certain mountain-ridge on the far western coast of Spain was regarded as sacred to the West wind,<sup>(19)</sup> thus implying that the local inhabitants held that wind in high esteem. However, it is equally likely - and indeed more probable - that the dedication of the mountain-ridge in question to the West wind Zephyrus was the result of Greek influence in Spain. From very early times - the ninth century BC at least - there were strong trading links between the

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Avienus, Ora Maritima 225-226. As is shown by C.F.C. Hawkes, Pytheas: Europe and the Greek Explorers, Oxford, 1975, p.19, the Ora Maritima is a Latin version of a Greek work which may possibly be dated to the late second century BC, and this work is in turn a versified version of an earlier prose work by the fourth century geographer Ephorus.

Spanish peninsula and the eastern Mediterranean area.<sup>(20)</sup> Initially, Phoenician traders were more predominant than the Greeks, although they must have called at Greek ports on their way. In subsequent times, however, Greek business in Spain expanded considerably; and from the sixth - fifth centuries BC Greek towns began to spring up along the Spanish coast. There was thus ample opportunity for the spread of Greek influence in Spain.

Given these links between Greece and Spain, it does not seem unreasonable to proceed one step further and suggest that not only the Spanish cult of Zephyrus, but also the Spanish account concerning the wind impregnation of mares may possibly have arisen due to Greek influence. The trading carried out between the island of Crete (on the regular trade route) and Spain could well have enabled the transmission of the Cretan belief in the possibility of the wind fertilisation of mares. This in turn could have been taken up by Spanish inhabitants and given its local colouring. Given the state of our evidence, such a reconstruction can be nothing more than tentative. Nonetheless it does demonstrate that it is by no means extravagant to conjecture a possible connection - albeit indirect - between the accounts of Aristotle and Varro.

The passages found in Aristotle, Virgil and Varro all served as a source of inspiration for the scholarly account produced by the agricultural writer Columella. In the sixth book of his De Re Rustica (see App.I, no.6), we find a circular discussion which begins with the admonition that in spring every opportunity must be given to mares and to stallions to couple when they so desire, for if

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Cf Hawkes, op.cit., pp.17-19 (to whom I am also indebted for the information immediately following).

frustrated in their desires, horses beyond all animals are excited by the fury of their lust; then states that in some regions mares are filled with such excessive passion that by imagining in their own minds the pleasures of love, they conceive by the wind; supports this statement by quoting several lines of Virgil, and by paraphrasing Varro; and finally, repeats the initial admonition. There can be no doubt that the admonition that forms the framework for Columella's discussion is derived initially from Aristotle's statement regarding the Cretan practice of ensuring that the stallions are always available to the mares; nor can there be any doubt that for the remainder of his discussion Columella is deeply indebted both to Varro and to his beloved Virgil. Columella's considerable debt to his predecessors does not, however, mean that the passage in question is entirely devoid of innovation or individuality. A close examination of his contribution reveals not only a number of minor adaptations, but also an interesting use of highly descriptive language which may be seen as a further attempt to imitate Virgil. In sum, the value of Columella's version may be said to lie in the fact that it provides a scholarly résumé of previous versions of the subtradition.

The natural historian, Pliny, writing only a few years after Columella, likewise seems to have relied entirely on literary sources. Of the three passages in which he alludes to wind-fertilised mares, the first (see App.I, no.7) is merely a geographical reference to the town of Olisipo, famous for its mares that conceive from the west wind; the second (see App.I, no.8) provides a significant description of the wind impregnation of Spanish mares that is closely

related to Varro's account; and the third (see App.I,no.9) makes a specific reference to Spanish mares during a discussion of the first stage of the annual cycle of nature, namely, fertilisation.

If we pass over the first passage and move directly to the second, we find that, according to Pliny, it is well-known that in Lusitania, near the town of Olisipo and the river Tagus, the mares face the westerly breeze and 'conceive a living breath', which in turn becomes a foal and is born extremely swift, but does not live more than three years. When Pliny's account is compared with that of Varro, a number of small changes become evident : Mount Tagrus has become the river Tagus; the mares are specifically said to conceive by facing the westerly breeze (cf Virgil); and the offspring of such a union is described as possessing exceptional speed (a detail most probably introduced from the epic strand of the tradition). More important, however, is the fact that Pliny does not use the simple verb 'concupere' ('to conceive'), but that he employs the fuller expression 'animalem concipere spiritum' ('to conceive a living breath'). This expression indicates that, in Pliny's view conception by the wind involves the inhalation of a living breeze/breath, that is, a breath that contains the essence of life. Such an interpretation is supported by Pliny's third passage, where it is stated that, in the yearly cycle of things, fertilisation takes place when the westerly breeze begins to blow, for this wind impregnates the creatures that derive life from the earth (i.e. plants), and in Spain even the mares; it is the generating breath of the universe. The view expressed by Pliny is to be distinguished from the wind/soul concept previously discussed, but is by no means to be interpreted as

contradictory to that. Pliny suggests that the westerly breeze - which may be seen to promote the growth of vegetation during springtime - has the power to generate life not merely in the plant kingdom, but, by extension, in the animal kingdom as well. Distinct from this is the view that winds not merely carry souls, but, by extension, are souls and in that capacity have the ability to fertilise members of the animal world. There can be no doubt that these two approaches are complementary to one another. Indeed, it has even been suggested that the wind/soul concept may have given rise to the belief in the generative powers of the individual winds. (21)

Pliny marks the end of the initial phase of the zoological sub-tradition. It is clear that in this phase the tradition in question has moved away from its oral origins, and has become a scholarly, literary tradition with little, if any, recognisable oral input. This fact could be used to argue that the literary tradition existed on its own, without a coexistent oral tradition. This may have been the case, but on the other hand, there seems to be no good reason for doubting the continued existence of the belief attributed by Aristotle to the Cretans. After all, it was a vital agricultural belief based on a real phenomenon and supported by a complex of ideas connecting wind with soul. Although there is an absence of evidence for the existence of an oral tradition in the period just reviewed, it is worth noting at this point that two subsequent authors provide evidence which points to the possibility of the persistence of the Cretan belief in popular oral tradition, not merely in the Graeco-Roman world, but also in the Middle East.

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Cf Anna Sacconi, op.cit., pp.148-149.

Before pursuing the subsequent phases of the zoological sub-tradition - phases in which the influence of Aristotle, Varro, Virgil, Columella and Pliny is particularly evident - it is appropriate to return to the epic sub-tradition and to follow that through to its conclusion. As was stated earlier in this chapter, the Roman epic writer Silius Italicus was the first to contribute to the tradition begun by Homer. In the sixteenth book of his Punica (see App.I, no.11), in the context of a horse-race (being run during funeral games), he provides a description of one of the contestants, a magnificent horse named Pelorus. The climax of the description is a statement to the effect that this outstanding horse has no father; rather, it is the offspring of the West wind, Zephyrus, out of a mare named Harpe. These details concerning Pelorus' parentage vividly recall the Homeric passage on the immortal origin of Achilles' horses : Zephyrus = Ζέφυρος, and Harpe closely resembles (and no doubt originates from) Ἀρπυία, the epithet attached to Podarge. Moreover, as Silius subsequently indicates in his text, Pelorus is endowed with the speed of its sire, in the same way as its Homeric equivalents were. Thus, it takes its driver, Durius, to victory, showing the superiority of such a horse on the race-track.

It is important to note here that there are certain aspects of Silius' passage which derive not from Homer, but from the alternative strand of the Graeco-Roman tradition concerning wind-impregnated mares. The specific location in which Pelorus was born (the plains of the Vettones,<sup>(22)</sup> in Spain), and the particular season of the year at

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For comments on Silius' reference to this tribe - as opposed to the Lusitani - see the discussion of his zoological version, below.



which this occurred (springtime), are both reminiscent of the second strand of the tradition. There is also a verbal reminiscence in Silius' use of the phrase 'mirabile dictu'. The reason for the incorporation of these elements is undoubtedly the fact that Spain is the setting for the funeral games at which the race in question is being run; a horse of such a background as Pelorus therefore provides a touch of local colour and is especially topical.

Greek literary epic of the fourth and fifth centuries AD likewise maintained the Homeric tradition, albeit with a number of notable adaptations. In a brief passage in Book VIII of his Posthomerica (see App.I, no.18), Quintus Smyrnaeus attributes to Neoptolemus, Achilles' son, the statement that his father's horses (which he has inherited) were sired by the West wind on a Harpy, and that they can not only skim over the crests of waves, but they can also match the winds in their speed. Here, Quintus obviously fuses elements of the two Homeric passages to form his own version of the tradition. It will be recalled that, according to Homer, Achilles' horses were produced by the West wind (Ζέφυρος) and Podarge, a Harpy in the form of a mare (Ἄρπυια Ποδάργη). Quintus thus follows Homer closely when he gives the parentage of these same horses. It will also be recalled that Achilles' horses were described by Homer as wind-swift, but that it was the foals born of Boreas and the mares of Erichthonius that were said to have the ability to skim over the sea. By applying both these qualities to Achilles' (Neoptolemus') horses, Quintus highlights the supernatural aspects of the team in question, reinforcing their appropriateness as the hero's battle-companions.

Interestingly enough, in an earlier passage in the Posthomerica (see App.I, no.17), Quintus ascribes the identical parentage to the horse Arion. Thus, Arion is said to be the offspring of the West wind on a Harpy, and, moreover, to be swifter than all other steeds, possessing the speed of its sire (here, once again, we have a wind-sired horse indebted to its parent for its swiftness). In attributing such an origin to Arion, Quintus offers an alternative to the earlier suggestion of Pausanias (VIII. 25.5) that Arion was the result of the union of Poseidon and Demeter Erinys, both of them in horse form.<sup>(23)</sup> The version given by Quintus may have been inspired by Pausanias, given the similarity between the Erinys and the Harpy,<sup>(24)</sup> but could quite possibly have arisen as a result of resemblances between Arion and the horses of Achilles. Not only was Arion a horse of incredible speed, he also had the gift of speech (Propertius II.34-37), and at one stage belonged to the hero, Heracles (Hesiod, Shield 120). Yet, whatever gave rise to Quintus' association of Arion with the West wind and the Harpy, one thing is clear: the tremendous ease with which a poet could adapt mythological details as he wished.

This same facility of adaptation is even more evident in the third (and final) example of wind impregnation found in Quintus Smyrnaeus. In the eighth book of the Posthomerica (see App.I., No.19), the four steeds of the war-god Ares, Red-fire, Flame, Tumult, and Panic-fear,

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On this Pausanias passage, see Walter Burkert, Structure and History in Greek Mythology and Ritual, University of California Press, 1979, p.127. (I am grateful to Dr Burkert for bringing his discussion of the passage to my attention.

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Cf P.W. Suppl.8,88, s.v. Erinys; Roscher I.2.1843, s.v. Harpyia.

are said to have been born to Boreas by Erinys, and to have the ability to breathe fire. Although rather more removed from the original Homeric versions than the previous two passages from the Posthomerica, these lines nevertheless illustrate the same essential concept : the immortal and extraordinary horse, sired by the wind, and accompanying an important figure. The coupling of Boreas with Erinys may be seen as an extension of the union of Zephyrus and Harpy, Boreas (already renowned in this role) replacing Zephyrus, and Erinys (owing to the close association of Erinyes and Harpies) being substituted for Harpy. The choice of Erinys as mother of Ares' steeds may also have been influenced by the relationship between Arion and Demeter Erinys mentioned above. As for the horses themselves, they have inherited the destructive tendencies of their parents, and therefore make fitting companions for the war-god Ares.

Nonnus, the fifth century AD successor of Quintus Smyrnaeus, likewise introduced a number of interesting variations to the Homeric concept of the wind-sired horse. His Dionysiaca, a work for the most part devoted to Dionysus' conquest of India, contains a description of a horse-race, the first event in a set of funeral games instituted by Dionysus. Not one, but two of the teams involved in this horse-race contain horses that have been sired by the wind. In the first of the teams, belonging to Erechtheus (see App.I, no.22), we find a pair named Xanthos and Podarke, both of whom are said to be the offspring of Boreas and a stormfooted Sithonian Harpy (and to have been given to Erechtheus by Boreas when the latter stole the former's daughter Oreithyia for his bride).<sup>(25)</sup> Erechtheus' horses, Xanthos

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The tradition concerning Boreas' rape of Oreithyia will be discussed below, in Chapter VIII.

and Podarke, recall the Xanthos and Podarge of Homer's version, although Podarke has become the partner rather than the mother of Xanthos. Similarly the coupling of Boreas and a Sithonian Harpy is parallel to, and most probably inspired by, the union of Boreas with the Trojan mares (owned, it should be noted, by Erichthonius, a name close in form to that of Erechtheus), of Zephyrus with the Harpy, and of Boreas with Erinyes.

The second team to include a horse sired by the wind (see App.I, no.23), is that of Scelmis, the son of Poseidon. The horse in question is named Balios, and is described as being the offspring of Zephyrus, and as being able to skim over the sea without getting wet. Homer's Balios, partner of Xanthos, and issue of Zephyrus and Podarge, has, in Nonnus' adaptation, retained Zephyrus for his sire. He has, however, become a member of the team of Poseidon, rather than that of Achilles. As such, it is most appropriate that he be attributed with the ability - almost identical with that attributed in Homer to the offspring of Boreas and the mares of Erichthonius - to skim over the waves without getting wet.

Balios, then, separated from his Homeric kin, must contest against them in a team of seabred horses. It is a race of one set of immortal horses versus another. Poseidon's team proves inferior, the victory going to the team of Erechtheus. Here, once again, we have an affirmation of the superiority of wind-sired horses.

The Homeric concept of the wind-sired horse, thus recorded in Latin and Greek literary epic, reappeared in twelfth century French and German court epic. In the Roman d'Enéas, a medieval French

adaptation of Virgil's Aeneid, we find an intriguing passage concerning the young war horses of Neptune's son Mesapus, and his one thousand knights (see App.1, no.27). These horses are said to be born of sea-mares that conceive wholly from the wind, and are described as faultless, more courageous than all other horses, and wonderfully fast. It should be pointed out that the passage in question is a deliberate addition by the author of the Roman d'Enéas to his Virgilian original. It draws on the broad outlines of the earlier versions of the tradition, emphasizing, for instance, the marvellous speed of such wind-sired horses, but also introduces one or two novel and interesting details, such as the fact that the horses are without fault, and moreover, that they are born of sea-mares. The latter detail is, of course, most appropriate, given that these young horses belong to the son of the sea-god Neptune and his men.

Whilst it is obvious that the lines in the Roman d'Enéas form part of the Homeric tradition, it is also evident that they incorporate elements of the zoological strand of the tradition concerning wind-impregnated mares. Thus, the horses of Mesapus and his knights are said to derive from Cappadocia,<sup>(26)</sup> and to never live beyond youth. Indeed, the general effect of this passage in the Enéas comes very close to that of some of the versions of the alternative strand.

The Roman d'Enéas was, in turn, adapted into German by the Flemish epic writer, Heinrich von Veldeke. Heinrich's style was freer and

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This is an aspect of the zoological strand that is yet to be discussed. See below.

more expansive than that of his predecessor, but nonetheless he followed his French source reasonably closely. Hence it is not surprising to find that his Eneide contains a parallel passage to that found in the Enéas (see App.I, no.28). The essential data presented here by Heinrich do not differ greatly from those recorded in the earlier work. Thus, the identical origin is attributed to the young horses (they are said to be born of sea-mares impregnated by the wind); the same stress is laid on their general excellence (they are described as beautiful, swift, and extremely good); and a similar limit is placed on their life-span (they are said to live no longer than four years). Differences do occur, however, in secondary details. For instance, Heinrich stipulates that the horses are born at the sea's end (a detail which possibly derives from Homer's mention of the stream of Oceanus, but which more probably stems from locations cited in the co-existent sub-tradition); he declares the limited life-span of the horses to be verified by earlier written accounts (thereby confirming his reliance on literary sources); and he states that no offspring can be produced by these wind-sired horses (a limitation that seems to be related to - indeed, an extension of - their shorter life-span).

Several centuries later - in the sixteenth century, to be exact - Italian literary epic gave new expression to the ancient concept of the wind-sired horse. Both Ariosto and Tasso drew on their Graeco-Roman predecessors and moulded the material obtained therefrom for their own purposes. In the fifteenth canto of Ariosto's Orlando Furioso (see App.I, no.36), we find an extended description of the marvellous - in fact, unsurpassable - qualities of Rabican, the steed

of Duke Astolfo : such was his legerity that he could travel over dust, grass, and snow without leaving a trace, and could even have negotiated the sea without getting wet; moreover, he was faster than wind, lightning, and the arrow; for he was conceived by wind and fire, and fed only on pure air. Here, the innovations introduced by Ariosto are unmistakable. He gives fire as well as wind a role in the production of the Duke's horse; and, not content with the characteristics ascribed by Homer to such a horse, he adds detail upon detail, enhancing the horse's powers. The final novel touch is his reference to Rabican's unusual means of subsistence, a feature that crowns the preceding description, and convinces the reader of the suitability of this horse for such a figure as Astolfo.

In general outline, Tasso's account differs considerably from that of Ariosto (see App.I, no.39). Tasso begins by citing a series of fascinating details about the birth of Aquilino, the horse of Count Raimondo. All the details given (location, time of year, manner of birth, and so on) are derived not from the Homeric strand of the tradition about wind-impregnated mares, but from the alternative strand. However, in the lines that follow, Tasso reverts to the traditional Homeric approach. He describes Aquilino as seemingly born of heaven's lightest breath of wind, for he could gallop across the sands so quickly that he left no footprint, and could double to left and right with wonderful agility. Here, once again, we have a wind-sired horse said to be endowed with the abilities of its parent. There is almost no need to add that the possession of these supernatural qualities renders Aquilino the ideal companion for the hero, Raimondo.

With Ariosto and Tasso, we come to the end of the series of literary versions comprising the epic strand of the tradition of the wind impregnation of mares. As has been demonstrated, this strand focuses on the wind-sired horse, and gives special prominence to the wonderful wind-like capabilities of such a horse : thanks to these capabilities, a horse of this type is superior to all other horses, whether it be on the battle-field, in a prize herd, or on the race-course, and above all, is a fitting companion for a hero.

Before we leave this strand of the tradition, it is worthwhile to compare the material discussed thus far with two passages found in the Central Asiatic Kirghiz oral epic Manas, which was first recorded in the nineteenth century, and which, in its present form, is thought to go back no further than the eighteenth century.<sup>(27)</sup> The first of these passages (see App.I, no.47) provides merely a brief (though vivid!) reference to the possibility of a mare being impregnated by the wind. However, in the second passage (see App.I, no.48), we find a delightful description of Manas' horse Ak-kula, to the effect that at night, when the earth is covered with mist, his ears shine as though there are lights in them, for he is the offspring of a mare made pregnant by a whirlwind. Thus, Ak-kula - even as his equivalents in the epic strand of the Graeco-Roman tradition - is a wind-sired horse, endowed with special qualities. These qualities do not relate closely to the powers of his sire, but nonetheless they do underline his supernatural origin, and, as Shoolbraid himself says (p.76), make him a fitting steed for a hero.

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Cf G.M.H. Shoolbraid, The Oral Epic of Siberia and Central Asia, Indiana University, Bloomington, 1975, p.41.



The occurrence of the concept of the wind-sired horse in the oral epic Manas brings us once again to the question of the transmission of the epic sub-tradition. This sub-tradition is undoubtedly a literary one; and, on the basis of available evidence, it is impossible to assume the existence of a concurrent oral tradition. On the other hand, it does not seem unreasonable to presume that even if the epic concept of the wind-sired horse was not being actively transmitted by word of mouth, it was nonetheless being transmitted in a passive fashion by those who read it in one or more of the many literary versions in which it appeared. (28)

Let us now return to the zoological sub-tradition and likewise follow its progress through until its conclusion. The epic writer, Silius Italicus (whose epic version has already been discussed), was the first to refer to the subject of the Spanish mares after Pliny. In Book III of his Punica (see App.I, no.10), he relieves an otherwise dry list of troops by inserting, at the point where the squadrons of the Vettones are mentioned, a statement to the effect that, in that country, when the mild spring breezes are blowing, the mares secretly conceive by the wind, but that their offspring are soon overcome by old age, and do not live longer than seven years. Silius' poetic language prevents us from ascertaining his exact source (Varro and/or Pliny?), but it is nonetheless obvious that, in general details at least, he follows preceding versions.

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The distinction between active and passive bearers of tradition is one that is made by C.W. von Sydow in his Selected Papers on Folklore, Rosenkilde and Bagger, Copenhagen, 1948, pp.11-43 and espec. pp.12-13. (I am grateful to Prof. W.F. Hansen for referring me to the paper in question.)

Two innovations deserve comment, firstly, his reference to the Vettones, and secondly, his specification of a seven-year life-span for the foals.<sup>(29)</sup> The former (likewise found in Silius' epic version) may be explained by the fact that the Vettones were a neighbouring tribe of the Lusitani, also located in the vicinity of the Tagus : Silius apparently associates the two in his mind. As for the latter, Silius' reference to a seven rather than a three-year life-span, it would appear that the modification is due to the fact that Silius here attempts to imitate two lines of Virgil (Georgics IV, 206-207):

Ergo ipsas quamvis angusti terminus aevi

Excipiat, neque enim plus septima ducitur aestas

(And so although the end of a brief life awaits them,

For they have no longer than seven years...)

The change would not have been a severe one in Roman eyes, given that the numbers 3 and 7 were both considered to possess a mysterious, unknown quality, and were therefore treated with the greatest awe and respect.<sup>(30)</sup> An examination of subsequent versions reveals, however, that the innovation does not persist.

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(29)

Cf John Nicol, The Historical and Geographical Sources used by Silius Italicus, Oxford : Basil Blackwell, 1936, p.163. (His comments on p.164 are, however, unacceptable.)

(30)

Cf H. Usener, *Dreiheit*, Rheinisches Museum für Philologie 58 (1903), pp.1-47, 161-208, 321-362; E. Tavenner, *Three as a Magic Number in Latin Literature*, Transactions and Proceedings of the American Philological Association 47 (1916), pp.117-143; E.B. Lease, *The Number Three, Mysterious, Mystic, Magic*, Classical Philology XIV (1919), pp.56-73, and more recently, W.F. Hansen, *Three a Third Time*, Classical Journal 71.3 (1976), pp.253-254.

The literary version produced by Silius was followed in the late second/early third century AD by a brief but significant account which appears to provide evidence of a concurrent oral tradition. The account in question, recorded by Aelian (see App.I, no.12), begins with the statement : "Horse-keepers frequently testify that horses are impregnated by the wind and that they run off towards the south or the north wind" and then cites two literary sources by way of support : Homer (Iliad XX) and Aristotle. Although Aelian may possibly have invented the initial generalisation in order to introduce the subsequent literary evidence, it seems more probable that he is making a genuine statement here, and what is more, a statement that provides proof of the existence of an oral tradition concerning the wind impregnation of horses. If we can rely on Aelian's words - which seems more than likely - then it would appear that the phenomenon of the wind-impregnated mare was well-known to horse-breeders in Aelian's time.

At this point we shall pass over the account of Solinus (see App.I no.13) and Martianus Capella (see App.I, no.21), both of which concern the mares of Spain, the first being a (descriptive) paraphrase of Pliny, and the second, a version derived from both Pliny and Solinus. Neither of the accounts mentioned contains anything that is truly significant in the development of the second strand of the tradition.

The same third century AD author, Solinus, was responsible, however, for a second passage about the wind impregnation of mares, a passage that did indeed influence the history of the tradition (see App.I, no.14). In his Collectanea Rerum Memorabilium, at the very end of

a lengthy chapter on Cappadocia, Solinus makes the statement that mares can even produce foals conceived by the wind, but that these never live more than three years. Despite initial appearances, Solinus' statement is not intended to imply that the phenomenon occurs solely in Cappadocia. An examination of the chapter in question shows this clearly : having commenced with a description of the situation of Cappadocia in relation to the surrounding peoples, and with several remarks on its natural boundaries and cities, Solinus proceeds to state that this land, above all, is the most suitable for the breeding of horses; this, in turn, leads to a long diversion in which Solinus catalogues the numerous remarkable qualities of the horse, a diversion that culminates in the assertion that mares can even be fertilised by the wind. Thus, the final statement is to be interpreted as having no specific geographical setting.

Although Solinus did not intend his statement about the wind fertilisation of mares to be restricted to Cappadocia, three writers of the twelfth and thirteenth centuries understood it this way. In his encyclopedic work, the De Imagine Mundi, Honorius Augustodunensis concludes a chapter on the Caucasus and the regions of the East by saying that in Cappadocia the mares conceive by the wind, but their offspring do not live more than three years (see App.I, no.26). Almost identical statements are to be found in the Historia Hierosolymitana sive Orientalis of Jacobus de Vitriaco (see App.I, no.30); and in the Image du Monde, a widely

read encyclopedia composed by Gossouin de Metz (see App.I, no.31).<sup>(31)</sup>

A parallel statement to those recorded by Honorius, Jacobus, and Gossouin is also to be found in the twenty-first book of Augustine's De Civitate Dei, written in the early fifth century AD, and there can be no doubt that Solinus was likewise the source in this instance (see App.I, no.20).<sup>(32)</sup> The context in which Augustine introduces the phenomenon of the Cappadocian mares is highly significant, for it indicates a new trend in the history of the tradition, namely, the use of the 'pagan' belief in the wind impregnation of mares for apologetic purposes. In this passage, Augustine responds to the demands of pagan infidels for explanations of divine miracles that are beyond human comprehension, by asking for an explanation of a number of wonderful things in nature that are likewise inexplicable, but that nonetheless exist. Amongst these marvels he includes the phenomenon of the impregnation of mares by the wind. Augustine thus uses Solinus in a positive fashion in order to combat the views of those opposed to Christianity. This, in

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A passage in Neckam's De Naturis Rerum (see App.I, no.29) is cited by Oliver Prior, L'Image du Monde de Maître Gossouin, Lausanne et Paris, 1913, p.116, n.E, as a parallel to these three statements. However, the passage in question bears little if any resemblance to them, for it not only makes no mention of Cappadocia, but it also includes two details unique to the second strand of the tradition : firstly, it describes the impregnating wind as coming from a northerly direction (possibly under the influence of the epic strand); and secondly, it limits the life-span of the offspring, not to three years but to a few days.

(32)

Cf Harald Hagendahl, Augustine and the Latin Classics, Göteborg, 1967, Vol.II, pp.671-672.

itself, is particularly noteworthy, because for his apologetic purposes, Augustine generally drew on the Latin classics only to criticise them. (33)

The stance adopted by Augustine may be usefully compared with that of his predecessor, Lactantius (late third/early fourth century AD). In his Divinae Institutiones Lactantius attempts to convince pagans of the possibility of the Virgin birth by comparing the impregnation of the Holy Virgin by the Holy Spirit, with the conception of 'certain animals' by means of the wind (see App.I, no15). Just as Augustine cites the instance of the wind impregnation of Cappadocian mares (amongst other natural wonders) in an effort to prove the validity of divine miracles, so Lactantius refers to the wind fertilisation of certain unnamed animals (amongst whom the mare is most probably included) to prove the validity of one particular miracle, that of the Virgin birth. We gain further insight into the parallel drawn by Lactantius if we recall Pliny's phrase for wind conception namely, 'animalem concipere spiritum'. Thanks to Pliny's expression, we can see that Lactantius' comparison in fact involves the juxtaposition of 'spiritus' and 'Spiritus' (the 'breath/breeze' and the '(Holy) Spirit'). (34)

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(33)

Cf Hagendahl, op.cit., p.727.

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Here it is informative to compare a statement recorded by the late sixth/early seventh century Christian writer, Isidore. In his Etymologiae, in a very different context from that found in Lactantius, Isidore states : '... quaedam animalia favonio spiritu hausto concipere existimantur' (see App.I, no.24). His words undoubtedly derive from Lactantius, but instead of Lactantius' expression 'vento et aura', we find the synonymous term 'spiritu'.

The suitability of the phenomenon of the wind impregnation of mares for apologetic purposes was likewise perceived by the thirteenth century Franciscan scholar, Roger Bacon. He states in his encyclopedic work, the Opus Maius, that the human mind can be influenced to accept the Virgin birth by the fact that mares in many regions conceive from the winds when desirous of the male (see App.I, no.33).<sup>(35)</sup> Bacon's statement has a close affinity to the statements of Lactantius and Augustine, for it, too, defends the plausibility of a Christian concept (the Virgin birth) by adducing the parallel pagan concept of the wind-impregnated mare. It is worth noting that Bacon does not refer specifically to Cappadocian mares, as Augustine did before him, but rather alludes in a general way to mares 'in many regions'. The reason for his generality is obvious : he is drawing on the differing versions of Pliny and Solinus (as he himself states in the passage in question)<sup>(36)</sup> and possibly on other versions as well.

With Bacon we come to the close of what may be termed the apologetic phase, a phase that is noteworthy on two counts : firstly, in that the scholars concerned appear to have relied entirely on literary sources for their information about the pagan belief in wind impregnation; and secondly, for the fact that they nonetheless assume the existence of a popular oral tradition concerning wind

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(35)

The reference to the reproduction of vultures, found in this same passage of Bacon, will be discussed below, in Ch.VI.

(36)

Bacon's citation of Pliny and Solinus is somewhat confusing, for he not only uses an alternative title for Solinus' Collectanea Rerum Memorabilium, but he also gives an incorrect reference for Pliny (none of Pliny's three accounts occurs in N.H.V).

impregnation. Can we interpret their references to wind impregnation - even though derived from literary sources - as an indication of a concurrent oral tradition? Certainly, it would be tempting to do so. However, the fact remains that the accounts of Augustine, Lactantius and Bacon are scholarly, literary accounts with little, if any, apparent input from oral material. It would be most unwise to use them as proof of an oral tradition.

Of the numerous authors discussed thus far (the initial phase of the sub-tradition aside), almost all have derived their accounts directly or indirectly from Pliny. As was indicated above, however, Pliny was by no means the only early source utilised by subsequent scholars : Aristotle, Virgil, Varro, and Columella were all drawn on in their turn. The influence of Aristotle is particularly evident in a passage from the De Natura Animalium of the Persian scholar Avicenna (late tenth - early eleventh century), a passage that was in turn imitated by the thirteenth century scholar Albertus Magnus. In the passage in question<sup>1</sup> (see App.I, no.25), Avicenna begins by stating that when the mare is desirous of intercourse, it offers its womb to the wind by kicking its leg up towards it; proceeds to relate an account about an Arabian mare (told him by an 'honest old man') : the mare - in the land of Alchufa - was desirous of intercourse, so it kicked up its leg, and when the wind whirled into its womb it did not stop galloping until it reached the edges of the island; and ends with the statement that according to Aristotle, this process of kicking was carried out in a southerly or northerly direction only. There can be no doubt that Aristotle's account forms the basis for that of Avicenna : a



number of obvious details, together with the direct reference to Aristotle, are sufficient proof of that. However, Avicenna has moulded his material in an innovative fashion, producing an individual version that differs in many respects from that of his predecessor. Thus, he insists that when the frustrated mare seeks stimulation from the wind, it is impregnated thereby; he stresses that the mare enables the wind to enter its body by kicking up its leg ('foot' is the term used in the Latin); and he suggests - in what is, in fact, a misinterpretation of Aristotle - that this process of kicking is carried out in a southerly or a northerly direction.

Even more significant than these differences is the fact that Avicenna records an intriguing account which he says he has heard from an honest old man. The account bears a number of resemblances to that attributed by Aristotle to the Cretans. Thus, it concerns a frustrated mare that seeks stimulation from the wind, and having been aroused in that way, gallops incessantly until reaching the edges of the island (or, in other words, the sea). At the same time, the account includes certain descriptive details not found in the Cretan version, for instance, the continuous sweating of the mare; and the specification of the number of miles covered during its journey. What is more, the account is imbued with local colour: the mare is described as Arabian, and it is said to inhabit the land, or rather island, of Alchufa. (37)

If Avicenna did indeed hear an old man relate this account (and there seems to be no good reason to doubt his word), then it would

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(37)

This may possibly be identified with modern-day Al Kufah, situated on the Euphrates river.

appear that the Cretan account recorded by Aristotle in the fourth century BC is to be found in the Middle East in the eleventh century AD. The question of the transmission of the account is a difficult one. Given that the Cretan version appears to have existed in popular oral tradition in the Graeco-Roman world from at least the fourth century BC through until the second century AD, if not longer (cf Aelian), it may possibly have been transmitted eastwards (via Alexander's army, or via trading routes?) at some point during this period and have survived in popular belief until recorded by Avicenna early in the eleventh century. On the other hand, given that the works of Aristotle were well-known in the Arab world,<sup>(38)</sup> it is also possible that the account in question may have passed back into oral tradition from the Historia Animalium at some point prior to the time of Avicenna, only to be re-recorded by that author in the eleventh century. Whatever the case, the account as initially found amongst the Cretans has undoubtedly been adapted to fit local conditions, and in the form in which it is found in Avicenna has a distinct Middle Eastern flavour.

Albertus Magnus, the scholar responsible for the introduction and assimilation of Aristotle's teachings in Germany, subsequently reiterated the data found in Avicenna. His version, contained in the sixth book of the De Animalibus (see App.I, no.32), expands on Avicenna's initial comments (underlining, for instance, the

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Cf A.L. Peck, De Generatione Animalium, (Loeb), 1942, Introduction, pp.vii, xx; cf, too, D.J. Geanakoplos, Interaction of the "Sibling" Byzantine and Western Cultures in the Middle Ages and Italian Renaissance (330-1600), New Haven and London, Yale University Press, 1976, pp.61-62.

immense delight of the mare when the wind enters its womb), but repeats only the essential details of the old man's account. (39)

It is noteworthy that the modifications introduced by Albertus Magnus have the effect of rendering his account closer in import to that of Aristotle : the main emphasis lies, not on the wind-impregnated, but on the wind-stimulated, mare.

It was Columella whom two sixteenth century scholars, Textor and Heresbach, favoured as their major source. In their respective passages (see App.I, no.s 35 and 38), they follow the first few lines of Columella almost word for word; then, at the point where Columella quotes several lines of Virgil and paraphrases Varro, Textor gives a (rather free) paraphrase of Varro, followed by the almost identical quotation from Virgil, whilst Heresbach merely quotes one line of Virgil and provides an extremely brief summary of Varro. Despite these latter changes, the debt of both scholars to Columella is unmistakable.

Due, no doubt, to a desire for completeness, two further scholars of the sixteenth and early seventeenth centuries, Gesner and Aldrovandi, compiled extremely lengthy accounts in which they not only drew on earlier sources, but, for the most part, quoted them word for word. Thus, in Gesner's Historia Animalium (see App.I, no.37), we find - in complete or almost complete form - the versions

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(39)

In this account, we find Avicenna's 'terra de alchufa' replaced by A.M.'s 'terra, quae dicitur Arabice Dealcufa'. 'Dealcufa' is undoubtedly a contraction of 'de alchufa', the preposition being incorporated as part of the noun.

of Columella (including his lines from Virgil), Varro, Pliny (and Solinus), Avicenna, Albertus, and Justin,<sup>(40)</sup> together with a brief reference to Augustine. Similarly, in his De Quadrupedibus Solidipedibus (see App.I, no.40), Aldrovandi records, in full or in resumé, the versions of Columella (including Virgil), Varro, Pliny (and Solinus), Avicenna, Albertus, Homer, Silius Italicus, Augustine, Aristotle, Ariosto, and Justin. A comparison of the two accounts shows that both tend to be mere lists of passages and that both contain a number of unfortunate misspellings, particularly of proper names (for example, 'Dealtufa', 'Varo', and 'Targo'). However, Aldrovandi's account (which appears to be an attempt to improve on that of Gesner) utilises a wider range of sources, and also makes a number of attempts at scholarly interpretation.

We shall pass over the very brief summary of the second strand of the tradition that was recorded by Jonstonus in his Thaumatographia Naturalis, published in 1632 (see App.I, no.42), so as to hasten on to the amusing and highly novel version created by the early seventeenth century Neapolitan court poet, Basile (see App.I, no.43). Basile's reference to the wind impregnation of mares in fact occurs in his Pentamerone, a collection of fifty popular tales written in the Neapolitan dialect and published posthumously in the years 1634-1636. One of the tales in question ('Viola') contains a delightful passage about an ogre who came upon a young girl in his garden after he had just passed wind, and who immediately assumed her to be the product of his fart, for he had once heard some students

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(40)

Justin's account is discussed below.

say that, in Spain, mares had been known to become pregnant by the wind. Here, Basile effectively includes an allusion to the marvellous phenomenon of the wind impregnation of Spanish mares in the fabulous context of a fairy-tale. He reproduces the mere outline of the ancient concept, utilising it as the basis for an assumption about the procreative powers of intestinal wind. Thus, for the first time, we find the concept appearing in what can only be called a bizarre and comic setting.

The fact that Basile makes merely a general reference to the wind impregnation of Spanish mares means that it is difficult to isolate a source or sources for his 'version'. His statement to the effect that the ogre learnt of the phenomenon from students, seems to indicate that in his mind, the wind impregnation of mares is a literary concept, knowledge of which is acquired through study, that is, presumably, through the study of classical literature. It therefore seems reasonable to suggest that Basile was familiar with the early Latin sources. However, there can be little doubt that he was also familiar with the epic version of the tradition recorded by his fellow-countryman, Tasso. This being the case, it seems appropriate to conclude that Basile's acquaintance with the phenomenon is the result of his familiarity not with one, but with a number of sources. (41)

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(41)

It is noteworthy that Giulio Cesare Cortese, the father of Neapolitan dialectical literature, and Basile's lifelong friend, was likewise acquainted with the ancient concept of the wind-impregnated Spanish mare. Thus, we find in his Lo Cerriglio 'Ncantato (1628) a reference

A review of the numerous authors who have contributed to the second strand of the ancient tradition about wind-impregnated mares shows that all have tended to present their material in a positive and uncritical fashion. There were, however, in the history of the tradition, a small number of authors who questioned the essential validity of the phenomenon, and offered their own personal rationalisation of the accounts concerned. The first of these was Pompeius Trogus, an historian of the Augustan period, whose work the Historiae Philippicae has been preserved for us by its epitomator Justin. Near the very end of this work, in the section on Spanish history, Trogus makes the statement that the many accounts<sup>(42)</sup> about the wind impregnation of mares near the river Tagus in Lusitania are fictitious, having arisen because of the fecundity of the mares and the fact that the many herds in Gallaecia and Lusitania are so vast and so swift that they not undeservedly seem to have been conceived by the wind (see App.I, no.16). Here, Trogus' essential denial of the veracity of preceding accounts about wind-impregnated Spanish mares is expressed in an extremely subtle fashion. Having

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to a young horse sired by the wind in Spain (see App.I, no.41). This very brief reference may be said to belong equally well to both strands of the Graeco-Roman tradition for, on the one hand, it depicts the epic concept of the wind-sired horse (although the horse in question is not described as possessing supernatural abilities), but, on the other hand, it is also indebted to the accounts of wind-impregnated Spanish mares found in the second strand of the tradition.

(42)

If Trogus' reference to 'multi auctores' is reliable, then it would seem that even by his day a number of accounts (most of them no longer extant) had appeared.

first summarised the general import of these accounts, he briefly refers to them as 'fabulae' ('fictitious accounts'),<sup>(43)</sup> then concentrates on offering what he sees as the very real reasons for their existence. In this way, he passes over the negative connotations of the term 'fabulae', only to counterbalance - indeed, displace - them with his description of the natural origins of the accounts. By carefully diverting attention onto his affirmative, and therefore attractive, rationalisation, Justin succeeds in introducing the term 'fabulae' without, in effect, endangering the continued existence of the zoological strand of the tradition.

But what of Trogus' rationalisation itself? Is there any substance to it? Essentially, Trogus gives two reasons for the development of the accounts in question: the fecundity of the mares, and the magnitude and swiftness of the many herds in Further Spain. That Spanish horses were, indeed, characterised by their fecundity and swiftness is reinforced by several subsequent authors such as Solinus (Collectanea Rerum Memorabilium 23.7), Nemesianus (Cynegetica 251-252) and Oppian (Cynegetica I.278-284). However, given that the earliest account about wind-impregnated Spanish mares, that of Varro, makes no mention of the swiftness of their offspring, and on the contrary emphasises the limited life-span of the latter, the reasons given by Trogus for the development of this and other such accounts seem improbable. Indeed, if we take into account the possibility discussed above that the Spanish account may have been influenced in its development by the parallel Cretan belief, then Trogus' rationalisation appears to have even less justification.

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(43)

Cf Thesaurus Linguae Latinae, s.v. fabula II A 3.

In the fifteenth century, Nicolaus Perottus followed in Trogus' footsteps by including a parallel statement to that of Trogus in his Cornucopiae, a commentary on Martial's Liber Spectaculorum and first book of epigrams (see App.I, no.34). In his statement, Perottus begins by giving a version of the traditional account about the wind impregnation of Spanish mares (a version that includes elements of both Pliny and Trogus), then asserts that, in his mind, it is a fictitious account ('fabulam') that has arisen because of the fecundity of the mares and the fact that the many herds in Lusitania are so vast and so swift that they not undeservedly seem to have been conceived by the wind. A highly original rationalisation!

There can be no doubt, however, about the originality of an explanation offered by the seventeenth century Spanish born scholar, Caramuel.

He states in his Rhythmica Campaniae that the Spanish usually honour their horses with the names of winds, hence there is clearly truth in what Pliny reports, namely that the horses of Baetica are the offspring of the winds, for they are in fact the offspring of horses that possess the names of winds (see App.I, no.45). Caramuel's rationalisation is certainly ingenious; but given the details found in Pliny's accounts, especially his reference to the westerly breeze as the "generating breath of the universe", the explanation offered by Carmuel is unacceptable.

In contrast to the rationalists, Justin, Perottus, and Caramuel, who contented themselves with theoretical analyses of the reasons behind the traditional accounts about the wind impregnation of Spanish mares, two seventeenth century scholars, Nierenberg and



Camerarius, utilised empirical evidence in their critical appraisal of the zoological strand of the tradition in question. In a lengthy discussion of the wind fertilisation of Lusitanian mares, a discussion found in his De Miris et Miraculosis Naturis in Europa (see App.I, no.44), Nieremberg, himself a Spaniard, expresses his astonishment that authors such as Silius Italicus, Varro, Pliny, and Columella could record this phenomenon, just as though they had discovered it by means of some definitive experiment; proceeds to relate the details of a personal investigation made into the phenomenon by Resendius<sup>(44)</sup> (who visited a farmer at Beneventa near the Tagus, and found that neither he nor his neighbours had ever been troubled by the problem of mares being impregnated by the wind); then concludes with the statement that even if the phenomenon does not exist in the modern world, it could possibly have existed in ancient times, for nature is in the habit of changing. Although Nieremberg is not prepared to reach a decision about the wind impregnation of Spanish mares in the ancient world, he accepts the results of Resendius' inquiry in the region of the Tagus, and on the basis of that evidence, denies the possibility of the phenomenon in his own day. The implications of Nieremberg's conclusion are obvious : increased reliance on empirical data must inevitably lead to the death of the zoological sub-tradition.

Indeed, it was only a few decades after Nieremberg's appraisal appeared, that is, at the end of the seventeenth century, that the

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Possibly Andre de Resende (1498-1573), author of De Antiquitatibus Lusitaniae (a work which has unfortunately proved unobtainable).

scientific investigations of the German botanist, Camerarius, led him to issue a blanket denial of the possibility of the wind fertilisation of animals. In his De Sexu Plantarum Epistola, published in 1694 (see App.I, no.46), Camerarius raises the question of the fertilising powers of the westerly breeze as elaborated by both Virgil and Pliny, only to suggest that the ancient concept is more applicable to plants than to animals, for whereas the latter may be moved or stimulated by the wind, they do not conceive offspring from it; plants, on the other hand, turn their female organs to face the westerly breeze and catch the flower dust scattered thereby, thus effectively being fertilised by the wind. Here, Camerarius gives greater force to his thesis concerning the wind fertilisation of plants by dismissing the parallel concept of the wind impregnation of animals. Moreover, as an examination of the Latin text shows, he takes great delight in parodying Virgil's description of the mares : in his description of the fertilisation of plants, he deliberately adopts Virgilian terminology. The stance adopted by Camerarius is significant in that it deals the final death-blow to the ancient phenomenon of the wind impregnation of mares. With Camerarius, we come to the end of the zoological sub-tradition.

Thus, of the two intertwining strands that comprise the ancient tradition concerning the wind impregnation of mares, the first - the epic sub-tradition - focuses on the wind-sired horse endowed with outstanding capabilities, whilst the second - the zoological sub-tradition - concentrates on the act of impregnation itself. The epic strand begins with Homer and thus may be said to have oral origins, but in subsequent times, it is found only as a scholarly,

literary tradition recorded by epic writers representative of Roman, Greek, French, German and Italian literary epic. This strand does not endure past the sixteenth century. The zoological strand is initiated by Aristotle and can be shown to have (possible) oral origins, not only in Crete but also in Spain. It is subsequently perpetuated by a vast number of scholars whose versions provide a vigorous literary tradition, but also, in two instances, suggest the possibility of a coexistent oral tradition. This strand comes to an end with the advancement of scientific knowledge in the seventeenth century.

On the question of transmission, it is not unreasonable to assume that - in addition to the (possible) active oral transmission of the zoological strand - both the epic and the zoological sub-traditions were transmitted in a passive fashion by their readers. One thing that is certain is that, in their transmission, the two sub-traditions undergo a number of changes. The variables that may be noted in the epic strand are:

1. the setting (battle; horse-race);
2. the wind (Boreas; Zephyrus; (unspecified) wind);
3. the mare (Podarge; Harpe; Harpy; Erinys; mares; sea-mares);  
and
4. the offspring (Xanthos; Balios; foals; Podarke; Arion; four steeds of Ares; warhorses; Rabican; Aquilino).

Similar variables are evident in the zoological strand:

1. the location (Crete; Troad; Lusitania (monte Tagro/monte sacro/ Tagum amnem); many regions; plains of the Vettones; Cappadocia; Alchufa (Dealchufa); Baetica);

2. the wind/time of year ((unspecified) wind; westerly breeze; springtime);
3. the method of conception (mouth; vagina);
4. the product/offspring (hippomanes; foal); and
5. the characteristics of the offspring (three year life-span; seven year life-span; life-span of a few days; swift).

These variables serve to give added interest and character to the tradition.

Underlying the two sub-traditions there appears to be a fascinating complex of ideas. In the instance of the epic strand, the association of wind and horse is particularly significant, as is that between wind and soul (seen especially in Iliad XVI). The wind/soul concept can also be detected in the zoological strand, but equally if not more prominent here is the complementary concept of the westerly breeze as a generative force. Important, too, in the instance of the zoological strand, is the notion of the horse as the most lustful of all animals. The combination of these ideas may be said to have provided the impetus for the development of the tradition.

#### IV HENS AND THE LAYING OF WIND-EGGS

Different in many respects from the tradition about mares - although at times cited as a parallel to it - is the ancient tradition pertaining to hens. This tradition focuses on the production of wind-eggs, that is, (infertile) eggs laid without the assistance of a male bird, by hens.<sup>(1)</sup> Figurative allusions to the phenomenon occur in Greek literature from as early as the fifth century BC, but it is the detailed discussion of the subject found in Aristotle that effectively gives the tradition its impetus. In subsequent centuries, the path of the tradition is an interesting one, culminating in the perpetuation of the concept of the wind-egg for at least two centuries beyond the demise of the ancient tradition per se.

In the subsequent pages of this chapter, the tradition concerning hens and the laying of wind-eggs will be examined in some detail. As in the last chapter, particular emphasis will be placed on the major characteristics of the tradition, on the various phases of its development, and on the nature of its transmission (whether oral as well as literary).<sup>(2)</sup>

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##### (1)

The ancients believed that a number of different female birds or 'hens' - for instance, pigeons, partridges, peahens and geese (cf App.II, no.11) - were capable of laying wind-eggs, but this phenomenon was predominantly associated with the domestic hen.

##### (2)

Although I am confident that I have succeeded in locating a good percentage of those texts that record the tradition under study, I cannot make such a claim concerning evidence for the persistence of the concept of the wind-egg. In this latter instance, I have had to rely on reference works for my information, and what is more, I have not always been able to consult all the texts cited in these works : in

The tragedian Sophocles was the first of a series of fifth and fourth century authors who alluded to the production of wind-eggs in a figurative fashion. In his Oenomaus, which has survived in nothing more than fragmentary form, Sophocles asserts that the hen is unaware of the passage of the winds through its body except when brooding-time is at hand (see Appendix II, no.1). There can be little doubt that what Sophocles has in mind here is the fact that although hens lay wind-eggs throughout the year, it is only in spring-time (the brooding season) that they are visibly stimulated by the wind.<sup>(3)</sup> For the purposes of this study, Sophocles' allusion is highly significant, for it provides an insight into the origin of the term 'wind-egg': it would seem that the ancients, having witnessed the way in which hens were stimulated by the wind in the spring season, became convinced that the production of eggs by hens without any obvious assistance from a male bird must be due to the influence of the wind; hence the term 'wind-egg'. In context, however, Sophocles' words are to be interpreted not in a literal, but in a figurative sense. The main purpose of the image is apparently to illustrate the point that people tend to pay little attention to obvious fact, except when their own interests are involved.<sup>(4)</sup>

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some cases, they have proved unobtainable. However, such evidence as has been obtained is sufficient to provide a general picture of the perpetuation of the concept in question, and so far as can be determined, further evidence would by no means invalidate the conclusions drawn.

(3)

Cf A.C. Pearson, The Fragments of Sophocles, C.U.P., 1917, vol.II, p.131. (Pearson's reiteration and apparent acceptance of Gomperz's view that the poet may have been thinking of the impregnation of the partridge is, however, ill-advised; cf chapter I, n.1.)

(4)

Cf Pearson, loc.cit.

Further allusions to the subject of the wind-egg are to be found in Aristophanic comedy of the late fifth century BC. A fragment of Aristophanes' Daedalus (a work that may possibly be dated to 414 BC) <sup>(5)</sup> contains the assertion that many hens have no choice but to lay wind-eggs time and again (see App.II, no.2). <sup>(6)</sup> The metaphorical import of this statement may well be that many people cannot help but do the things they do, time after time; or (if the infertile aspect of the wind-egg is stressed) that many people cannot help but suffer failure time after time. Similarly, in a papyrus fragment tentatively attributed to Aristophanes' Thesmophoriazousae (a work that may possibly be dated to 407/406 BC) <sup>(7)</sup> we find a statement (unfortunately incomplete) in which an unspecified plan or idea is compared with an (infertile) wind-egg (see App.II, no.4). The suggestion is that just as a wind-egg has no chicken inside it and is therefore unproductive, so the scheme in question is lacking in substance and completely fruitless. <sup>(8)</sup>

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(5)

Cf J.M. Edmonds, The Fragments of Attic Comedy, Leiden, E.J. Brill, 1957, vol.I, p.625.

(6)

It is worth noting that this fragment has also been attributed to Plato; cf Edmonds, op.cit., vol.I, pp.494-495, 624-625.

(7)

Cf Pearson, op.cit., vol.I, p.949.

(8)

In addition to the two instances discussed above, there is a third occasion on which Aristophanes refers to the wind-egg, namely, in the Birds (see App.II, no.3; and cf App.II, no.32). This reference, which forms part of a cosmogony outlined by the chorus of Birds, differs considerably from other figurative references found in fifth and fourth century literature. The Birds suggest that, in the beginning, Chaos, Night, Erebus and Tartarus were all that existed,

Aristophanes' son Araros appears to have followed his father's example and made reference to the phenomenon of the wind-egg in a figurative fashion. Fragment 6 of Araros' comedy Caeneus (see App. II, no.5) in fact contains nothing more than the words ἀνεμ(ι)αῖον ᾠόν (wind-egg); but given that the context is one of comedy, and that the term ἀνεμιαῖον seems to have been used solely to convey a figurative meaning,<sup>(9)</sup> it is not unreasonable to assume that Araros' reference is intended to be metaphorical rather than literal.

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and that the first step in the creation of the universe occurred when 'in the infinite bosom of Erebus... black-winged Night bore a wind-egg (ὑπηνέμιον ᾠόν).' The concept of the wind-fertilised cosmic egg is one that is found in the Orphic cosmogony (cf Siegfried Morenz, Aus Antike und Orient, Leipzig, 1950, pp.71-74), and there can be little doubt that it was this cosmogony that inspired Aristophanes' use of the term ὑπηνέμιον ᾠόν. However, as the wind-egg in question (that is, in Aristophanes) is said to have given rise to Eros ('swift as the whirling winds') and thereby to the creation of the universe, it is obviously envisaged as a fertile rather than an infertile egg. The sense attached to the term ὑπηνέμιον ᾠόν in the Birds is thus very different from that seen in other figurative contexts in contemporary literature. Indeed, the description of Eros as endowed with the speed of the winds shows a remarkable resemblance to the Homeric concept of the wind-sired horse.

It is worth noting here that, in his discussion of this passage, Morenz (loc.cit.) suggests that it was the Orphic idea of the wind-fertilised cosmic egg that gave rise to the ancient concept of the wind-egg. This suggestion appears to have little to commend it. It seems much more probable that the concept of the wind-egg arose in the manner suggested above, that is, as a result of the visible response of the hen to the springtime breeze (cf the zoological strand of the tradition about mares).

For further discussion of Aristophanes' reference to the wind-fertilised cosmic egg and the birth of Eros therefrom, see chapter VIII, below.

(9)

Cf Aristophanes (above) and Plato (below) (see App.II, no.s 4, 6, 7, 8 and 9).



Last of the series of authors who made figurative allusion to the wind-egg was the fourth century philosopher Plato. On at least four separate occasions in his Theaetetus (see App.II, no.s 6, 7, 8 and 9), Plato makes effective use of the concept in question. All four instances occur in circumstances where Socrates is encouraging - or, in the final example, has been encouraging - Theaetetus to formulate and express his personal opinion on the nature of ἐπιστήμη or 'knowledge', and where Socrates repeatedly insists that he is nothing more than a midwife whose role is to assist Theaetetus to produce or 'give birth to' his own point of view. In this context, it is appropriate to find Socrates suggesting to Theaetetus (as he does on three separate occasions) that the two of them examine a particular view expressed by the latter to see whether or not it is ἀνεμιαῖον, a 'wind-egg' or 'misbirth' (as explicitly or implicitly contrasted with γόνιμον, 'a real offspring'); and similarly to find Socrates and Theaetetus concluding at the end of their dialogue that all the ideas that have been 'produced' by means of the former's art of midwifery, are in fact ἀνεμιαῖα or wind-eggs. Plato's use of the term ἀνεμιαῖον is thus a deliberate (and exceedingly effective) means of maintaining and enhancing the extended image of birth or creation.

With Plato we come to the end of the initial figurative phase of the tradition. (Many centuries later, in European countries such as England and Germany, the term wind-egg was again to be utilised in a figurative sense; but so far as can be ascertained from extant evidence, this usage did not recur during the intervening period.) The one conclusion that can be drawn from the frequent metaphorical references in fifth and fourth century literature to the production

of wind-eggs is that the phenomenon in question was one with which the ancient Greeks were completely familiar; for if this was not the case, figurative allusions to the subject would have been pointless, having little if any impact on audiences and readers. The assumption that the concept of the wind-egg was widely appreciated amongst the Greeks leads to the further suggestion that there must also have been a strong oral tradition about hens and the laying of wind-eggs. It seems highly probable that the concept under study formed part of popular belief and as such was transmitted by word of mouth from one person to another.

Proof that the production of wind-eggs was a subject of intense fascination to the ancients is to be found in the biological writings of Aristotle. Page after page of his Historia Animalium and De Generatione Animalium is devoted to discussion of the formation and characteristics of wind-eggs. So extensive is the information recorded by Aristotle that it is impossible to do justice to it here; but a brief outline of the salient features of the wind-egg as delineated in the Hist. Anim. and the De Gen. Anim. will provide an insight into the major questions pursued therein. (10)

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(10)

It is worth noting here that Aristotle always uses the term ὑπηνέμιον when referring to the wind-egg (see App.II, no.s 10-25). The term ζεφύρια does appear on two occasions in these passages, but then only as an alternative to ὑπηνέμιον, and one which Aristotle does not himself favour. As for the terms κυνόσουρον and οὖριον (see App.II, no.s 11, 14 and 24), it is clear that these were used not as equivalents to ὑπηνέμιον (as is incorrectly stated by Liddell and Scott, s.v. οὖριος, α,ον), but to indicate an egg that was addled or rotten, generally as a result of hot, sunny weather.

One of the initial points to be made by Aristotle is that it is not merely the domestic hen that is capable of laying wind-eggs; other female birds (or 'hens') that have the same ability are the partridge, the pigeon, the peahen, the goose and the vulpanser (see App.II, no.s 11, 12, 15, 16, 17, 18, 21, 22, 23 and 25). What is more, the presence of a male bird is by no means a prerequisite for the production of such eggs, for even young hens that have never before engaged in copulation can and do produce wind-eggs (see App.II, no.s 11, 13, 16, 17, 18, 21, 22, 23 and 25).

On the nature of wind-eggs, Aristotle comments that they differ from ordinary eggs in a number of ways : they are smaller, less tasty, more fluid and more numerous (see App.II, no.s 11 and 20). Even more significant than this, however, is the fact that they are lacking in the male principle and are therefore infertile (see App.II, no.s 10, 11, 12, 13, 16, 17, 18, 23 and 25). On the other hand, wind-eggs can become fertile if the hen that is in the process of laying the eggs in question is trodden at a sufficiently early stage by a cock (see App.II, no.s 10, 11, 16, 18, 23 and 25).

A further characteristic of wind-eggs, says Aristotle, is that they lack the principle of soul, a principle that can only be supplied by the semen of the male (see App.II, no.17). More specifically, they lack sentient soul, for wind-eggs do - at least potentially - possess soul of a sort, namely, nutritive soul. This soul is present in all animals and plants alike, but it is incapable of effecting the production of an animal. For this purpose, sentient soul is required (see App.II, no.s 18 and 25).

On the question of the formation of wind-eggs, this - according to Aristotle - is due to the fact that although seminal matter is present in female birds (as it is in other females), it is not discharged in the same way as it is in the higher blooded animals (that is, in the form of menstrual fluid). Instead, when it arises in birds, this residue develops - under the influence of the heat in the region of the diaphragm - into fetations or eggs. These eggs resemble fertile eggs in shape, but having been created without the assistance of a male, are inadequate for the purposes of generation (see App.II, no.20).

What is more, the process just described is one that occurs solely in birds that are prolific, and does not take place in those that are crook-taloned or good fliers. The reason for this is that the former have great deal of residue, whereas the latter only have a small amount and this is diverted to produce wings and wing-feathers rather than to produce semen (for both feathers and semen alike are formed out of residue) (see App.II, no.s 19, 20 and 22).

Most interesting of all, however, is the fact that Aristotle cites the phenomenon of the wind-egg as evidence for the respective roles of the male and the female in generation (cf chapter II, above). He suggests that it is evident from the production of wind-eggs by hens that what the female contributes to the embryo is the material, whilst the male contribution comprises the principle of movement (see App.II, no.16). There can be little doubt that the wind-egg played a significant part in the development of Aristotle's theories concerning conception.

The detailed information recorded by Aristotle in his numerous discussions of the subject of the wind-egg thus provides important theoretical background for a popular and widely accepted concept. As can be expected, the impact of Aristotle on subsequent generations was considerable : many of the accounts produced in later times have their origin in those of Aristotle.

In the Roman world of the first centuries BC and AD, three authors made reference to hens and their laying of wind-eggs, one of whom, namely, Pliny, shows an obvious debt to Aristotle. The other two - Varro and Columella - both introduce the subject in question into their respective accounts of the wind impregnation of mares (see App.II, no.s 26 and 27) and do so in an attempt to provide a 'local' parallel for the 'foreign' concept of the wind-impregnated mare. Their two references - brief as they are - reveal that the phenomenon of the wind-egg was as well-known in the Roman world as it had been in the Greek. It therefore seems not unreasonable to suggest that the phenomenon was actively transmitted as a popular, oral tradition in the period concerned. (11)

Confirmation of the existence of an active oral tradition appears to be provided by Pliny whose account (see App.II, no.28) - although heavily influenced by Columella and Aristotle - introduces one small

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(11)

Other authors who refer to the production of wind-eggs by hens during discussion of the wind impregnation of mares are Neckam (see App.II, no.37), Gesner (see App.II, no.41), Heresbach (see App.II, no.44), Aldrovandi (see App.II, no.50) and Nieremberg (see App.II, no.53). Of their accounts, only that of Neckam requires further discussion (see below).

but important detail that is a definite innovation in the literary tradition and may well derive from oral accounts. Thus, Pliny begins by suggesting that two alternative factors are responsible for the production of wind-eggs : they are conceived either as a result of the female birds mutually imagining feelings of lust, or else from dust. The first factor mentioned - that of the imagination of lust by the female birds - is a detail that is undoubtedly derived from Columella's account of the excessive lust of mares and their impregnation by the wind (see App.I, no.6 or App.II, no.27). The second factor specified - namely, dust - does not appear to have its origin in literary sources, however. For this reason, it seems probable that the function ascribed to dust is one that is to be found in concurrent oral tradition. Whether or not this is the case, Pliny's specification of dust as a factor in the production of wind-eggs serves to enhance and revitalise the literary tradition.

In view of Pliny's opening remarks, it is interesting to note that later in the same account he refers to the role of the wind in the formation of wind-eggs. He suggests that certain people attribute the laying of wind-eggs to the wind and that as a result these eggs are also called 'zephyria'. Pliny's words are noteworthy on two counts : in the first instance, they are reminiscent of - and most probably derived from - a statement found in Aristotle to the effect that wind-eggs are called 'zephyria' by some people because in spring-time female birds can be seen inhaling the breezes (see App.II, no.11; cf n.10 above); and secondly, they reveal that Pliny himself (even as Aristotle before him) does not regard the wind as the predominant factor in the production of wind-eggs. This latter point is

significant for it marks a movement away from the apparent origin of the tradition.

The remainder of Pliny's account may safely be said to have been fashioned under the influence of Aristotle. The enumeration of the various birds that are capable of laying wind-eggs, the delineation of the particular characteristics of the wind-egg, and the distinction drawn between wind-eggs and those eggs termed 'urina' or 'cynosura' are all remarkable for the way in which they parallel Aristotle. The one minor variation introduced by Pliny is his suggestion that 'urina' and 'cynosura' tend to be produced, not in summer, but in spring.

In later times Pliny's account provided a source of inspiration for a number of authors, but - as might be expected- it was by no means as influential as the numerous accounts produced by Aristotle. The impact of these two scholars on subsequent generations will be examined shortly; in the meantime, it is appropriate to look briefly at the transmission of the hen tradition in Christian literature. So far as can be determined, the tradition is recorded only twice in Christian literature, firstly in a work by the late second/early third century scholar Tertullian, and secondly in the Clementine Recognitions.<sup>(12)</sup>

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(12)

This work circulated in the early Church under the name of the Christian scholar Clement, but it appears to have been written early in the third century AD; cf F.L. Cross (ed.), The Oxford Dictionary of the Christian Church, London, 1957, p.301.

Tertullian's reference to the hen occurs in his work on the Valentinians (see App.II, no.33). Having first referred to the Valentinian belief that Sophia conceived and gave birth without the assistance of a husband, Tertullian cites the parallel instance of the procreation of the hen.<sup>(13)</sup> Given the context, it would seem that Tertullian viewed the hen as capable not merely of producing (infertile) wind-eggs but of actually reproducing its species without the help of a male.

The author of the Clementine Recognitions appears to have viewed the hen in much the same light. He suggests (see App.II, no.34) that the hen - which produces eggs conceived of wind or dust - is one of a number of animals ordained by the Creator to procreate in an exceptional way and so provide proof that the normal perpetuation of the animal race (by mating of male with female) is not part of a natural order of things but is likewise due to divine providence. Several aspects of this passage deserve comment. In the first place, the author refers specifically to the production of wind-eggs by hens, but nonetheless attributes a parthenogenetic ability to the hen. Secondly, dust is said to be an alternative factor to that of wind in the formation of these eggs : whether this detail derives from literary sources or - as was apparently the case with Pliny - from concurrent oral tradition is, unfortunately, difficult to tell. Most important of all, however, is the fact that the author utilises the tradition under study in an apologetic fashion to give added

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(13)

In addition to the hen, Tertullian also mentions the parthenogenetic vulture here (see App.IV, no.12, and the discussion in chapter VI, below).



weight to the Christian doctrine of the divine creation of the world and the creatures upon it. Such an application of the tradition is reminiscent of the so-called apologetic trend in the zoological strand of the tradition concerning mares.<sup>(14)</sup>

Having briefly surveyed the transmission of the hen tradition in Christian literature, it is now appropriate to return to our original path and examine the way in which both Aristotle and Pliny shaped the remaining stages of the ancient tradition. The series of authors who were inspired by Aristotle will be discussed first, then those who were influenced by Pliny will come under review. Throughout this discussion, attention will of course be paid not merely to the literary tradition but also to the question of a concurrent oral tradition.

Galen's debt to Aristotle is a subject that has already been examined in some detail (cf chapter II, above). It therefore comes as no surprise to find that Galen refers to the matter of the wind-egg on a number of occasions in his works (see App.II, no.s 29, 30 and 31) and that he appears to be largely indebted to Aristotle for his information. In two of the passages concerned (no.s 29 and 31), Galen stresses that the female cannot reproduce on its own without a male, for female semen has to be mixed with male semen in order to bring a fetus to completion; and that although hens are capable of laying wind-eggs without the assistance of a male, these eggs are

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(14)

Cf, too, the use of the vulture tradition for apologetic purposes (see chapter VI, below).

nonetheless imperfect as an animal cannot be generated from them.<sup>(15)</sup>

It is evident that for Galen (even as for Aristotle before him) the production of wind-eggs was a topic of special interest and one that he found it essential to take into consideration when discussing the subject of generation.

At this point we shall pass over the accounts of both Isidore and Avicenna, the first of which (see App.II, no.35) provides nothing more than a summary of the essential points of the tradition, a summary that is possibly indebted to Aristotle, and the second of which (see App.II, no.36) is evidently derived in every detail from the writings of Aristotle. By leaving these aside, it is possible to move on more quickly to the thirteenth century scholar Bartholomaeus Anglicus, whose account appears to provide evidence of an active oral tradition existing side by side with the literary.

In his De Proprietatibus Rerum (see App.II, no.38), Bartholomaeus Anglicus (or Bartholomew the Englishman) writes at some length on the subject of wind-eggs. The first few lines of his account are taken directly from Isidore, as he himself acknowledges; but by far the majority of the account has its origin in Aristotle. Thus, the influence of Aristotle may be seen in Bartholomaeus' description of the characteristics of wind-eggs, in his enumeration of the various birds that lay such eggs, in his suggestion that these eggs occur

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(15)

The third passage (no.30) contains nothing more than a passing reference to the fact that certain people cite the phenomenon of the wind-egg as an example of the superfluosity of the male, a view with which Galen appears to have little sympathy.

not in good fliers or crook-taloned birds but in birds that are prolific, and, what is more, in his justification thereof. Contained in the account, however, is one small detail that does not derive from Aristotle, and that can only be traced in one previous literary version of the tradition, that of the twelfth-thirteenth century Englishman Alexander Neckam (see App.II, no.37). Having listed a number of characteristics of the wind-egg (all of which - as stated above - are derived from Aristotle), Bartholomaeus adds that these eggs are lacking in a hard shell. Given that this particular detail does not occur in the literary tradition prior to Neckam and Bartholomaeus, and that these two scholars are both English by birth, it seems reasonable to suggest that the detail in question is one that was found in popular belief circulating in England at the time.<sup>(16)</sup> If this was the case, then both Neckam and Bartholomaeus may be said to have revitalised the literary tradition concerning hens and the laying of wind-eggs by introducing a new and vital detail from concurrent oral tradition.

A contemporary of Bartholomaeus Anglicus was Albertus Magnus, the German scholar who - as has already been noted (see chapter III, above)<sup>(17)</sup> - was responsible for the assimilation of Aristotelian philosophy in Germany. It is not surprising, then, to find that

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(16)

It is interesting to note here, too, that Neckam cites dust rather than wind as the origin of these eggs (calling them 'apala' rather than 'hypenemia'). It will be recalled that this detail was first introduced into the literary tradition by Pliny, apparently from oral sources.

(17)

Cf Kurt Ranke (ed.), *Enzyklopädie des Märchens*, Walter de Gruyter, Berlin, New York, 1977, I.256, s.v. Albertus Magnus.

Albertus makes reference to the subject of the wind-egg in his De Vegetabilibus (see App.II, no.39), and what is more, that this reference is taken directly from Aristotle himself. Albertus leads into the subject by outlining Aristotle's views on nutritive and rational soul, a review that concludes with the statement that, according to Aristotle, the wind-egg does not live, except in so far as a plant lives, and not an animal. There can be no doubt that this statement is a direct résumé of Aristotle's suggestion that the wind-egg possesses nutritive - but not sentient - soul (see above).

Further insight into the stance adopted by Albertus Magnus towards the wind-egg is to be found in an account produced by the sixteenth century scholar Ulisse Aldrovandi (see App.II, no.49). Aldrovandi begins by reporting a statement of Aristotle to the effect that some hens mistakenly lay eggs that are soft, and by suggesting that the eggs to which Aristotle is referring are shell-less and - according to Albertus - are termed wind-eggs. Three aspects of Aldrovandi's opening sentence deserve comment. Firstly, there is the fact that Aldrovandi wrongly attributes to Aristotle the view that these soft eggs are laid by mistake ('vitio') : perhaps this is a reflection of sixteenth century attitudes? In the second instance, it is remarkable that Aldrovandi refrains from mentioning that Aristotle (even as Albertus) regarded these eggs as 'wind-eggs'. Lastly, it is noteworthy that Aldrovandi makes a point of specifying that the eggs in question are shell-less (compare Neckam and Bartholomaeus Anglicus).

This last detail is one that Aldrovandi pursues further : he relates that, in the view of Albertus, wind-eggs are notable for the fact that they are lacking in their outer shell, having only the membrane that usually lies under the shell; and that this lack of a shell is due to the moist and watery nature of the eggs themselves, which in turn is caused by the hens being fed on moist food. If Aldrovandi's account is reliable,<sup>(18)</sup> then Albertus' description of the wind-egg - with its emphasis on the shell-less aspect of such eggs - bears a striking resemblance to the details recorded by the two Englishmen Neckam and Bartholomaeus. It is possible that Albertus was familiar with the works of these two English scholars and that he derived his information from them; but what seems more likely is that his view is but a reflection (and an expansion) of the popular view of the wind-egg in thirteenth century Germany. If this interpretation is correct (an interpretation that receives substantiation from events discussed below), Albertus may be said to provide a direct parallel in Germany to Neckam and Bartholomaeus in England, in that he, too, introduces local material of an oral nature into the literary tradition.

Before we leave Albertus and Aldrovandi, it is interesting to note that Albertus (according to Aldrovandi) is not content merely to define the wind-egg as an egg without a hard, outer shell; he also offers an explanation for this characteristic. It would seem that, in his view, the absence of a shell is due to the watery nature of the egg, and that this, in turn is influenced by the diet of the hens.

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(18).

This is a matter that has unfortunately proved difficult to verify.

Here, we have a practical rationalisation of the phenomenon of the wind-egg, a rationalisation that may well take its substance from popular German belief, and that shows little relationship to the ancient view of the wind-egg as conceived from wind or dust.

The influence of Pliny in these later stages of the wind-egg tradition was by no means as great as that of Aristotle. Nonetheless, certain authors appear to have been largely indebted to Pliny for their accounts. One such author is Pierre Belon, who is known to have utilised Pliny extensively when writing his two works on birds and fishes in the sixteenth century.<sup>(19)</sup> His account (see App.II, no.42) effectively provides a summary of the tradition, for it states that there are certain birds which can conceive by the wind and lay eggs without the help of a male, but that these eggs cannot be used for hatching as they are infertile. Although there are no evident verbal reminiscences of Pliny in Belon's account, it seems not unreasonable to suggest - given Belon's acquaintance with Pliny - that he relied at least to some extent on that author for his information.

There can be no doubt, however, that Pliny was the source of two other accounts, the first produced by Belon's fifteenth century predecessor Nicolaus Perottus (see App.II, no.40), and the second by his contemporary Conrad Heresbach (see App.II, no.45). Both accounts

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(19)

Cf, for instance, Vera Smalley, The Sources of a Dictionarie of the French and English Tongues by Randle Cotgrave, Baltimore, The John Hopkins Press, 1948, p.122. (It is unfortunate that the Latin titles cited by Smalley are not always accurate.)

follow that of Pliny closely, even to the extent of repeating complete phrases from the original. Thus, both refer to the different terms used for 'wind-eggs', both suggest that these eggs are conceived as a result of the female birds mutually imagining feelings of lust, and both state that certain people consider such eggs to be generated by the wind. What is more, Perottus also paraphrases Pliny's final sentence to the effect that wind-eggs are to be distinguished from those eggs called 'urina' and 'cynosura'. That these two accounts both have their origin in Pliny cannot be disputed; indeed, Heresbach makes a point of acknowledging his debt to the author of the Naturalis Historia, and the debt of that author to Aristotle before him.

Heresbach marks the end of this group of authors who were inspired by Pliny; and as we move from the sixteenth into the seventeenth century, we find ourselves near the end of the ancient literary tradition about wind-eggs. In 1651, William Harvey - a scholar widely known for his research on the circulation of the blood - published a work entitled Exercitationes De Generatione Animalium in which is included a brief discussion of the wind-egg. Harvey's discussion (see App.II, no.55) is noteworthy in that it sets out to provide an insight into the origin of the wind-egg tradition. Having first listed the alternative Latin terms for infertile eggs ('improlifera', 'irrita', 'hypoemia', 'subventanea' and 'zephyria'), Harvey reports that the term 'hypoemia' is applied to those eggs which are produced without coition with a male and are unsuitable for hatching, being - as it were - occasioned by the wind. He then stresses that the westerly breeze (Zephyrus) is extremely fertile;

and suggests that, for this reason, when the ancients saw hens laying eggs without the help of a male during springtime while this wind was blowing, they believed that the West wind Zephyrus was responsible for the production of those eggs. Harvey's suggestion concerning the origin of the tradition is remarkable not only for the fact that it coincides with the views expressed near the outset of this chapter, but also because it emphasises that the wind concerned is the West wind Zephyrus, that very wind described by Pliny (see chapter III, above) as being the generating breath of the universe.

The objective approach adopted by Harvey was taken a stage further by the German botanist Camerarius whose scientific research led him to issue a complete denial of the possibility of the wind fertilisation of animals. Camerarius' De Sexu Plantarum Epistola (published in 1694) has already been discussed in some detail in relation to the ancient tradition concerning mares (see chapter III, above). Suffice it to say here that at the beginning of the relevant passage in that letter (see App.I, no.46; App.II, no.59), Camerarius refers not only to the wind-impregnation of mares but also to the production of wind-eggs (eggs so called 'because, as Aristotle explains, in springtime the birds seem to receive a fertilising breath from the West wind') and that his subsequent statement - to the effect that plants but not animals can be fertilised by the wind - therefore applies to hens as well as to mares. Even as Camerarius' letter brought the equine tradition to a close, so, too, did it mark the end of the ancient literary tradition about wind-eggs. No further literary accounts along the lines of those just discussed appeared in publication.



The demise of the ancient Graeco-Roman literary tradition was not, however, accompanied by the demise of the popular, oral tradition. Indeed, evidence abounds to show that the popular concept of the wind-egg that was seen to exist in both England and Germany in the thirteenth century AD, persisted for centuries thereafter in both countries,<sup>(20)</sup> and what is more, that this popular concept gave rise to a figurative usage of the term 'wind-egg', a usage which parallels that found in fifth and fourth century BC Greek texts.

Proof of the common use of the term 'wind-egg' in its literal sense is to be found in German texts and dictionaries dating from as early as the year 1563. In that year, Hans Kirchhof referred to the wind-egg ('das wind ey') in his Wendurmmuth, adding that this was the name given to that which hens lay and which has no shell (see App.II, no.43). The years 1582 and 1587 saw the publication of two dictionaries, the earlier of which - a Latin-German dictionary produced by Nathan Chytræus - contains the term 'Windtey' as the equivalent of the Latin 'hypenium' and other synonyms (see App.II, no.46), whilst the later - a quadrilingual dictionary compiled by Helfric Emmel - explains the German term 'Windey' in four different languages, suggesting that it is an infertile egg which the hen lays without being mounted by a cock (see App.II, no.47). 1587 was also the year in which Bartholomäus Krüger produced his Hans Clawerts Werckliche Historien, a work that contains a delightful reference to shell-less wind-eggs (see App.II, no.48) and indicates that these were commonly

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(20)

This fact appears to give added weight to the interpretation of Albertus Magnus given above.

thought to result from the hens being fed too much bread (cf Albertus Magnus, above). In the following century (1682), Wolfgang Hohberg recorded in his Georgica Curiosa (see App.II, no.58) the statement that wind-eggs (Wind-Eyer) are eggs that cannot be used for hatching. Gotthold Lessing, in a work that appeared in 1759 (see App.II, no.61), likewise suggested that a wind-egg is an infertile egg laid by a hen without the help of a male.

Entries in English dictionaries - one of which dates to the early seventeenth century - likewise provide proof of the persistence of the term 'wind-egg' in its literal sense. Randle Cotgrave, in his Dictionary of the French and English Tongues (first published in 1611), interprets the French word 'Harde' as an egg that is laid with a soft skin around it instead of a shell, that is, a soft-shelled egg or a wind-egg (see App.II, no.51).<sup>(21)</sup> Samuel Johnson's Dictionary of the English Language (1755) defines the wind-egg as an egg that has not been impregnated and that does not contain the principles of life (see App.II, no.60). Finally, the entry for wind-egg in Brewer's Dictionary of Phrase and Fable (which first appeared in 1870) suggests that this is a term applied to an egg without a shell, or with a soft shell, or to an unfertilised egg (see App.II, no.70).

There can be little doubt, then, that the concept of the wind-egg first evidenced in England and Germany in the thirteenth century AD continued to exist in popular, oral tradition in both countries for

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(21)

It is worth noting that the equivalent of the term 'wind-egg' does not appear to exist in French.

a number of centuries thereafter. Further proof of the strength of this oral tradition is the fact that, in both England and Germany, the term 'wind-egg' came to be used in a figurative as well as a literal sense. It seems clear that without the existence of a vital oral tradition such a figurative usage could not have developed.

The movement towards the figurative use of the term in question appears to have occurred somewhat earlier in England than in Germany. Thus, as early as 1614, we find an amusing reference in (Beaumont and) Fletcher's comedy Wit Without Money<sup>(22)</sup> to the effect that peasants consuming the most basic foods have no difficulty producing children, but 'other men with all their delicates, and healthful diets, can get but wind-eggs' (see App.II, no.52). This reference, which focuses on the infertile, unproductive aspect of the wind-egg, was followed by one which likewise dwells on the negative qualities of the wind-egg, but occurs in a very different context from the first. In his Colasterion (published in 1645) Milton rebukes another author for his lack of literary skill and suggests that the definition of divorce produced by that author - far from being 'well hatcht' - is nothing other than a wind-egg (see App.II, no.54). Edward Stillingfleet's Irenicum (which first appeared in 1661) contains a similar metaphor, although, in this instance, the shell-less aspect of the wind-egg comes into play. In the passage in question (see App.II,

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(22)

Although attributed in certain early sources to both Beaumont and Fletcher, this play is now generally agreed to have been written by Fletcher alone; cf E.H.C. Olifant, The Plays of Beaumont and Fletcher, Phaeton Press, New York, 1970 (repr.), pp.150-151.

no.56), it is stated that the early division of provinces amongst the apostles is but 'the wind-egge of a working fancy that wants a shell of reason to cover it.' Two centuries later, we find the term 'wind-egg' again utilised in a far from complimentary fashion : in a letter written in 1826 (see App.II, no.67), Thomas Beddoes describes a certain Dr Raupach as a person 'who lays a tragedy or two in the year - mostly wind-eggs.'

Whilst the metaphorical application of the term 'wind-egg' appears to have been at its greatest strength in England in the seventeenth century but to have persisted in usage through until the nineteenth century, German use of the term in a metaphorical sense appears to have been rare up until the mid-eighteenth century, but to have flourished from then on until the end of the nineteenth century. As with the English evidence, relevant German material tends to fall into two types : on the one hand, simple metaphorical references which involve no more than the word 'wind-egg' itself; and on the other hand, more complex metaphors which incorporate the process of laying or hatching as well. (23)

So far as can be determined, Gotthilf Treuer was the earliest German author to allude in a figurative fashion to the wind-egg. His Deutscher Dädalus (published in 1675) contains a delightful passage (see App.II, no.57) which describes how Aesop's hound saw in the water the shadow of itself holding a very much enlarged piece of meat in its mouth, snapped at it and lost the meat, 'for the enormous shadow was

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(23)

Cf the distinction drawn in Jacob and Wilhelm Grimm, Deutsches Wörterbuch, Leipzig, 1913, XIV.2. 278-279, s.v. Windei. Unfortunately, some of the texts cited there have proved unobtainable.

a wind-egg.' This reference, which suggests that (the shadow of) the meat was nothing but a delusion or a product of the imagination, was followed approximately a century later by a brief but scathing passage in one of Gotthold Lessing's Antiquarischer Briefe (cf Lessing's literal usage, discussed above). In the passage concerned (see App.II, no.62), Lessing says - with reference to certain mocking statements that have been made by his opponents - 'The hen made itself so audible as it sat on its egg; and for all that it was a wind-egg', thus indicating that these statements - for all their force - are worthless.

The reference found in Lessing is but the first of a long series of references in which the term 'wind-egg' is applied in a derogatory fashion to written statements, literary works, or the activity of writing itself (cf the English usage, mentioned above). Thus, in 1775, Matthias Claudius (ps. Asmus) suggested that the poet who affects a foreign style in his/her poetry 'lays wind-eggs' (see App.II, no.63). Four years later, we find in Johann Schummel's Spitzbart (see App.II, no.64), a brief episode in which the character Senft speaks in some trepidation of the possibility of a certain book amounting to nothing but a wind-egg. At the end of this same century (1798), in one of his personal letters (see App.II, no.65), Johann Paul Richter (ps. Jean Paul) wrote of a certain poet : '...so long as a page of mine has 3 readers, his poetry - which is as empty as a wind-egg - has 3 less.' Remarks of an equally disparaging nature are to be found in a letter of Johann Goethe dating to 1812, (see App.II, no.66): here, Goethe finds fault with the work of a particular poetess and pictorial artist, but concludes by saying that he finds

them all the less blameworthy 'since the German public... hatches such wind-eggs by preference.' In his Memorabilien, written during the first half of the nineteenth century, Karl Immermann likewise said - with reference to a certain author - 'The fine seminal vapour, which in true scholars first creates the ability to produce living intellectual fruits, failed however... as a result, it gave rise merely to wind-eggs and monstrosities...' (see App.II, no.68).

Immermann's scathing tone can be detected in Johann Scherr's passing reference to the 'trifling wind-egg of the Peter-in-Rome-fable', a reference found in his König Jan der Gerechte, composed during the latter part of the nineteenth century (see App.II, no.69). Equally harsh is the final of this series of references concerning literary productions : in his Werke (1884-1887 edition), Friedrich Jahn implies that certain writings "on education for the state" are merely wind-eggs (see App.II, no.72).

It has been suggested (see above) that the metaphorical application of the term 'wind-egg' is unlikely to have arisen except in the presence of an active, oral tradition pertaining to wind-eggs. Further proof of the existence of such a tradition appears to be provided by the fact that the wind-egg features in five separate proverbs recorded by Karl Wander in his nineteenth century Deutsches Sprichwörter - Lexikon (see App.II, no.71). All five proverbs concerned (viz. 'that should lay no wind-eggs for him', 'those are wind-eggs', 'he should pay that off with wind-eggs', 'to hatch wind-eggs', and 'to lay wind-eggs, nothing but wind-eggs') focus on the negative aspects of the wind-egg evident in the figurative examples discussed above : all have to do with the worthlessness

and insignificance of the wind-egg. It seems reasonable to suggest that these proverbs were in common usage in Germany, at least in the eighteenth and nineteenth centuries, if not before,<sup>(24)</sup> and that they were transmitted by word of mouth amongst the populace.

There can be little doubt, then, that from the thirteenth through until the nineteenth centuries the concept of the wind-egg - as an infertile, shell-less egg - was transmitted in the form of a popular, oral tradition in both England and Germany and that from the seventeenth century onwards the concept was also employed in a figurative sense in both countries. In the late nineteenth and early twentieth centuries, however, it would appear that the term 'wind-egg' suddenly lost currency in its literal usage and that, in consequence, the figurative use of the term also declined.

Evidence of the development of a more scientific attitude towards the wind-egg may be seen in Alfred Newton's Dictionary of Birds, first published in 1893 (see App.II, no.73). Here Newton suggests that abnormal eggs commonly occur in domesticated birds, and especially in fowls, where the artificial overproduction of eggs tends to exhaust the oviduct; and that soft-shelled or wind-eggs may well be due to a lack of calcareous food. Newton's rational explanation for the existence of soft-shelled eggs is one that is still considered valid today.<sup>(25)</sup>

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(24)

These being the two centuries during which the comparable figurative usage of the term 'wind-egg' appears to have flourished.

(25)

A spokesman for the New Zealand Poultry Board recently gave this very explanation when asked to explain the production of such shell-less or soft-shelled eggs.

Whether it was as a result of scientific advances and the adoption of a more objective, critical approach towards the eggs in question, or whether it was simply a case of a term dropping out of popular usage, from the late nineteenth/early twentieth century on there appears to be little evidence for the continued usage of the term 'wind-egg' in either its literal or its metaphorical sense. Thus, although there is an entry for 'wind-egg' in the 1933 edition of the Oxford English Dictionary,<sup>(26)</sup> the most recent example cited there is the reference in Newton's Dictionary of Birds just quoted, and the term does not appear to be in current usage in the English language today.<sup>(27)</sup> Moreover, although there is likewise an entry for 'Windei' in Langenscheidts Enzyklopädisches Wörterbuch (published in 1975),<sup>(28)</sup> the term 'Fließei' appears to have displaced 'Windei' in so far as its literal meaning is concerned, whilst the term 'Niete' is apparently more commonly used to convey the figurative sense of 'failure' or 'washout'. The turn of the century thus appears to be the point at which the 'modern' version of the wind-egg concept effectively came to an end.

In conclusion, the ancient tradition concerning hens and the laying of wind-eggs is one that is first evidenced in a series of figurative allusions found in Greek tragedy, comedy and philosophy of the

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(26)

Oxford English Dictionary, Oxford, Clarendon Press, 1933, XII.159, s.v. Wind-egg.

(27)

This was verified by the above-mentioned spokesman for the New Zealand Poultry Board who had never before heard the term in question.

(28)

Otto Springer (ed.), Langenscheidts Enzyklopädisches Wörterbuch, vol.II, Hodder and Stoughton, 1975, s.v. Windei.



fifth and fourth centuries BC. Although significant, these allusions have little part to play in the subsequent development of the tradition; rather, it is the detailed and comprehensive data recorded by Aristotle which provides the major impetus for the tradition. Thus, from Pliny onwards the influence of Aristotle is unmistakable : numerous accounts derive either directly or indirectly from the information on wind-eggs recorded in the Historia Animalium and the De Generatione Animalium. These accounts persist until the seventeenth century; but at the end of this same century, thanks to the scientific research of the German botanist Camerarius, the ancient literary tradition comes to a close. The demise of the literary tradition does not imply the end of the concept of the wind-egg, however. In subsequent centuries this concept lives on in what can only be called a vigorous existence.

Evidence found in the ancient literary tradition suggests that the written accounts were accompanied by an active, oral tradition concerning wind-eggs. Although the evidence in question relates to specific time periods (the fifth and fourth centuries BC, the first centuries BC and AD, and the thirteenth century AD), there seems to be no reason to suppose that the popular, oral tradition did not persist in the intervening periods as well. Whether or not that is so, the popular concept of the wind-egg found in thirteenth century England and Germany appears to have flourished for century upon century thereafter, only passing out of use at the end of the nineteenth century. What is more, this same vital concept appears to have given rise to a figurative usage of the term 'wind-egg' which existed side by side with the literal usage, likewise passing out of currency at the turn of this century. The similarities

between the modern and the ancient figurative application of the term are remarkable.

During its transmission, the tradition provides evidence of a number of interesting variations. These may be summarised as follows:

1. the wind/initiating factor ((unspecified) wind; West wind Zephyrus; abundance of residue; dust; lustful imagination of the birds; moist food; bread; lack of calcareous foods);
2. the hen/female bird (hens; geese; pigeons; partridges; peahens; vulpanders); and
3. the characteristics of the wind-egg (small; unappetising; moist; lacking in sentient soul; soft; shell-less; soft-shelled).

One of the most noteworthy features in the transmission of the tradition is the development - from as early as the thirteenth century AD - of the Anglo-German concept of the shell-less or soft-shelled wind-egg, a concept which prompts a variety of rationalisations, all relating to the diet of the hens concerned.

The tradition pertaining to hens and the laying of wind-eggs appears to have its origin in the visible effects of the wind - or, more specifically, the West wind Zephyrus - on hens in springtime.

Particularly important here is the fact that the wind involved is Zephyrus, the very wind that plays a significant role in the zoological strand of the tradition concerning mares (see chapter III, above). In the instance of the hen tradition, however, it is notable that from as early as the time of Aristotle the wind is not always portrayed as the predominant factor in the production of wind-eggs, other factors such as an abundance of residue, dust and the lustful imagination of the hens taking priority. Indeed, with

the development of the Anglo-German concept of the shell-less wind-egg, the significance of the wind appears to be almost entirely lost. It must be stressed that these variations do not alter the fact that the ancient tradition apparently has its origin in the visible stimulation of hens by the wind.

## V THE WIND-SIRED TIGER

The ancient tradition of the wind-sired tiger (or more appropriately, tigress) is one that is first recorded by Oppian of Apamea early in the third century AD. Found solely in poetic works (and in prose paraphrases of such works), this tradition is noteworthy for the fact that it strongly resembles the epic concept of the wind-sired horse, but at the same time displays certain distinct features of its own.

Oppian - as was indicated above - was the earliest author to make allusion to the tradition in question. In his Cynegetica, an epic poem about big game in the Middle East (probably written between 212 and 217 AD),<sup>(1)</sup> Oppian twice refers to tigers as the offspring of the West wind Zephyrus, and as endowed with the speed of their sire (see Appendix III, passages no.1 and 2). Oppian's portrayal of tigers as being sired by the wind, and as therefore being wind-swift, vividly recalls the epic descriptions of wind-sired horses previously discussed (see chapter III, above), although one important difference should be noted: according to Oppian, all tigers are the offspring of the wind, whereas in the epic strand of the horse tradition, individual horses are said to have the wind as their sire. The association between the wind and the tiger (even, as that between the wind and the horse) may be said to have its basis in the notion that the tiger is possessed of the speed of the wind and that it must therefore be the offspring of the wind. Indeed,

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(1)

Cf P.W. XVIII. 1. 703-704 s.v. Oppianos.

the tiger is described as 'animal velocitatis tremendae' ('an animal of outstanding speed') even as early as the first century AD.<sup>(2)</sup>

Oppian's contribution to the tradition of the wind-sired tiger does not end there, however. In the second of the two passages concerned (see App.III, no.2), Oppian suddenly alters his stance. Without warning he suggests that tigers are not, in fact, the offspring of the West wind Zephyrus, and that the rumour that this race is completely female and does not mate with a male has no basis whatsoever. Oppian's unexpected self-contradiction is noteworthy on a number of counts. In the first instance, it reveals that the central focus of the tradition is not merely the concept of the wind-sired tiger, but also the notion that all tigers are female and that they reproduce by means of the West wind. In this expanded form, the tradition shows remarkable similarities with the ancient tradition concerning vultures and their procreation by the wind (see chapter VI below).

What is more, thanks to Oppian's change of stance, we learn that the concept of the wind-sired and wind-impregnated tigress is one that is already well-established in Oppian's time. An important question arises here : is the tradition that Oppian has in mind one that is largely transmitted by literary texts or is it an oral tradition? Oppian's use of the term *κοιτις*, which is usually translated as 'common talk' or 'rumour', could perhaps be interpreted as an indication of a popular oral tradition pertaining to the wind impregnation of tigers. However, in context, the term seems to be equally applicable to literary accounts of the phenomenon

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(2)

Pliny N.H.VIII.25.66; cf, too, Mela, De Chorographia III.5.7.

in question. This being the case, it is difficult to provide a satisfactory solution to the question of Oppian's sources. One point that is worth mentioning here, though, is that in Latin poetry (first century BC - early second century AD) the term 'tigris' or tiger is always feminine.<sup>(3)</sup> This would seem to indicate that amongst poets in the period prior to Oppian the tiger was generally regarded as female. As the tradition in the centuries following Oppian is transmitted solely in poetic works (and in prose paraphrases of poetic works), it does not seem unreasonable to assume that Oppian may well have drawn on poetic sources for the tradition. If this was the case, it does not, of course, preclude the possibility of the passive transmission of the tiger tradition by those familiar with the texts in which it is recorded.

Despite Oppian's negative comments about the tradition, it was subsequently recorded by a number of authors. In the fourth or fifth century AD, it was presented in a novel form by Symphosius, the creator of a series of one hundred riddles, each composed in hexameters. Riddle no.38 of Symphosius is devoted to 'The Tigress' and it contains - as two of its clues - the lines : 'I have mated with the wind, than which I am swifter; the wind gives me offspring, and I do not seek a mate' (see App.III, no.4). These lines, which indicate that the tigress mates not with a male but with the wind, may be directly compared with the version of the tradition presented (and denied) by Oppian.

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(3)

Lewis and Short, s.v. tigris.

Comparison of Symphosius' riddle with the accounts of Oppian does, however, highlight one distinct difference : whereas Oppian describes the tiger (or tigress) as possessed of the same speed as its sire, Symphosius proposes that the tigress is swifter than its mate, the wind (see App.III, no.4). Whether or not such a detail is an example of exaggeration for effect, it is interesting to note that two contemporary or near-contemporary versions of the tradition depict the tigress in an identical fashion. Thus, both Claudian - in his unfinished epic the De Raptu Proserpinae (see App.III, no.3) - and Corippus - in his epic entitled Iohannides<sup>(4)</sup> (see App.III, no.5) - make allusion to the tigress as being swifter than the West wind Zephyrus, her mate. It would seem, then, that from the fourth to the sixth centuries AD, this was the form of the tradition that was most favoured.<sup>(5)</sup>

Subsequent centuries saw the appearance of two further versions, both of them prose paraphrases of earlier verse accounts. The first of these is an eleventh century paraphrase of a verse account produced in the fifth century by the zoological writer, Timotheus

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(4)

For the debt of Corippus' epic to that of Claudian, see P.W.IV.1241 s.v. Corippus.

(5)

It is possible that the fifth to sixth century poet Dracontius also recorded the concept of the wind-impregnated tiger. In a brief passage in his Laudes Dei, he describes the tigress as 'un&o fetata marito' (I.311). If Vollmer's reading of 'vento' for 'un&o' is correct, then this passage may readily be accepted as a further example of the tiger tradition; cf Dirk Kuijper, Varia Dracontiana, Diss., Amsterdam, 1958, p.25.

of Gaza<sup>(6)</sup> (see App.III, no.6). The paraphrase in question highlights the two separate but complementary emphases evident in the tradition : it refers firstly to the tigress that produces offspring when impregnated by the wind, then, changing slant, suggests that the tigress is extremely swift because it has been sired by the wind.

The second of the two versions is a Byzantine paraphrase of a verse account produced by Dionysius of Philadelphia<sup>(7)</sup> (see App.III, no.7). The passage requires little comment for it in fact concerns the wind impregnation of vultures (see chapter VI, below) and contains merely a passing reference to the parallel between the impregnation of vultures and that of tigers (tigresses) by the West wind. With this passage, we reach the end of the tiger tradition, a tradition that clearly provides little evidence of being anything other than a literary tradition.

In conclusion, the Graeco-Roman tradition concerning the tiger is characterised by the fact that it is a favourite of poets, occurring solely in poetic works (and in late paraphrases of such works). It bears remarkable resemblances to the epic strand of the horse tradition in that it concerns the wind-sired tiger (tigress) endowed with the speed of its sire, but it also shows definite similarities to the tradition about vultures and their reproduction by means

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(6)

For a discussion of Timotheus' writings, espec. his didactic poem on animals, see F.S. Bodenheimer and A. Rabinowitz, Timotheus of Gaza Περὶ Ζώων, Paris/Leiden, 1948, Introd., pp.4-7.

(7)

An author about whom very little is known; cf P.W.V.925 s.v. Dionysios.



of the wind (see below). The tradition in question is one that is first evidenced in Oppian, although it is apparently already well-established by that point. In subsequent times it is represented by only a handful of versions, the last of which are in fact paraphrases of earlier versions no longer extant.

In its transmission, the tiger tradition appears to have been predominantly, if not entirely, a literary tradition. Even if the tradition was not transmitted actively, however, there seems to be a good chance of it having been passively transmitted by those familiar with it as a literary concept. Throughout the existence of the tradition, the twin emphases (of the wind-sired and the wind-impregnated tigress) are maintained with little variation. The West wind Zephyrus is also a constant throughout.

The tradition appears to have at its heart two central and complementary concepts : firstly, that of the tiger as a creature that is wind-swift and therefore necessarily the offspring of the wind (compare the similar wind/horse association delineated above); and secondly, that of the tiger as existing only in the female sex and as therefore requiring a parthenogenetic method of reproduction. The fusion of both concepts appears to provide the basis for the tradition.

## VI THE PROCREATION OF VULTURES BY MEANS OF THE WIND

More long-lasting than the tiger tradition, but in certain respects similar to it (see chapter V, above), is that concerning the procreation of vultures by means of the wind. According to this tradition, the vulture is a bird which exists only in the female sex and which utilises the wind for the purposes of reproduction. Speculation about the origin of the vulture appears to have begun as early as the fourth century BC, but it is not until the late first/early second century AD that the concept of the parthenogenetic vulture first occurs in Graeco-Roman literature. From this time on the tradition flourishes, especially in Christian literature where the concept in question is frequently employed for apologetic purposes.

The following pages will be devoted to a detailed discussion of the ancient tradition concerning vultures and their procreation by means of the wind. As in previous chapters, particular attention will be given to the nature of the tradition, to its development, and to the question of its transmission.

So far as can be ascertained, it was Herodorus of Herakleia who initially attributed a mysterious origin to the vulture (see Appendix IV, passage no.1). Writing around 400BC, Herodorus suggests that since the nest of the vulture has never been seen, and since vultures tend to appear suddenly in the wake of armies, they must derive from some other country unknown to the Greeks. It would appear that others likewise subscribed to the viewpoint expressed by Herodorus, but the only evidence we have of this is a passing reference to be found in Aristotle, who on two separate occasions

discusses Herodorus' suggestion (see App.IV, no.s 3 and 3). Aristotle himself took a different standpoint on the matter. Although conceding that it is difficult to catch sight of the vulture's nest and its young, he asserts that this is not so much because the vulture derives from some obscure land, but is rather due to the fact that the bird builds its nest on inaccessible rocky cliffs (see App.IV, no.s 2 and 3).<sup>(1)</sup>

Discussion of the belief of Herodorus and others in the mysterious origin of the vulture continued in subsequent centuries, but was much influenced by the Aristotelian approach. Thus, in the third century BC, the paradoxographer Antigonus of Carystus makes reference to the marvel in question, repeating Aristotle almost word for word (see App.IV, no.5); and in the first century AD, Pliny echoes Aristotle's sentiment, if not his exact words, when discussing the matter in his Naturalis Historia (see App.IV, no.9). As will be seen, however, the strong stance adopted by Aristotle, Antigonus and Pliny did not dispel ancient curiosity concerning the derivation of the vulture.

Indeed, the speculation of Herodorus served to pave the way for the introduction into Graeco-Roman literature of an Egyptian concept:

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(1)

There is a passage in the Mirabiles Auscultationes, attributed to Aristotle, to the effect that large vultures have no young, and that this is proven by the fact that no one has ever seen a nest of large vultures (see App.IV, no.4). The apparent discrepancies between this passage and those in the Historia Animalium may be disregarded for the M.A. is almost certainly a spurious work.

that of the procreation of the vulture by means of the wind.

The Greek author, Plutarch (late first/early second century AD) was the first to record this concept. In the context of the use of vultures in augury, Plutarch makes mention not only of the long-established view that these birds derive from some other foreign land (see App.IV, no.11), but also of the excitingly new concept that all vultures are female, and that, for the purposes of reproduction, they conceive by the East wind (see App.IV, no.10).

Two aspects of Plutarch's account concerning the wind impregnation of vultures deserve particular comment. The first is the comparison that Plutarch makes between the fertilisation of vultures by the East wind, and that of trees by the West wind. This comparison brings to mind the passage of Pliny in which he mentions the wind-impregnated Spanish mares in the same breath as the fertilisation of all plants and trees by the westerly breeze, a breeze that he describes as "the generating breath of the universe" (see App.I, no.9). It would appear that, even as Pliny's view of the westerly breeze as the regenerative force in the plant kingdom facilitates his acceptance of the possibility of the wind impregnation of Spanish mares, so Plutarch can more readily accept the Egyptian concept of the procreation of vultures by means of the East wind on account of his belief in the ability of the West wind to fertilise trees. Here, too, just as in the zoological strand of the tradition about mares (chapter III, above), the attributes of the West wind as envisaged by the ancients may be seen to play a significant role.

The second noteworthy aspect of Plutarch's account is his attribution of the concept of the wind-impregnated vulture to the Egyptians. Here it is appropriate to point out that the vulture was a bird of considerable significance in ancient Egypt, being more highly regarded in that country than in any other part of the ancient Mediterranean world.<sup>(2)</sup> Believed by the Egyptians to exist only in the female sex (a point mentioned by Plutarch himself), this bird served as an object of religious worship, as evidenced in the cult of the two Vulture-Goddesses, Mut and Nechbet. Moreover, it was viewed as a symbol of power and protection; and it was used as a hieroglyph to portray a variety of meanings. Given the high regard of the Egyptians for the vulture, and their particular interest in this bird, it seems reasonable to assume that the wind impregnation of the vulture was a widespread popular tradition in ancient Egypt. The concept introduced by Plutarch is thus one which is specifically and uniquely Egyptian, but which is remarkable for the fact that it is compatible not only with earlier Greek speculation concerning the vulture, but also with other Graeco-Roman beliefs involving the wind impregnation of animals.

Plutarch's indebtedness to Egyptian myth and folklore is indisputable; but one question remains : what was the source of Plutarch's information? Here, there appear to be two major possibilities.

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(2)

This - and the following - information is derived from an excellent article by W. Speyer on the vulture (Geier) in Theodor Klauser (ed.), Reallexikon für Antike und Christentum, Anton Hiersemann, Stuttgart, 1976, Band IX, 430-468 (see espec. 432-436). I take this opportunity to acknowledge my considerable debt to the article in question.

Firstly, since Plutarch is known to have visited Egypt during his lifetime,<sup>(3)</sup> it is not improbable that he learnt of the Egyptian belief in the wind fertilisation of the vulture - either from oral or from written sources, or both - whilst there. The other possibility is a more specific one, namely, that Plutarch may well have derived his information from the first century AD grammarian and philosopher, Chaeremon of Alexandria.<sup>(4)</sup> Unfortunately, the work of Chaeremon has survived only in fragments;<sup>(5)</sup> but three passages (tentatively) attributed to him contain references to the vulture and its impregnation by means of the wind.

For the purposes of this study, the first of the passages concerned (recorded by the late third/early fourth century AD Christian writer Eusebius, and also attributed to Eusebius' third century AD predecessor Porphyrius; see App. IV, no.s 6, 15 and 16) is of little importance except in so far as it states that the people of Eileithyia, where the Vulture-goddess <Nechbet> was worshipped, considered all vultures to be female and believed that they conceived from the wind. The two remaining passages, however, discuss the procreation of the vulture in some considerable detail, disagreeing with one another only on certain minor points. Thus, that recorded by Horapollo

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(3)

Cf P.W. XXI.1.654, s.v. Plutarchos

(4)

For further details, see the article entitled Chairemon in P.W.III.1. 2025-2027.

(5)

See Hans-Rudolf Schwyzer, Chairemon, Leipzig, Kommissionsverlag Otto Harassowitz, 1932 (Klassisch-philologische Studien, 4)

in his fourth century AD Hieroglyphica (see App.IV, no.s 7 and 17) states that there are no males in the vulture species; that the (female) vulture opens its sexual organ to the North wind for a period of five days when it is desirous of conception; and that it gestates for 120 days, feeds its young for a further 120 days, and devotes the remaining 120 to itself. The third and final passage, recorded by the twelfth century Byzantine scholar Joannes Tzetzes (see App.IV, no.s 18 and 27), contains a similar - although not completely identical - statement : all vultures, it says, are female; to conceive they fly for five days with the winds against their rump; then, in 120 days they produce windegg, in as many more days they hatch the eggs, and in a further 120 days they rear their offspring.

Although sufficiently close in content to be (at least tentatively) attributed to the same source, namely, Chaeremon, the two passages in question display a number of minor differences. Firstly, there is the matter of the wind itself (whether it be specifically the North wind, or simply the unspecified winds); secondly, there is the product resulting from the conception (whether it be living offspring or rather eggs); and thirdly, there is the series of activities allocated to each portion of the year (the nature of which changes according as the vulture is thought to be viviparous or oviparous).<sup>(6)</sup> As will be seen, these variations (plus one or two

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(6)

It is worth pointing out that there is an apparent internal discrepancy in the material recorded by Horapollo: having initially spoken of vultures as oviparous, he subsequently describes their various phases in the process of reproduction as though he envisages them as

others) persisted throughout the entire course of the vulture tradition.

Given the details specified by Plutarch in his account of the procreation of vultures by means of the wind, it is possible then, that he may have obtained his information from Chaeremon of Alexandria.<sup>(7)</sup> Whatever his source(s), Plutarch's account served as the starting point of a long and vital tradition.

Only a century or so later, Aelian introduced the subject into his De Natura Animalium (see App.IV, no.13). His version follows a similar pattern to that of Plutarch<sup>(8)</sup> and the fragments of Chaeremon in that it begins by stating that all vultures are female, then discusses their impregnation by the wind; but it also includes a number of interesting variations. For instance, it attributes a certain intelligence to vultures, whereby they know that there are no males amongst them and therefore make a point of conceiving by

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viviparous. If Horapollo's account were to refer to vultures as oviparous throughout, the minor differences evident between the two accounts (i.e. of Horapollo and Tzetzes) would be considerably reduced, and this in turn would render them even more convincing as sources for Chaeremon.

(7)

Plutarch's account differs in one respect from the two sources for Chaeremon, that is, in its description of the impregnating wind. However, as this is also a point of disagreement between Horapollo and Tzetzes, it need not concern us here.

(8)

It is appropriate to note here that Zirkle, op.cit., pp.105-106, confuses the accounts of Plutarch and Aelian, attributing De Natura Animalium II.46 to Plutarch rather than to its rightful author.



the wind.<sup>(9)</sup> Moreover it suggests that, in order to conceive, vultures open their beaks (rather than their sexual organs) to the wind; it specifies either the South or the South-east wind as the one that effects impregnation; and it states that vultures have a three-year gestation period.

Aelian's suggestion that vultures conceive via their beaks rather than their sexual organs is reminiscent of the descriptions found in Virgil and Pliny of the wind impregnation of mares (see chapter III, above). It may well be that Aelian has in mind Pliny's concept of the westerly breeze as a generating force and that he applies this, by extension, to the South and South-east winds; but it seems even more likely that he is thinking in terms of the winds as souls and of their being breathed into the body.<sup>(10)</sup> Certainly, this interpretation would fit well with the subsequent use of the concept of the wind-impregnated vulture by Christian scholars to prove the validity of the impregnation of the Virgin by the Holy Spirit (see below).

The specification of the impregnating wind as being the South or South-east wind is interesting in so far as it raises the question as to whether the two winds specified may have been associated by the Egyptians with the procreation of the vulture or whether they are in fact a Graeco-Roman innovation. This is a difficult question

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(9)

It is interesting to compare Aelian's statement concerning vultures with that regarding sheep (see App.V, no.5). In both instances he attributes human qualities to the animals concerned, and makes them responsible for their own actions.

(10)

Cf chapter III, n.4 and the references cited therein. For further discussion of this subject, see chapter IX, below.

to answer. On the one hand, the South and South-east winds come close to the East wind, that mentioned by Plutarch in his account of the Egyptian concept of the wind-impregnated vulture. On the other hand, whilst the South wind has not been apparent in the traditions relating to mares, hens and tigers, it is one of two winds associated by the Greeks and Romans with the reproduction of sheep. It does not seem wise to attempt even a tentative solution here (and even an examination of Aelian's possible sources - for which see below - does not help). Whatever Aelian's reasons for specifying the South and South-east winds, it would appear from the several winds named by Chaeremon, Plutarch and Aelian that no one wind was generally considered more effective than the others and that, in fact, the direction of the wind was far less significant than it seems to have been in the traditions concerning mares, hens and tigers.

The three-year gestation period attributed to the vulture by Aelian does, however, appear to be a Graeco-Roman addition to the tradition. Not only is this detail missing from Chaeremon, but, as has already been indicated in relation to the equine tradition, the number three had a special significance in Graeco-Roman antiquity.<sup>(11)</sup> This fact may well have contributed to the introduction of the figure specified for the period of gestation.

One further question remains concerning Aelian's account : from what sources did he obtain his information? Were they oral or literary?

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(11)

See chapter III above, and espec. n.30 for the references cited therein.

And if literary, were they Egyptian or Graeco-Roman? That Aelian was, indeed, reliant on earlier sources for his information is evident from his opening words which - literally translated - read : 'They say (φασι) a male vulture is never born.' Unfortunately, the term φασι can be used to designate both literary and oral sources,<sup>(12)</sup> and as the context does not clarify the situation, we are left in a state of uncertainty as to the exact nature of the sources referred to. However, if we can rely on the words of Origen (the Christian scholar who wrote about a century after Aelian),<sup>(13)</sup> it would appear that there were a number of writers on animals prior to the time of Origen who had mentioned the phenomenon of the vulture. So long as Origen is not simply pluralising Aelian himself, then it seems possible that one or two of the writers referred to may have preceded Aelian and therefore have been utilised by him as source material. If this is so (and this suggestion can be no more than tentative), it would seem reasonable to conclude that Aelian relied on literary sources for his information (although whether these were Egyptian or Graeco-Roman it seems impossible to tell). Certainly, there appears to be no evidence to support the view that Aelian may have drawn on oral sources.

The influence of Aelian on subsequent generations was considerable, as will become evident in ensuing discussion. Meanwhile, however, at approximately the same time as Aelian was writing, there began what was to be a major trend in the vulture tradition, namely, the transmission of the concept of the wind-impregnated vulture by

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(12)

Liddell and Scott, s.v. φασι

(13)

See App.IV, no.14. This passage is discussed below.

Christian scholars. This trend was initiated by Tertullian and Origen, and in subsequent centuries numerous Christian scholars recorded the concept, frequently for apologetic purposes.<sup>(14)</sup> One point that should be noted about this trend is that the scholars concerned often omit specific reference to the wind as the fertilising agent, although apparently aware that this role is traditionally assigned to the wind.

As indicated above, the earliest Christian writer to allude to the vulture in this way was Tertullian, a contemporary of Aelian. In the context of the Valentinian belief that Sophia conceived without the help of a husband and gave birth to a female child, he reports that vultures are said to exist in the female sex only, and to become mothers without the assistance of a male (see App.IV, no.12).<sup>(15)</sup> Here, the concept is cited not by way of support for a Christian doctrine but as a parallel to a doctrine promoted by the Valentinians.

It was for a truly apologetic purpose, however, that Origen (a near contemporary of Tertullian) introduced the subject of the vulture into his Contra Celsum (see App.IV, no.14). In the passage concerned, Origen asserts - in an effort to convince pagans of the possibility of the Virgin birth of Jesus - that the Creator provided parallels for that birth in the reproduction of certain animals, and that, as writers on animals confirm, the vulture is just such a creature for it preserves the continuation of its species without copulation.

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(14)

Here, it is useful to compare the similar use made by Christian scholars of the beliefs concerning mares and hens (see chapters III and IV, above). Of the three animals, the vulture is, however, that most favoured by the scholars concerned.

(15)

Cf App.II, no.33, and the discussion thereof in chapter IV, above.

It is interesting to note Origen's acknowledgement of his debt to writers on animals (cf discussion above). This suggests not only that Origen was reliant on literary sources for his information, but more specifically that he would have been familiar with Aelian's account and therefore with the role attributed therein to the wind, although refraining from any mention of the fertilising agent himself.

In the fourth century AD, two Christian scholars made much the same use of the pagan belief in the parthenogenesis of the vulture as Origen had done before them.<sup>(16)</sup> The two scholars concerned were Basil and Ambrose, and their accounts subsequently proved to be a source of inspiration for a considerable number of authors, both Christian and non-Christian.

In his version - found in the Hexaemeron (see App.IV, no.18) - Basil begins by asserting that in the case of many birds, eggs produced without the assistance of a male are infertile, but that vultures are accustomed to reproduce without coupling and to do so until an advanced age since they live for a hundred years; and he then suggests to his readers that if they come up against people who deny the possibility of the Virgin birth, they must remember that the Lord has provided in nature a thousand reasons for believing in the marvellous. Basil's statement concerning the procreation of vultures is notable on two counts : firstly, for the fact that it stresses the oviparous nature of the vulture, and - allied to that - the latter's ability to produce fertile wind-eggs<sup>(17)</sup> (a detail strongly reminiscent

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(16)

Here I omit discussion of the late third/early fourth century Christian writer Eusebius as his reference to the wind impregnation of vultures has already been dealt with in relation to Chaeremon (see above).

(17)

Cf chapter IV, above.

of Chaeremon - as recorded in Horapollo - and possibly indebted to him); and secondly, because it attributes a one hundred year life-span to the vulture (an innovation in the tradition as we have it, but one that may possibly derive from literary sources as well). Equally interesting, however, is Basil's application of the traditional concept, for he introduces it not so much to convert pagans to the Christian faith as to give Christians themselves added confidence in the plausibility of the Virgin birth, even in the face of criticism from non-believers.

Between Basil's account and that of his contemporary Ambrose (see App.IV, no.19), there are remarkable similarities. Indeed, it would seem that the one was influenced by the other,<sup>(18)</sup> or that both scholars drew on the same source(s).<sup>(19)</sup> Thus, Ambrose commences by stating that vultures conceive without intercourse with a male, and that they continue producing offspring until they are one hundred years of age; proceeds to assert that although pagans do not refute the procreation of the vulture without a mate, they nonetheless deny that a virgin can give birth to a child; and concludes by encouraging his readers to note that the Lord has provided many examples from nature itself as proof of the possibility of the birth in question. There can be no doubt that the

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(18)

That Ambrose may well have been familiar with Basil's work seems to be confirmed by D.J. Geanakoplos, op.cit., p.57.

(19)

Perhaps Chaeremon also attributed a one hundred year life-span to the vulture? This does not seem incompatible with the information found in the fragments (recorded by Horapollo and Tzetzes). If this was the case, then he may well have been a common source for both Basil and Ambrose.

information recorded by Ambrose about vultures is parallel to that found in Basil; although it should be noted that the omission of any reference to eggs may indicate that Ambrose saw the vulture as viviparous. Likewise, there can be no doubt that Ambrose (just as Basil) addresses himself, not to pagans, but to Christians themselves.

One further point is worth noting here : whereas Basil (even as Origen before him) simply adopts the phenomenon of the wind impregnation of the vulture without hesitation and, what is more, attributes it to the Creator as part of his divine plan, Ambrose on the other hand tends to take a slightly more objective stance, and whilst repeating the tradition about the vulture, nonetheless appears to classify it as a pagan belief and distance himself from it. The approach adopted by Ambrose raises an important question (a question that has already been discussed in relation to Augustine, Lactantius and Bacon in chapter III) : does the classification of the concept of the wind-impregnated vulture as a pagan belief necessarily mean that there was an oral as well as a literary tradition? The same answer as was given in chapter III applies here. Since there is no evidence that Ambrose has utilised anything other than literary sources for his information concerning the vulture, it would be unwise to suggest that his account provides proof of the existence of a concurrent oral tradition. (The most that could be suggested is that the tradition was transmitted in a passive fashion by those who read of it in its literary form.)

Thus far, then, the tradition of the procreation of the vulture by means of the wind appears to have been nothing other than a scholarly literary tradition, passed on from one author to another, with little

if any input from oral material. In subsequent times, the nature of the tradition does not appear to change. Indeed, such was the impact of both Basil and Ambrose on later generations of scholars that their accounts gave rise to no less than a dozen others. Most of the accounts in question were derived from either Basil or Ambrose individually, but one or two were dependent on both. Much of the remainder of this chapter will be devoted to an examination of these accounts, firstly, of those reliant on both Basil and Ambrose, secondly, of those initiated by Basil and, finally, of those inspired by Ambrose. (20)

In the fifth century AD, Pseudo-Eustathius included in his Hexaemeron a passage that may well have derived its substance, at least in part, from both Basil and Ambrose (see App.IV, no.20). The passage is nothing more than a general statement to the effect that the vulture conceives by the wind, has no physical contact with a male, and lives for a hundred years; although a comment is also appended to the effect that the bird lives in lofty places, and that no one knows where it makes its nest (a comment that is reminiscent of some of the earlier accounts about the vulture). The reference to the vulture's one hundred year life-span forms a direct parallel with the references found in both Basil and Ambrose. Two centuries later, and likewise in a work entitled the Hexaemeron, Georgios Pisides continued the pattern evidenced in Basil and Ambrose

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(20)

Since the accounts to be discussed in this next section all have their origin in Basil and/or Ambrose, it is difficult at times to avoid repetition. An attempt has been made to reduce excessive reiteration, whilst nonetheless ensuring that a clear outline of the development of the tradition is given.



(and also their predecessor, Origen) : he defended the plausibility of the Virgin birth by citing the instance of the vulture and its impregnation by means of the wind (see App.IV, no.22). In his account, he actually begins by indicating his familiarity with those authors who have introduced the subject of the vulture for apologetic purposes; proceeds to give his own viewpoint on this whole question; and then concludes with the statement that nature has endowed birds such as the vulture with a particular ability so as to encourage faith in the enigma of parthenogenesis. Pisides' debt to his predecessors is unmistakable; but there is also one particular aspect of the established argument which he develops in a new and interesting fashion. He suggests that, in his view, it was necessary for pale reflections of the Virgin birth to exist in nature itself, so that nature would neither undergo an innovation because of the birth, nor reveal too much concerning the mysteries of that birth (for vultures, unlike Mary, do not remain virgins after reproducing). Thus, although he draws a parallel between the Virgin birth and the wind impregnation of vultures, Pisides also maintains that there are certain vital distinctions between the two.

Of those authors who drew directly on Basil, the earliest was the pagan writer, Theophylactus Simocattes, a seventh century contemporary of Pisides. In his Quaestiones Naturales (see App.IV, no.23), Simocattes discusses the vulture and its method of reproduction, commencing with a statement which is derived almost word for word from the initial sentence of Basil's account. Thus he relates that in the case of many birds, eggs produced without the assistance of a male are infertile, but that vultures are bidden by the laws

of nature to reproduce without coupling. To this initial statement derived from Basil, he appends a description of the way in which vultures fly against the wind to ensure conception, a description that is in fact nothing other than a slightly revised and enlarged version of Aelian's account. Simocattes fuses the information obtained from his two separate sources most successfully. However, in so doing, he imposes upon Basil's words a meaning that does not seem to have been initially intended, for, following Aelian, he advocates that vultures produce live offspring, not wind-eggs. Basil, on the other hand, seems to have believed that vultures are oviparous (although as Simocattes demonstrates, his words can be interpreted either way).

In the twelfth century AD, the Christian scholar Michael Glycas utilised the accounts of both Basil and Theophylactus Simocattes to formulate his own account (see App.IV, no.28). In form, the passage in question closely resembles that of Simocattes, with the one exception that Glycas adds a final sentence in which he draws a parallel between the reproduction of the vulture and the Virgin birth for apologetic purposes. This concluding statement suggests a direct line between Basil and Glycas, a link that is confirmed by the fact that Glycas' opening words follow those of Basil even more closely than do those of Simocattes. There can be no doubt, then, that Glycas relied not merely on Simocattes but also on Basil.

Basil served as a source for two further Christian scholars : Symeon Metaphrastes in the tenth century AD (see App.IV, no.25) and Arsenius in the sixteenth century (see App.IV, no.38). In his twenty-second sermon, Metaphrastes quotes Basil almost word for word, although in

a slightly different order from the original; whilst Arsenius, in his 1533 preface to Manuel Philes' De Animalium Proprietate, makes a more general statement, but is nonetheless dependent on Basil for the terminology which forms the heart of that statement. As neither author introduces anything particularly noteworthy or original, their passages do not require close scrutiny.

The late sixth/early seventh century scholar, Isidore, was the first of a series of authors, both Christian and non-Christian, who derived inspiration from Basil's contemporary, Ambrose. Isidore's account (see App.IV, no.21) comprises little more than a résumé of the details found in Ambrose, with the apologetic aspect omitted. Thus, it states that vultures conceive and produce offspring without engaging in intercourse, and that their offspring live until they are almost one hundred years old. In the ninth century AD, the Christian writer, Rabanus Maurus, took the liberty of repeating Isidore's passage word for word (see App.IV, no.24); and Rabanus' statement was in turn paraphrased by the German author, Konrad von Megenberg, in his fourteenth century Buch der Natur (see App.IV, no.34).

Meanwhile, two Christian scholars followed the example set by Ambrose and cited the parthenogenesis of the vulture for apologetic purposes. The first of these was Roger Bacon<sup>(21)</sup> who, in his thirteenth century Opus Maius (see App.IV, no.30), suggests that the human mind can be influenced to accept the Virgin birth by the fact that certain animals

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(21)

Cf chapter III, above, where Bacon likewise refers to the wind impregnation of mares for apologetic purposes.

such as vultures - as Ambrose says in his Hexaameron - conceive and bear offspring whilst remaining in a state of virginity. Bacon's acknowledgement of Ambrose leaves no doubt as to his source.

Similarly, there can be no doubt about the source of the second scholar concerned, namely, Werner of St. Blaise (? fifteenth century AD), for his account is copied directly from that of Ambrose with only one or two minor changes (see App. IV, no. 35).

So far as can be ascertained, there were only two other authors who derived their accounts essentially from Ambrose : Brunetto Latini and Joannes Ravisius Textor. Writing in the thirteenth century, Latini appears to have been the first to introduce the tradition of the vulture into Italian literature (see App. IV, no. 31). His version to some extent resembles that of Isidore (and Rabanus Maurus) in that it gives nothing more than the essential details. However, in the case of Latini, his source is a little more difficult to determine, mainly because he is writing, not in Latin, but in Italian. Nonetheless, it would seem from the wording that he uses that he is following Ambrose rather than Basil.

Finally, Textor. The account provided by this early sixteenth century scholar comprises - once again - nothing other than the skeleton of the account in Ambrose (see App. IV, no. 37). That Ambrose was the source utilised by Textor is, in this instance, beyond dispute: a number of verbal reminiscences exist to prove it.

This brings us to the end of a significant trend in the history of the tradition under study, a trend involving the transmission of the concept of the parthenogenetic vulture by a series of Christian writers,

frequently for apologetic purposes. First evidenced in Tertullian and Origen, the trend continued - thanks to the influence of Basil and Ambrose - for centuries following. Indeed, such was the impact of Basil and Ambrose that side by side with the Christian scholars are found a number of non-Christian writers who were also influenced by them.

The above-mentioned trend, although lively and long-lasting, did not prevent certain authors from perpetuating the views of the two authors who initiated the ancient tradition of the wind-impregnated vulture, Plutarch and Aelian.<sup>(22)</sup> Indeed, up until the sixteenth century (when the tradition began to take a new turn), all but one of the accounts produced - and not thus far discussed - owed its origin to either Plutarch or Aelian.

The one account that does not fit the pattern is that found in the Byzantine paraphrase of Dionysius' De Avibus (see App.IV, no.29). Here, it is stated that whenever vultures couple, they produce no offspring; but that when they are ready to lay eggs, they follow the example of the tiger and turn their sexual organ towards the West wind to be impregnated.<sup>(23)</sup> This version is noteworthy in that it assumes the existence of male vultures as well as female; makes a comparison between the wind fertilisation of vultures and that of tigers; and specifically mentions the West wind as the impregnating force. So far as it is possible to ascertain, no such

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(22)

The influence of Aelian on Theophylactus Simocattes has already been discussed (see above).

(23)

Cf chapter V, above.

combination of details occurs in any previous version and for this reason it is difficult to suggest an original source or sources for the passage.

There can be no doubt, however, that Plutarch was the major source utilised by the late fifteenth/early sixteenth century scholar, Ludovicus Rhodiginus (also known as Lodovico Ricchieri). In his Lectio-num Antiquarum Commentarii (see App.IV, no.36), Rhodiginus reports, even as Plutarch had done before him (see App.IV, no.10), that in augury the vulture is considered a most outstanding bird, amongst other reasons because - as is related by the Egyptians - all vultures are female, and just as trees are fertilised by the westerly breeze, so too, vultures are impregnated by the South-east wind. The correspondence between Rhodiginus and Plutarch is obvious, although it should be pointed out that the wind specified by Rhodiginus is identical to that cited, not so much by Plutarch, but rather by Aelian. That Rhodiginus was familiar with a number of different accounts is evident from the fact that he refers in passing to both Ambrose and Horapollon in his own account. It is therefore quite possible that he was acquainted with that of Aelian as well.

Whether or not Aelian did influence Rhodiginus, he certainly provided a source of inspiration in a number of other instances. In the Geoponica, a work dating to the tenth century AD, it is stated that vultures do not couple with one another, but rather fly against the South wind and become pregnant, giving birth every three years (see App.IV, no.26). The details concerning the direction of the wind and the three year gestation period, corresponding as they do

with those found in Aelian's account, are proof that the latter was, indeed, the source here. (24)

Manuel Philes (late thirteenth/early fourteenth century) produced two accounts, one of which (see App.IV, no.33) is nothing but a general reference to the reproduction of vultures by means of the wind whilst the second (see App.IV, no.32) may be said to be the verse form of Aelian's original prose statement. Thus, it repeats all the major points made by Aelian, stressing, as well, that the final product of the wind fertilisation of the vulture is, in fact, live offspring.

Early in the seventeenth century, despite the fact that a new attitude towards the traditional concept of the procreation of the vulture was beginning to become apparent (for which, see below), much the same statement as is found in Philes was recorded in a treatise on animals entitled Physiologus (see App.IV, no.43). As the statement concerned merely restates all the information initially provided by Aelian, no further comment need be made; except to say that this proved to be the last of that series of accounts whose central substance was drawn from Aelian.

Some time prior to the appearance of the Physiologus, in the latter part of the sixteenth century to be precise, the tradition under study began to lose some of its vigour and impetus. Accounts continued to be produced, but these tended to be, not individual versions of the tradition as such, but mere collections of earlier

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(24)

And not Aristotle, as is incorrectly stated at the outset of the paragraph concerned in the Geoponica.

versions. This was certainly the case with Konrad Gesner,<sup>(25)</sup> who, in a passage in his Historia Animalium (see App.IV, no.39), contents himself with relating the views of Ambrose, Horapollo, Basil, Ludovicus Rhodiginus, Joannes Tzetzes, Aelian, the Geoponica and Varinus.<sup>(26)</sup> As a result, his account is no more than a routine list, with little, if any, individuality or originality. Indeed, apart from one remark to the effect that it is preferable to envisage vultures as being impregnated via their sexual organs rather than their beaks, Gesner makes no attempt to present his own viewpoint, either by opting for one particular version over another, or at the other extreme - by commenting objectively about the tradition.

The account presented by C. Ponce de Leon (see App.IV, no.40) differs from that of Gesner in as much as it forms part of a commentary on another text, namely, Epiphanius' Physiologus, and to some extent at least, endeavours to characterise the nature of the vulture tradition. Thus, it states that the procreation of vultures by means of the wind is recorded by both Christian and pagan writers; that it was utilised by the Valentinians to prove the validity of Sophia's imaginary acts of coition; and that it is cited by Christian authors as proof of the purity of the Virgin birth. These comments reveal a certain objectivity on the part of Ponce de Leon, but do not disguise the fact that his account comprises little more than a list of certain representative versions of the

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(25)

Cf Gesner's account concerning mares (App.I, no.37)

(26)

Varinus is presumably to be identified as Guarino of Favera, bishop of Nocera, who died in 1537. Unfortunately, I have not had an opportunity to consult his work.



tradition, those included being Basil, Ambrose, Irenaeus<sup>(27)</sup> and Tertullian (all merely referred to in passing), plus Origen and Cyril of Alexandria<sup>(28)</sup> (both quoted at some length).

Similar in some respects to Gesner's account is one of two passages found in Book III of Ulisse Aldrovandi's Ornithologia (first published in 1599).<sup>(29)</sup> The passage concerned (see App.IV, no.41)<sup>(30)</sup> is of considerable length for it incorporates - in most instances in complete form - the versions of a range of scholars, most particularly, Aelian, Horapollon, Tzetzes, Basil, Ambrose, Simocattes, Philes and Isidore. Reminiscent of Gesner is the fact that Aldrovandi's account is essentially a compilation of earlier versions, and that it includes not merely the Christian authors Basil and Ambrose, but also Aelian, Horapollon and Tzetzes.

There the similarities seem to end, for Aldrovandi, unlike Gesner, adopts an objective and critical stance towards his material. Utilising the various sources by way of illustration, he points out that although there is general agreement concerning the partheno-

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(27)

The relevant passage in Irenaeus has not been located and may well no longer be extant.

(28)

The six lines attributed by Ponce de Leon to Cyril of Alexandria correspond to ll.1136-1141 of Georgios Pisides, and should rightfully be attributed to the latter; cf Reallexikon für Antike und Christentum IX, 462.

(29)

As the second passage in Aldrovandi (see App.IV, no.42) is merely a restatement of Tzetzes' account, and an enlargement of information provided in the first passage, it will not be discussed at this point.

(30)

Cf Aldrovandi's account concerning mares (App.I, no.40).

genesis of the vulture, there is much variation as to the length of gestation and the product finally created. Thus, some authors make the vulture oviparous, others, viviparous; and some declare that they give birth within 120 days, whilst others assert that it is no earlier than three years. The height of Aldrovandi's critical appraisal of the tradition comes, however, in a subsequent statement, a statement that reveals a marked change of attitude to that of his predecessors : he indicates that, in his view, most vultures do engage in intercourse, and that reports about conception by the wind are fabulous, for, according to the law of nature, both a male and a female are found even in the race of vultures, and the female is impregnated by the male. As can be expected, Aldrovandi's words mark the beginning of the natural demise of the tradition.

The objective approach adopted by Aldrovandi at the very end of the sixteenth century was perpetuated in the seventeenth century by Joannis E. Nieremberg<sup>(31)</sup> in what was to be the very last account concerning the wind impregnation of vultures. The relevant passage in Nieremberg's Historia Naturae (see App.IV, no.44) begins rather deceptively by restating the views of Theophylactus Simocattes in an apparently uncritical fashion. Indeed, Nieremberg's reservations about the parthenogenesis of the vulture only become apparent in the very last lines of the passage. Here, he expresses uncertainty about all that he has related, thus reinforcing Aldrovandi's stance and further undermining the validity of the tradition. So far as can be ascertained, no other literary versions of the vulture tradition appeared subsequent to that of Nieremberg.

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(31)

Cf the objective stance adopted by Nieremberg in his account pertaining to mares (App.I, no.44).

In the light of the above discussion, and the fact that the literary tradition concerning the vulture and its procreation by means of the wind provides little if any evidence of a concurrent oral tradition, it is interesting to compare a popular belief recorded in the United States earlier this century. In an article published in 1958,<sup>(32)</sup> Lawrence S. Thompson points out that many beliefs pertaining to the European vulture were transferred to the American turkey buzzard, and he goes on to say (p.156): 'A white man in Allen County recently declared solemnly that there are no male buzzards, only females, that they conceive by parthogenesis [sic], are viviparous, have a gestation period of nine months, and live to be a hundred and fifty years old'. It would be interesting to know whether this is merely an isolated instance or whether it is, in fact, indicative of a more widespread oral tradition in that part of the States or even further afield.<sup>(33)</sup> Whatever the case, the existence of this popular belief in the United States gives rise to the question of its transmission. Was it transmitted in the form of an already established oral tradition from Europe to the United States? If so, what are the implications for the ancient literary tradition? Or was the belief transmitted in a literary form to the United States, at which point it passed into popular oral usage? Given the nature of this study and the limited evidence available, it is impossible to make a definitive statement here. However, it

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(32)

More Buzzard Lore, Kentucky Folklore Record 4 (1958), pp.155-162 (espec.155-156).

(33)

This is a matter which I have not been able to pursue, although I hope to do so at a future date.

does not seem unreasonable to suggest two major possibilities : firstly, that at some point in the history of the ancient literary tradition (perhaps later rather than sooner) the concept of the parthenogenetic vulture may have passed into oral usage and that subsequently this very same concept was transferred by European immigrants to the States where it was applied to the turkey buzzard; or alternatively, that literary records of the ancient tradition travelled with immigrants to the States and that at some point in subsequent years the concept was adopted into popular usage and associated with the turkey buzzard rather than the vulture. If the former was the case (and it is difficult to give preference to one or other of these possibilities), then it is necessary to assume that the ancient literary tradition was - from some (unknown) point on - accompanied by a popular oral tradition.

To conclude : the ancient tradition concerning the procreation of the vulture by means of the wind is one which is introduced into Graeco-Roman culture from Egypt but which nonetheless coincides closely with earlier Greek speculation about the origin of the vulture, and likewise with other ancient beliefs concerning wind impregnation. The tradition is particularly noteworthy for the fact that it is transmitted by a long series of Christian scholars many of whom record the concept of the parthenogenetic vulture for apologetic purposes. The critical stance adopted by two scholars in the late sixteenth and seventeenth centuries (perhaps due to advances in scientific knowledge) eventually brings the tradition to an end. However, it is worth noting that a popular form of the tradition is recorded as existing in the United States in the twentieth century.

On the matter of transmission, it would be fair to say that the literary versions of the tradition provide no proof of the existence of a concurrent oral tradition. On the other hand, it seems not unreasonable to assume the passive transmission of the concept of the wind-impregnated vulture by those acquainted with it through literature. Moreover, as the American belief recorded by Thompson indicates, it would be unwise to completely discount the possibility of an active oral tradition existing side by side with the literary.

During transmission, the tradition displays a number of variations.

The following variables are particularly noteworthy :

1. the wind (North; East; (unspecified) winds; South; South-east)
2. the method of conception (beak; sexual organ)
3. the period of gestation (120 days; 3 years)
4. the product/offspring (eggs; live offspring)
5. the characteristics of the offspring (unspecified; one hundred year life-span)

Of these variables - which bear a remarkable resemblance to those found in the zoological strand of the tradition about mares - some are derived from Egyptian sources, others appear to be Graeco-Roman innovations.

As it exists in Egypt, the concept of the wind-impregnated vulture is supported by a complex of related ideas (motherhood, the seasonal cycle, and so on). In Graeco-Roman culture, the acceptance of the phenomenon appears to rely on two related concepts : firstly, that of the westerly breeze as a regenerative force, and secondly, that of winds as souls (cf the zoological sub-tradition about mares,

above). As for the Christian predilection for the vulture, this may possibly be attributed to the mysterious nature of this rarely seen bird (as is frequently mentioned in Graeco-Roman literature), as well as to its esteemed position in Egyptian culture, qualities that render it eminently suitable for apologetic purposes. All in all, it would be fair to say that the tradition is a successful fusion of Egyptian and Graeco-Roman concepts.

## VII THE ROLE OF THE WIND IN THE REPRODUCTION OF SHEEP

An interesting variation on the ancient concept of wind impregnation is to be found in one of the lesser known Graeco-Roman traditions, namely, that concerning sheep. This tradition, initiated by Aristotle, focuses not so much on the fertilising powers of the wind, as on the ability of the wind to influence sex determination. More specifically, it concerns the role of the opposing northerly and southerly winds in the production of male and female offspring by sheep.

Aristotle first recorded the concept in his Historia Animalium. Here, during a discussion of the reproduction of sheep, he makes a brief statement to the effect that if sheep copulate while northerly winds are blowing, they tend to produce males, whereas if they do so while southerly winds are blowing, they tend to produce females (see Appendix V, passage no.1). It is noteworthy that Aristotle's association of male with north, and of female with south, recalls Parmenides' belief that the male - being of a denser texture than the female - first arose in the northerly regions of the world, whilst the female - being of a rarefied texture - first arose in the south (see chapter II, above).<sup>(1)</sup> The parallel between Parmenides and Aristotle - and, indeed, the full significance of Aristotle's statement - can only be truly appreciated, however, if a second passage, found in the De Generatione Animalium, is examined.

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### (1)

This does not alter the fact, though, that whilst Parmenides associated the male with cold and the female with hot, Aristotle made the opposite association, namely, male/hot and female/cold (cf chapter II, above).

In his discussion of the determination of sex in the De Gen. Anim., Aristotle begins by presenting a general theory of sex differentiation (for which, see chapter II, above), then, in his ensuing enumeration of supportive evidence, refers in some detail to the northerly and the southerly winds as sex determinants (see App.V, no.2). He maintains that male offspring tend to be engendered when the wind is in the north rather than when it is in the south, because when a southerly is blowing, animals' bodies are more fluid, and therefore more abundant in residue; the more residue there is, the greater difficulty they have in concocting it, and so the semen of the males and the menstrual discharge of the females is more fluid, which in turn tends to produce female offspring. He records, too, that according to shepherds the generation of males and females depends not only on whether a northerly or a southerly is blowing at time of copulation, but also on whether the animals face north or south while copulating.

In this passage, Aristotle provides both a general explanation of the influence of the northerly and the southerly winds on the generation of male and female offspring, and a more detailed reference (than that found in the Historia Animalium) to the role of the wind in the reproduction of sheep. Aristotle's explanation is of particular interest, for it indicates that the ability of the wind to influence the determination of sex stems from the fact that the cooler northerly and the warmer southerly winds affect the bodily constitution in opposite ways. Not only does this bring to mind Parmenides' belief that the dense-textured male first arose in the north, and the thin-textured female in the south (see chapter II, above); it



is also reminiscent of statements found in the Hippocratic writings concerning the effect of the northerly and the southerly winds on the constitution.<sup>(2)</sup> There can be no doubt that these two opposing winds evoked strong associations for the ancients.

Of particular interest, too, is the further information provided by Aristotle on the role of the wind in the reproduction of sheep - not so much for the fact that it stresses that the sheep must face the wind during copulation (although this is interesting when compared with the impregnation of horses and vultures via their mouths/beaks),<sup>(3)</sup> but rather for the fact that this information is said to derive from shepherds. Aristotle's reference to shepherds as his source provides vital proof of the existence of a popular oral tradition concerning the significance of the wind in the sex determination of sheep. It seems likely that shepherds were not only familiar with this particular function of the northerly and the southerly winds but that they actively transmitted this information amongst themselves. It is worth noting here, too, that in addition to these active bearers of the tradition in question, there almost certainly would have been passive bearers as well, that is, those who read of the phenomenon in Aristotle and although not actively passing it on, were nonetheless aware of it.

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(2)

Cf The Sacred Disease 13; 16.

(3)

Cf chapters III and VI, above. In the instance of mares and vultures the emphasis is on the wind as a vital living force (soul?) that can effect impregnation; here, the emphasis seems to be rather on the wind as a force that can influence the metabolism of the animal in question.

The tradition which Aristotle set in train owed a great deal to its initiator. Indeed, of the several natural historians and agricultural writers who later recorded the phenomenon in question, most, if not all, were either directly or indirectly indebted to Aristotle. The first of these, Columella, was no exception. In the seventh book of his De Re Rustica, during a lengthy discussion of the breeding and the care of sheep, he suggests that if more males than females need to be produced, Aristotle advises that in the breeding season, on dry days when northerly breezes are blowing, the flock should be pastured facing this wind, and the male should cover the female looking in that direction; but that if female births are required, the same procedure should be carried out when a southerly is blowing (see App.V, no.3). Columella's debt to Aristotle is obvious. His version successfully combines material found in the two separate passages of his predecessor, introducing only one small innovation: the reference to 'dry days'. As the ancients apparently believed that one of the effects of the north wind was to render the atmosphere clear and bright and dry,<sup>(4)</sup> this reference merely serves to emphasise the requirement that a northerly wind be blowing. It is appropriate to add here that Columella's version provided a source of inspiration for the fourth century agricultural author, Palladius, whose Opus Agriculturae contains a passage that bears a remarkable resemblance to that of Columella, even down to such details as the specification of 'dry days' (see App.V, no.6).

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(4)

Cf The Sacred Disease 16.

Columella's near contemporary, Pliny, did no more than refer in passing to the conception of male lambs during a northerly, and of female lambs during a southerly (see App.V, no.4), but Pliny's second to third century successor, Aelian, presented the traditional material in a somewhat novel fashion. In Book VII of his De Natura Animalium, during a short section devoted to the subject of sheep, Aelian suggests that sheep are familiar with the fertilising powers of the northerly and the southerly winds; that they also know that the northerly wind tends to produce males, and the southerly wind females, and that the ewes therefore face either in a northerly or a southerly direction when being covered, according as they want male or female offspring; and, finally, that shepherds, too, take heed of the direction of the wind, putting the rams to the sheep when the south wind blows, so that the offspring may preferably be female (see App.V, no.5). Aelian's version is notable on three counts : firstly, it makes a distinct reference to the fertility of the wind, thereby bringing this tradition closer to those that concern impregnation by means of the wind; secondly, it speaks in a delightful way of sheep utilising their knowledge of the influence of the northerly and the southerly winds for their own ends, a description that echoes Aelian's portrayal of the female vulture deliberately flying against the wind for the purposes of procreation (see chapter VI, above), and thirdly, it stresses the reliance of shepherds on the northerly and the southerly winds as an effective method of sex differentiation. This last point requires further comment. For if shepherds made a practice of utilising the winds to produce sheep of the required sex, then it seems likely that this particular method of sex determination formed part of their popular

lore and was transmitted by word of mouth from one shepherd to another. This being the case, Aelian's passage provides strong proof (even as that of Aristotle before him) of the existence of a popular oral tradition concerning the effect of the northerly and the southerly winds on the sex of sheep.

In subsequent times, the tradition continued but with a little less vigour. So far as can be ascertained, it was recorded on three further occasions, the first of these being in the Geoponica, a collection of agricultural writings compiled by Cassianus Bassus in the tenth century AD (see App.V, no.7). Here, the same advice as is found in earlier versions is given for the person wanting to produce more males than females; but when it comes to the production of females rather than males, the suggestion is that the rams should be admitted whilst the southerly wind is blowing from behind. This is a distinct variation on the usual advice that the ewes should be covered facing the wind in question, a variation that perhaps owes its origin to a desire to stress that the procedure for obtaining female births is the exact opposite of that used for obtaining male births.<sup>(5)</sup>

In the thirteenth century, Albertus Magnus repeated the essential details of the tradition, adding his own personal explanation for the phenomenon. In the passage in question, found in the sixth

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(5)

It is interesting to note that in the Geoponica the method of sex determination traditionally applied to sheep alone is likewise applied to bulls (Geoponica XVII.6) and indeed to all animals (Geoponica XVIII.3.6; see App.V, no.7); cf Eugene McCartney, Sex Determination and Sex Control in Antiquity, American Journal of Philology XLIII (1922), pp.62-70 (espec. 67-68).

book of his De Animalibus (see App.V, no.8), Albertus proposes that the reason for the phenomenon is that, when copulating sheep are chilled by the cold northerly, the heat of the semen evaporates through their pores. Albertus' explanation may be seen as complementary to that of Aristotle which, in effect, focuses on the generation of female offspring.

The last known version of the tradition appeared in the sixteenth century work of Charles Estienne and Jean Liébault, entitled Maison Rustique. An examination of this version reveals a decided lack of originality on the part of the two authors concerned : the passage is nothing other than a paraphrase of Columella. With this passage in the Maison Rustique we come to the end of the tradition under study, a tradition that in its latter stages appears to have existed solely in a literary form and to have had little, if any, relationship with popular belief.

The ancient tradition concerning the role of the wind in the reproduction of sheep is thus one that focuses not so much on the fertilising powers of the wind as on the ability of the wind (specifically the northerly and the southerly winds) to effect sex determination. First found in Aristotle, it leads a vigorous existence through until the late second/early third century AD, during which time it is recorded by a number of authors, all of whom show a direct or indirect debt to Aristotle. In subsequent times, the tradition appears to lose its impetus, being recorded on three occasions only, the last of them in the sixteenth century. Nonetheless, it continues to bear witness to the strong influence of Aristotle.

Once again it seems reasonable to assume the passive transmission of the literary tradition by readers of the texts concerned.

Moreover, evidence found in Aristotle and Aelian suggests that the literary tradition was accompanied - at least in the period up until the early third century AD - by an active oral tradition, transmitted amongst shepherds. Given that the tradition was apparently transmitted by both active and passive bearers, one point that is remarkable is the lack of variation in the course of the tradition. From start to finish, very few changes are evident.

The significance of the sheep in this tradition is a question surrounded by uncertainty. Internal evidence does not provide any clue as to why the ancient Greeks and Romans associated this particular phenomenon with sheep. There is the obvious factor that the sheep is an animal that pastures out in the open, and the additional factor that the sheep was considered by the ancients to have a certain religious significance, being used as a sacrificial victim in a number of cults.<sup>(6)</sup> These suggestions are not totally convincing, however. It is perhaps worth remembering that in the Geoponica (a late work belonging to the tenth century AD) the tradition in question is attached not merely to sheep but to all animals.

One final point worth making is that, even today, the factors affecting sex determination are still discussed. Indeed, in recent years a number of scholars have suggested that the generation of

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(6)

Cf Jocelyn Toynbee, Animals in Roman Life and Art, Thames and Hudson, 1973, p.164.

males and females is influenced by the surrounding atmosphere and environment. (7) The parallel between this suggestion and the information recorded by Aristotle and subsequent authors is striking.

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(7)

Cf, for instance, W.R. Lyster, Sex Ratio of Human Births in a Contaminated Area, The Medical Journal of Australia (May 28, 1977) pp.829-830.

# VIII THE WIND FERTILISATION OF MYTHICAL AND LEGENDARY WOMEN<sup>(1)</sup>

Ancient accounts of the wind fertilisation of women are, for the most part, well-known, but rarely have they been discussed in the

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(1)

Following the pattern established in chapters III - VII, this chapter will discuss relevant Graeco-Roman evidence, material (directly or indirectly) derived from the classical sources, plus any other instances of the wind fertilisation of mythical or legendary women which may usefully be introduced by way of comparison. These limitations on the scope of the chapter - essential if the balance of the thesis is to be maintained - necessarily preclude all but the briefest reference to the numerous tales from China, Japan, Formosa, India and the Middle East which tell of a Kingdom/Island of Women and the reproduction of the inhabitants by means of the wind, and likewise permit nothing more than a fleeting glance at some of the mythical and legendary tales from throughout the world which make mention of wind-fertilised women. For references to the latter, see Stith Thompson, Motif-Index of Folk Literature, Indiana, 1955-1958, vol.V, p.394, s.v. T 524 Conception from wind; and for information on the former, see Thompson, op.cit., vol.III, p.20, s.v. F112 Journey to Land of Women; Verrier Elwin, Myths of the North East Frontier of India, Shillong, 1958, pp.182-190; Gabriel Ferrand, Relations de voyages et textes géographiques arabes, persans et turks relatifs à l'Extrême-Orient du VIII<sup>e</sup> au XVIII<sup>e</sup> siècles, 2 vols, Paris, 1913-14, passim; Berthold Laufer, Ethnographische Sagen der Chinesen, in: Aufsätze zur Kultur - und Sprachgeschichte vornehmlich des Orients, Munich, 1916, pp.198-210; F. Hirth and W.W. Rockhill (eds.), Chau Ju-Kua : His Work on the Chinese and Arab Trade in the Twelfth and Thirteenth Centuries, entitled Chu-Fan-Chi, New York, 1966 (repr.); D.E. Mills, Medieval Japanese Tales, Folklore 84.1 (Spring 1973), pp.58-74; and Ho Ting-Jui, A Comparative Study of Myths and Legends of Formosan Aborigines, Taiwan, China, 1971, pp.127-134. It is my intention to make a detailed study of the Kingdom/Island of Women tales, with a view to establishing whether there is any direct connection between these tales and Graeco-Roman accounts of islands inhabited by women (e.g. the Amazons).



same context as the other Graeco-Roman traditions pertaining to wind-impregnation.<sup>(2)</sup> The winds noted by the ancients for their sexual aggression against women are two in number : the North wind Boreas and the West wind Zephyrus. It is remarkable that this is the very same pair as that which is seen in Greek and Roman epic to be responsible for the fertilisation of mares (see chapter III, above). The liaisons of these two winds with the equine race are more than matched by their associations with a series of (mortal and immortal) women. Most prominent of all is Boreas' rape of Oreithyia, first recorded by the lyric poet Simonides early in the fifth century BC, and subsequently found in numerous authors representing a wide range of genres. In comparison, the associations of Boreas with other women, most of whom are unnamed, pale into insignificance. Zephyrus, on the other hand, is generally linked with two women : with Iris by Greek authors (the earliest of these being Alcaeus, the late seventh/early sixth century BC poet), and with Flora by Roman writers (most significantly, the Augustan poet Ovid). The rape of Flora by Zephyrus, although recorded far less frequently in classical antiquity than Boreas' rape of Oreithyia, nonetheless forms a direct parallel with that.

Given the ancient portrayal of both Boreas and Zephyrus as sexual aggressors, the various escapades of these two winds with both mares and women, and the explicit parallel between the rape of Oreithyia

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(2)

In his article on Animals impregnated by the wind, *Isis* 25 (1936), pp.95-130 (and espec. 114-115), Conway Zirkle makes a point of discussing the wind impregnation of women as well as that of other female creatures, but even so he mentions no more than two examples from classical antiquity (both found in Ovid), and quotes only one of these.

and that of Flora, it seems appropriate to consider ancient accounts of the fertilisation of women by Boreas and Zephyrus as one traditional unit, and to speak of this as the Boreas-Zephyrus-complex. In the ensuing pages, a detailed examination of the B.-Z.-complex will be undertaken. Particular attention will be paid to the nature and development of the individual elements comprising the complex, as well as to the method of their transmission.

Because it is the most prominent element in the Boreas-Zephyrus-complex, the myth of Boreas and Oreithyia forms a useful starting point.

Briefly, the myth may be summarised as follows : Oreithyia, the daughter of Erechtheus, king of Athens, is carried off from Attica by the North wind Boreas and taken to his Thracian homeland; here she becomes his wife and subsequently gives birth to four children, Chione, Cleopatra, Zetes and Calais.<sup>(3)</sup> Two aspects of the myth are of special interest to this study, firstly, the circumstances of the rape (and the conclusions that can be drawn from them concerning the existence and transmission of the myth), and secondly, the nature of the offspring produced by Boreas and Oreithyia. It is convenient to consider these matters in the order stated.

As indicated above, the lyric poet Simonides was the first to make mention of Boreas' rape of Oreithyia. From a fragment of his Naumachia (see App.VI, no.2) it is clear that in his version Oreithyia is carried off from Brilessos, and conveyed to the rock of Sarpedon

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(3)

Cf Apollodorus, Bibliotheca III.15.2-3 (see Appendix VI, passage no.19) This and other versions will be discussed more fully below.

in Thrace.<sup>(4)</sup> Brilessos is the early Greek name for a mountain situated to the north-east of Athens,<sup>(5)</sup> and therefore directly in the path of Boreas as he enters Attica.<sup>(6)</sup> In view of the fact that the name 'Oreithyia' is generally agreed to mean 'she who storms/rages on the mountain,'<sup>(7)</sup> it comes as no surprise to find

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(4)

The specific location of the rock of Sarpedon is given by the mythographer Pherecydes; (see App.VI, no.3).

(5)

This same mountain was subsequently called Pentelikon; cf Erika Simon, *Boreas und Oreithyia auf dem silbernen Rhyton in Triest, Antike und Abendland* XIII (1967), pp.101-126 (espec.108). Here I must acknowledge my considerable debt to this excellent article which examines fifth and fourth century evidence - both artistic and literary - for the Boreas and Oreithyia myth.

This seems an appropriate point at which to mention another text which has only just reached my hands, namely, Kora Neuser, Anemoi. Studien zur Darstellung der Winde und Windgottheiten in der Antike, Giorgio Bretschneider Editore, Rome, 1982. It has not been possible to examine this text in any detail, and therefore no further reference will be made to it in this chapter; however, a quick perusal of the relevant sections of the text reveals that the author is primarily concerned with artistic rather than literary evidence.

(6)

For confirmation that the ancients viewed Boreas not simply as the North but also as the North east wind, see P.W.V.720-721, s.v. Boreas; cf.too, E. Simon, op.cit., p.108.

(7)

See P.W.XVIII.1.951.s.v. Oreithyia, and E. Simon, loc.cit. Simon's suggestion (pp.108-109) that Oreithyia may well have been a maenad has a lot to commend it. However, her further suggestion (p.109) - to the effect that the tale of Boreas and Oreithyia may be based on the fate of an 'historical' Oreithyia who was sacrificed to the wind ('ein Windopfer') - seems somewhat excessive and detracts from, rather than enhances, her argument. Cf Eberhard Thomas, Mythos und Geschichte, Cologne, 1976, pp.33-34.

that the location specified for her capture is, in fact, a mountain-side. It seems likely that there is a close interrelationship between the version of the myth recorded by Simonides and the name of its main female protagonist.

In subsequent times only one other author made mention of the setting delineated by Simonides, and then in terms which differ considerably from the description found in the earlier account. The author referred to is the late fifth century BC epic poet Choirilus of Samos. A fragment of Choirilus preserved by the scholiast on Apollonius Rhodius (see App.VI, no.8) gives us the specific circumstances of the rape of Oreithyia : she is said to be carried off as she is picking flowers at the source of the river Kephissos. As this river has its source at Mount Brilesson, north-east of Athens, it is obvious that Choirilus situates the rape in the same region as does Simonides.<sup>(8)</sup> The activity in which Oreithyia is engaged at the time of her capture is by no means identical, however. Whereas in the version of Simonides Oreithyia is assumed to be raging over the mountainside (most probably in maenadic fury),<sup>(9)</sup> Choirilus' version portrays her as quietly and peacefully picking flowers.<sup>(10)</sup>

Given that Simonides' reference to the myth of Boreas and Oreithyia is the earliest extant, and that there is a close correspondence

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(8)

Cf E. Simon, op.cit., p.108.

(9)

Cf n.7, above.

(10)

It is interesting to speculate as to whether the Latin poet Ovid may have had Choirilus' account in mind at the time he composed his account of the rape of Flora by Zephyrus; see the relevant discussion below.

between the connotations of the name 'Oreithyia' and the location explicitly cited, it seems probably that this version reflects the oldest form of the myth.<sup>(11)</sup> The transmission of the myth in the period prior to Simonides must remain uncertain; but one point that is worth noting is that a cult of the winds was already in existence in Athens at this time.<sup>(12)</sup> Athenians reverence for the winds may well have been enhanced by a myth which connected the Athenians - through Oreithyia - to Boreas, and likewise the transmission of the myth may well have been encouraged by their cult of the winds.

But why did Simonides make reference to the Boreas and Oreithyia tale in a poem entitled Naumachia? The answer to this question is to be found in Herodotus VII.189 (see App.VI, no.7). Here, Herodotus describes an incident which took place during the Persian Wars approximately one month before the Battle of Salamis,<sup>(13)</sup> that is, in 480 BC. He relates that the Athenians, whose ships were lying near Chalcis in Euboea, offered sacrifice to their 'son-in-law' Boreas and likewise to Oreithyia, imploring them to come to their assistance and destroy the Persian fleet (which lay at anchor off Cape Sepias), and that Boreas responded by raising a violent storm (which destroyed no fewer than four hundred ships), in recognition

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(11)

Cf E. Simon, loc.cit.

(12)

Cf Roland Hampe, Kult der Winde in Athen und Kreta, Sitzungsberichte der Heidelberger Akademie der Wissenschaften, Heidelberg, 1967, p.12.

(13)

Cf E. Simon, op.cit., p.110.

of which the Athenians, on their return home, built a temple of Boreas by the river Ilissus. (14)

Given that Simonides' poem is entitled Naumachia and that it features both Boreas and Oreithyia, there can be little doubt that it was written to commemorate the events described by Herodotus and that it received its inspiration from them. This being the case, it is likely to have been composed early in the 470's, and perhaps even in 479 if it was intended to coincide with the erection of the sacred precinct to Boreas by the Athenians. (15)

The destruction of the Persian fleet in 480 BC, and the view - generally held amongst the Athenians - that this disaster was the work of their son-in-law Boreas, produced a profound effect on art and literature of the time. Attic vase painters turned their attention to the rape of Oreithyia, and in the years 475-450 BC this became one of their favourite subjects, being depicted on vases of every kind. (16)

Similarly the myth of Boreas and Oreithyia provided subject-matter for a series of authors writing in several different genres, (17) a trend that was to continue in the centuries following.

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(14)

The ἱόνν referred to by Herodotus may indicate, not so much a temple, but a sacred area with an altar; cf E. Simon, loc.cit.

(15)

Cf E. Simon, loc.cit.

(16)

For a discussion of fifth century artistic representations of the Boreas and Oreithyia theme, see W.R. Agard, Boreas at Athens, Classical Journal 61 (1965-1966), pp.241-246, and E. Simon, op.cit., passim; see, too n.5 above.

(17)

The accounts of the lyric poet Simonides, the historian Herodotus,

One writer who appears to have been strongly influenced by the events of 480 and the subsequent establishment of a cult of Boreas in Athens was Aeschylus. Evidence survives to show that this fifth century tragedian composed a drama with the title Oreithyia.<sup>(18)</sup> Unfortunately only one five-line fragment of this drama has survived (see App.VI, no.4), but the content of these lines makes it possible to draw certain general conclusions about the work. The first point that must be made is that the language of the fragment is highly colourful and does not resemble the language of high tragedy. This fact, together with certain comments concerning the play which are to be found in ancient literature,<sup>(19)</sup> has led to the suggestion that Aeschylus' Oreithyia is not a tragedy, but a special type of drama termed a 'festival play', and that it may therefore have been especially composed to honour the establishment of the Athenian cult of Boreas.<sup>(20)</sup>

The lines of the fragment are generally attributed to Boreas and are considered to have been spoken at a point in the drama when Boreas

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and the epic poet Choirilus have already been discussed; and the tragedian Aeschylus, plus the historian Acusilaus will be examined below. It is to be assumed that, in addition to these, a number of other literary accounts were produced which have not survived.

(18)

See H.J. Mette, Der Verlorene Aischylos, Berlin, 1963, pp.185-186.

(19)

See H.J. Mette, Die Fragmente der Tragodien des Aischylos, Berlin, 1959, p.181, fr. 492(a) and (b) (only part of fr. 492(b) is recorded in App.VI, no.4).

(20)

See E. Simon, op.cit., pp.117-118. This suggestion is preferable to that of Mette (1959), loc.cit. to the effect that the Oreithyia may have been a satyr play.

has asked Erechtheus for the hand of his daughter Oreithyia in marriage, but has been rejected.<sup>(21)</sup> Boreas, in angry and violent mood, then states that the flame (of his love?) has been checked, and that he intends to get his revenge by setting fire to the house (of Erechtheus?) and burning it to cinders. Such an interpretation fits well with the version of the myth later recorded by Ovid (see App.VI, no.24, and further discussion below), a version in which Boreas is likewise seen to react furiously to Erechtheus' denial of his request for Oreithyia's hand in marriage.<sup>(22)</sup> It is probable that Ovid's rather lengthy account is in fact derived from Aeschylus' *Oreithyia*.

Even as Aeschylus was prompted by the sequence of events in 480-479 to use the myth of Boreas and Oreithyia as the framework for a drama, so too was the mid-fifth century historian Acusilaus of Argos impelled to record his own particular version of the myth.<sup>(23)</sup>

An examination of the relevant fragment of Acusilaus, preserved by the scholiast on Homer's *Odyssey* (see App.VI, no.5), reveals that the rape of Oreithyia is set in very different circumstances to those

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(21)

Cf Mette (1963), p.185.

(22)

E. Simon, *op.cit.*, pp.117-121, uses the version found in Ovid, coupled with that of Acusilaus (see below), as the basis for a tentative reconstruction of the plot of Aeschylus' *Oreithyia*. Her detailed discussion leaves the reader convinced that the reconstructed drama may well be close in form to the original.

(23)

According to E. Simon (*loc.cit.*) the details of this version derive directly from Aeschylus' festival play. Given that only five lines of the *Oreithyia* have survived, her suggestion can be nothing more than tentative (as she readily admits). Nonetheless, the case is convincingly argued, and for that reason the proposed connection between Aeschylus and Acusilaus cannot be lightly dismissed.



found in Simonides and Choirilos (see above). Acusilaus relates that Erechtheus king of Athens had a very beautiful daughter, Oreithyia, and that, one day, when he sent her as a Kanephor (Basket-bearer) to sacrifice to Athena Polias, she was carried off by the North wind Boreas - who successfully escaped the notice of the king's guards - and conveyed by him to Thrace.

Two aspects of Acusilaus' account deserve particular comment. The first is his reference to the abduction of Oreithyia whilst she is sacrificing to Athena. It would appear from the fact that Acusilaus specifically describes Oreithyia as being dressed in the manner of a Kanephor that he envisages her as a participant in the procession which formed part of the annual festival held in honour of Athena, the Panathenaea.<sup>(24)</sup> This procession normally wound its way from the Dipylon gate through the Agora and the Areopagus to the Acropolis.<sup>(25)</sup> If, as Acusilaus seems to suggest, Oreithyia is carried off while walking in the procession, the geographical location of her abduction could be taken to be anywhere along the route from the Dipylon gate to the Acropolis. However, given that the Areopagus is mentioned in a gloss to Plato's version (see below) as an alternative location for the rape of Oreithyia to that cited by Plato,<sup>(26)</sup> it is probable

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(24)

Cf E. Simon, op.cit., pp.114, 120.

(25)

See E. Simon, op.cit., p.120, and the reference cited there.

(26)

The gloss (which is included by some editors in the main text) reads: ἡ ἐξ 'Αρείου Πάγου' λέγεται γὰρ αὐτὸ καὶ οὗτος ὁ λόγος, ὡς ἐκεῖθεν ὅλλ' οὐκ ἐνθενδε ἠρπάσθη ('or from the Areopagus, for this story is also told, that she was carried off from there and not from here').

that this is the location which Acusilaus has in mind.<sup>(27)</sup>

That Oreithyia, daughter of the king of Athens, is portrayed as being abducted during a procession in honour of Athena, patron goddess of Athens and protectress of the Athenians, seems somewhat ironical, and gives rise to the question : why did not Athena prevent Boreas from carrying off Oreithyia? It has been suggested elsewhere<sup>(28)</sup> that in order to appease Boreas' anger at Erechtheus' denial of his request to wed Oreithyia, and to thereby gain the favour of Boreas for the Athenians, Athena herself proposed to Boreas that he carry off Oreithyia during the procession, on the condition that he cause no disruption of the sacred ceremony. This suggestion, which has a lot to commend it and may well represent the fuller version of the myth as originally recorded by Acusilaus,<sup>(29)</sup> leads us to the second noteworthy aspect of Acusilaus' account.

One detail concerning Boreas' rape of Oreithyia which is not evident in the accounts thus far discussed and is therefore particularly striking when encountered in Acusilaus is the reference to Boreas' invisibility and the fact that he successfully carries her off without being seen by those watching and guarding her.<sup>(30)</sup> This

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(27)

There are no grounds for assuming - as does Roscher III.1.950-951, s.v. Oreithyia - that the setting envisaged by Acusilaus is the Acropolis. Cf E. Simon, op.cit., pp.119-120.

(28)

See E. Simon, op.cit., p.120.

(29)

And, according to E. Simon, by Aeschylus in his Oreithyia. See discussion above.

(30)

That Boreas is visible to Oreithyia but not to her companions or guards seems to be confirmed by certain vase illustrations; cf E. Simon, op.cit., pp.113-114.

detail<sup>(31)</sup> is, of course, appropriate in the light of Boreas' role as the North wind, but it may also have some connection with the suggested agreement between Athena and Boreas outlined above. It seems possible that one of Athena's stipulations to Boreas - so as to ensure that he disrupt her procession as little as possible - may have been that he remain invisible to Oreithyia's companions and guards.<sup>(32)</sup>

In the fifth century accounts of the rape of Oreithyia which have just been examined, two specific locations have been encountered : mount Brilissos, and the Areopagus. The fourth century account of the philosopher Plato introduces yet another setting : the Ilissos river. The account in question occurs in Plato's Phaedrus (see App.VI, no.9) and takes the form of a dialogue between Socrates and Phaedrus in which the former is questioned by the latter as to the exact setting of the rape of Oreithyia, and is then asked whether he believes the tale to be true. Socrates indicates that the place concerned is at that point on the Ilissos where one crosses over to the precinct of Agra, and that there is an altar of Boreas somewhere thereabouts. On the question of his attitude towards the tale itself, Socrates suggests that if he disbelieved it, he might give a rational explanation to the effect that a blast of Boreas, the North wind, pushed Oreithyia off the nearby rocks as she was playing with Pharmacea, thereby giving rise to the tale that she had been carried off by Boreas. However, he continues, such an 'invention' would require the like rationalisation of numerous other creatures in

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(31)

Also found in Ovid; see below.

(32)

Cf E. Simon, op.cit., p.120.

mythology, a task for which he himself does not have the time or the inclination, and he therefore simply accepts the traditional tale of Boreas' rape of Oreithyia.

The first point that must be made about Plato's account is that it introduces not merely a new setting, but also a new set of circumstances in which the abduction of Oreithyia takes place. Thus Oreithyia is said to have been playing beside the Ilissos river, with a companion named Pharmacea, at the point when she was carried off by Boreas. It is interesting to note the correspondence between Plato's version and the account found in Herodotus of the setting up of the altar to Boreas beside the river Ilissos. It may well be that the version recorded by Plato developed some time during the fifth century BC following the establishment of this altar, and that it was an attempt to create a close connection between the place from which Oreithyia was supposed to have been abducted by Boreas, and the place in which it was decided to erect an altar to Boreas to commemorate his assistance to the Athenians during the Persian Wars.<sup>(33)</sup>

The second point to be noted about Plato's account is that it provides an interesting insight into ancient attitudes towards the tale of Boreas and Oreithyia. It is evident from Socrates' reference to the rationalisation of the tale that certain members of Athenian society, namely, those with a predisposition towards objective and critical thought, tended to interpret the abduction of Oreithyia by Boreas as nothing more than an elaboration of a particular incident,

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(33)

Here I disagree with E. Simon, *op.cit.*, p.116, who proposes that the Ilissos version is one that must have arisen very late in the fifth century BC. There seems to be no reason why it should not have occurred earlier (even though no such versions have survived).

viz. the death of Oreithyia as a result of her being blown down from a rocky height by a strong blast of the North wind. However, the fact that Socrates rejects such explanations, terming them clever inventions, and that he opts to accept the tale of Boreas and Oreithyia as it stands (even if this acceptance is more a matter of convenience than anything else) seems to suggest that amongst his - and Plato's - contemporaries most people would simply have accepted the tale at its face value without feeling a need to provide a rational explanation of it.

A review of fifth and fourth century evidence for the myth of Boreas and Oreithyia shows that the assistance given by Boreas to the Athenians during the Persian Wars and their subsequent erection of an altar to him led to a strong upsurge of interest in the myth. As well as numerous pictorial representations of the rape of Oreithyia (discussed merely in passing), many literary versions of the same subject were produced. These versions, recorded in several different genres (e.g. lyric and epic poetry, tragedy, history and philosophy); describe the abduction of Oreithyia as taking place in three separate locations : (1) on the slopes of mount Brilessos; (2) in the vicinity of the Areopagus; and (3) beside the river Ilissos. The first of these locations is to be found in the earliest extant version of the myth, that of Simonides, and is again found at the end of the fifth century BC in Choirilus, but it does not appear to have survived beyond this century. The second location mentioned (the Areopagus) is one which is cited (albeit indirectly) in Acusilaus,<sup>(34)</sup> and which likewise seems to have been a fifth century phenomenon. The third

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(34)

And may possibly occur in Aeschylus; see E. Simon, *op.cit.*, pp.117-121.

and last location, that of the river Ilissos, is not recorded until the time of Plato in the fourth century BC, but in view of the presence of an altar to Boreas on the banks of the Ilissos from approximately 479 BC (as confirmed by Herodotus), this setting for the rape of Oreithyia may well have arisen during the fifth century.

Given the prominence of the myth of Boreas and Oreithyia in the art and literature of this period, it seems reasonable to assume that the myth was transmitted not merely in literary and pictorial form but also by word of mouth. There can be little doubt that the recurrent references to the tale on vases and in written texts - a trend prompted by the events of 480 - 479 BC are an indication of a strong interest in, and a detailed knowledge of, the tale in question, especially in Athens. A further factor which can only have encouraged the oral transmission of the Boreas and Oreithyia myth is the existence of an active cult of Boreas amongst the Athenians. Worship of the North wind Boreas and the offering of sacrifices to him at the altar by the Ilissos river must have served to remind people of Boreas' rape of Oreithyia, the deed which brought about his intimate connection with the city of Athens, and must likewise have prompted frequent verbal reference to the topic. Whether the three separate locations evident in the literary versions were paralleled in the orally transmitted versions is difficult to tell, but there seems to be no reason to exclude such a possibility.

In subsequent centuries, ancient writers of prose and poetry continued to make allusion to the abduction of Oreithyia by Boreas. One striking feature about these later accounts is that, apart from the small number which give no precise setting at all, the remainder mention only one

location for the rape of Oreithyia : the banks of the Ilissos river. It would appear that from the fourth century BC onwards, this was the one location that was particularly favoured, and that it effectively displaced the two alternative settings that had been prominent in the fifth century.

At this point it is appropriate to pass over two very brief references to the Boreas and Oreithyia theme found in the third century historians Heragoras (see App.VI, no.13) and Philochorus (see App.VI, no.14)<sup>(35)</sup> so as to proceed more quickly to their contemporary Apollonius Rhodius, and to the second century scholar Apollodorus, both of whom produced influential accounts (four in total) concerning not only Boreas and Oreithyia but also their various offspring.<sup>(36)</sup> Apollonius' version of the abduction of Oreithyia is introduced into his epic poem, the Argonautica, by way of genealogical background to Zetes and Calais, two of the many heroes who participated in the voyage of the Argo. In the passage in question (see App.VI, no.16) Apollonius suggests that Boreas carried Oreithyia off from Attica as she was dancing close by the stream of Ilissus, and that, having conveyed her to the rock of Sarpedon in Thrace, he wrapped her in dark clouds and forced her to his will. Here it is noteworthy that although Apollonius agrees with Plato on the matter of the exact spot from which Oreithyia was abducted, he gives a more specific

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(35)

These two authors make contradictory statements, Heragoras to the effect that the Boreas who carried off Oreithyia was the son of the Strymon river, and not the wind,\* Philochorus to the effect that Oreithyia's abductor was Thracian Boreas, the son of Astraeus, or in other words the (North) wind.

(36)

Here it will be necessary to isolate those accounts or portions of accounts which focus on Boreas' rape of Oreithyia from those which focus on their offspring. The latter will be discussed below.

indication than Plato of the activity in which she was involved at the time : rather than simply 'playing', Oreithyia is described by Apollonius as 'whirling in the dance'.

The two accounts of Apollodorus focus rather more on the offspring of Boreas and Oreithyia than on this couple themselves, but nonetheless the opening sentence of one of these two passages is relevant to the present discussion. Recorded in the third book of Apollodorus' Bibliotheca, a work on Greek mythology, the statement concerned (see App.VI, no.19) indicates that whilst Oreithyia was playing beside the Ilissos river, Boreas carried her off and had intercourse with her. It is obvious that the essential details recorded here are in exact agreement with those found in Plato (see above).<sup>(37)</sup>

Even as Apollonius Rhodius introduces the mythical tale of Boreas and Oreithyia as vital background information on the two Argonauts Zetes and Calais, so too does the Augustan poet Ovid. In a lengthy and highly effective version, the very first to appear in the Latin language (see App.VI, no.24), Ovid describes in vivid terms the angry reaction of Boreas when Erechtheus refuses to allow him to marry his daughter Oreithyia, then outlines the way in which Boreas, having decided to abduct Oreithyia in his usual violent fashion, wings his way to Attica and carries her off to Thrace to become his wife ('trailing his dusty cloak over the mountain tops, the lover swept along the ground and, shrouded in darkness, engulfed the panic-stricken Oreithyia in his dusky wings').

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(37)

Further discussion of the accounts of Apollonius Rhodius and Apollodorus is included below, in the section on the offspring of Boreas and Oreithyia.



As has already been noted, the first part of Ovid's account bears a striking resemblance to the five lines of Aeschylus' Oreithyia that have been preserved. These lines, as was stated above, appear to be spoken by Boreas at a point where he is furious at the rejection of his request for Oreithyia's hand in marriage. Because of the parallel between the Aeschylean fragment and the passage of Ovid, it seems highly probable that the latter is directly influenced by the Oreithyia.<sup>(38)</sup>

The second noteworthy feature of the Ovidian version is the way it stresses the darkness surrounding Boreas as he abducts Oreithyia. This detail corresponds (in a general, if not a specific, way) to the description of the rape of Oreithyia in *Acusilaus*, where it is specified that Boreas remains invisible to Oreithyia's companions and guards (see above). Here, as in *Acusilaus*, it is not unreasonable to interpret Boreas' conscious effort to remain incognito as the result of a pact with Athena.<sup>(39)</sup>

A later version of the Argonautica, attributed to Orpheus and tentatively dated to the late fourth century AD, includes a passage which is very similar to that found in the first book of Apollonius' Argonautica in as much as it cites the tale of Boreas and Oreithyia in connection with Zetes and Calais, who are listed as being amongst those sailing on the *Argo* in search of the golden fleece. According to Orpheus' version of the tale (see App.VI, no.41) Oreithyia gave

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(38)

Cf discussion above.

(39)

Cf discussion above. Given the view of E. Simon, *op.cit.*, pp.117-121, that *Acusilaus*' account is also derived from that of Aeschylus, the parallel mentioned is of particular significance.

birth to Zetes and Calais after uniting with Boreas beside the river Ilissos. Although Orpheus' version occurs in the identical context to that of Apollonius, it displays one major disagreement with the earlier version : it omits all reference to Thrace, the homeland of Boreas, and consequently suggests that Boreas takes sexual advantage of Oreithyia, not in Thrace, but in Attica on the banks of the Ilissos. Whether the subsequent birth of Zetes and Calais should also be understood to have taken place in Attica, it is difficult to tell.

In addition to the above accounts, all of which serve to highlight the genealogy of Zetes and Calais, there appeared, in the period between Ovid and Orpheus, a series of allusions to the myth of Boreas and Oreithyia, all occasioned by specific geographic references. The earliest of these is to be found in Statius' Thebais (see App.VI no.27) where mention of the Ilissos river prompts a brief statement to the effect that this river was privy to the rape of Oreithyia, and that it concealed the Thracian passions (of Boreas) on its banks. Here, too, just as in the Orpheus account discussed above, it would appear that the author intends us to understand that Boreas, far from simply abducting Oreithyia from the banks of the Ilissos, in fact had sexual intercourse with her there.

Statius' contemporary Silius Italicus was likewise prompted by a geographical allusion to make mention of the mythical tale under study. In the eighth book of his Punica (see App.VI, no.28), in a passage which gives particular prominence to Calais,<sup>(40)</sup> Silius refers to the soldiers of Sidicinum whose mother city is Cales,

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For further discussion of Calais and the other offspring of Boreas and Oreithyia, see below.

and goes on to say that the founder of this city was Calais, nurtured in Thracian caves by his mother Oreithyia after she had been carried off by the North wind Boreas. The details of the abduction of Oreithyia recorded here by Silius show no disagreement with those found in earlier versions.

Two subsequent authors of geographical works, Pausanias and Avienus, also found occasion to relate the tale. In his Description of Greece, written in the second century AD, Pausanias gives an account of the rivers that flow through Attica, included amongst which is the Ilissos. At the point where the Ilissos is mentioned (see App.VI, no.32), Pausanias adds that this is the river by which Oreithyia was playing when she was carried off by the North wind, and made his wife; and he goes on to say that because of this tie between Boreas and the Athenians, the former assisted the latter by causing the destruction of the Persian fleet (in consequence of which the Athenians consider the Ilissos sacred to Boreas). The suggestion that the abduction of Oreithyia took place whilst she was playing on the banks of the Ilissos river is reminiscent of the version of the tale recorded by Plato (see above). The latter part of Pausanias' account, concerning the assistance given to the Athenians by Boreas during the Persian Wars, appears, on the other hand, to be derived from Herodotus, whose account of this incident has already been discussed in some detail (likewise see above).<sup>(41)</sup>

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(41)

In addition to the passage in Pausanias just examined, there is another - found in the fifth book of the Description of Greece (see App.VI, no. 34) - which makes reference to Boreas and Oreithyia. The passage in question alludes to the artistic representation of the tale on the Kypselos chest, and will not be discussed here as it is adequately covered in E. Simon, op.cit., p.111.

Avienus, writing two centuries later, introduces the myth in circumstances that resemble those found in Pausanias. In that part of his Descriptio Orbis Terrae which concerns Attica (see App.VI, no.39), he attributes the fertility of this region to the existence of the Ilissos river. The reference to the Ilissos provides a cue for the introduction of the myth : Avienus suggests that it was from the quiet water of the Ilissos river that Boreas carried off Oreithyia. So brief is this allusion that it requires no further comment. (42)

The impression thus far gained from this survey of later versions of the abduction of Oreithyia is that, from the third century BC onwards, the myth was well-known to literary scholars, forming an accepted part of Athenian history and tradition, but that it no longer possessed the vitality so evident in the fifth and early fourth centuries BC (a vitality that was, of course, largely due to its topicality). That the tale in question was little more than a literary theme during this later period appears to receive confirmation from a passage in Philostratus' Life of Apollonius (see App.VI, no.35) where Apollonius is said to have rebuked the Athenians for their behaviour during the annual festival of Dionysus, and to have accused them amongst other things, of having no respect for the winds, not even for their patron Boreas, the lover of Oreithyia. The stance adopted by Apollonius, as recorded in Philostratus, may be somewhat

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(42)

Given that Avienus drew heavily on his (?) 2nd century predecessor, Dionysius Periegetes, it is appropriate to point out that the latter apparently produced his own version of the myth of Boreas and Oreithyia; see P.W. V.724, s.v. Boreas. The text in question has unfortunately proved difficult to obtain, but it may well amount to little more than a passing reference, as in Avienus.

extreme, but it nonetheless provides important evidence of a change in attitude towards Boreas and his cult, and more especially towards the associated myth of the rape of Oreithyia. It seems likely that by the time of Apollonius (first century AD) the myth had passed out of oral currency and had become solely a literary phenomenon.

This trend receives further confirmation from the fifth century epic poet Nonnus, whose three references to the tale of Boreas, and Oreithyia in fact mark the end of this discussion of the later development of the tale in question.<sup>(43)</sup> Of the three passages to be found in Nonnus, two (see App.VI, no.s 45 and 46) merely refer in passing to Boreas and his bride Oreithyia, and therefore need not detain us further.<sup>(44)</sup> The third passage, however (see App.VI, no.44), is of particular significance, for it provides a direct link between the Boreas-Zephyrus-complex and the epic strand of the horse tradition (see chapter III, above). In the passage concerned Nonnus describes Erechtheus as the owner of Xanthos and Podarke, two horses sired by Boreas in a winged union with a Sithonian Harpy, and given by him to his father-in-law Erechtheus when he carried off Attic Oreithyia for his bride. The union of Boreas with the Sithonian Harpy has already been discussed at some length (see chapter III, above). Nonnus' suggestion that the offspring of that union were given by

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(43)

One further version of the myth of Boreas and Oreithyia is apparently to be found in the Mythographi Vaticani, a work tentatively dated to the eighth century AD; see P.W. V.724, s.v. Boreas. This is a work which I unfortunately have not been able to consult.

(44)

It is interesting to note that in both these passages reference is also made to Zephyrus and his bride Iris; for further discussion of this pair, see below.

Boreas to Erechtheus in exchange for Oreithyia is completely unprecedented in the history of the tale of Boreas' rape of Oreithyia. It is, moreover, an innovation which successfully reinforces the aggressive nature of Boreas, whose union with the Harpy (both of them in horse form?) is to be viewed as a direct parallel to his abduction of Oreithyia.

The fact that this particular version forms part of a literary epic (as is also the case with the earlier versions of Apollonius Rhodius, Statius, Silius Italicus and Orpheus) and that Nonnus' description of Boreas' union with the Harpy forms part of the epic sub-tradition concerning wind-sired horses which, from at least the first century AD, appears to have been nothing other than a literary tradition (see chapter III, above), serves to reinforce the suggestion that the mythical tale of Boreas and Oreithyia was, from the third century BC onwards, transmitted not so much by word of mouth, but rather in written form. There appears to be little, if any, evidence to support the possibility of the active oral transmission of the tale in the period in question. That the tale was not actively transmitted by word of mouth does not, however, preclude its passive transmission : there would, no doubt, have been many who read the tale in one or more of its numerous versions and who, if asked, would have been able to give the essential details of it, but who made no effort themselves to actively pass on the tale.

Having examined the mythical tale of Boreas' abduction of Oreithyia, paying particular attention to the circumstances of the abduction, it is now appropriate to focus on the offspring resulting from this union,

reputedly four in number : Chione, Cleopatra, Zetes and Calais.<sup>(45)</sup> The sole purpose of examining extant evidence concerning these four offspring is to ascertain whether or not they are envisaged as inheriting the characteristics of their parents, and/or as being endowed with outstanding abilities or traits (cf the instance of the wind-sired horses discussed in chapter III, above).

Little relevant information has survived on the subject of Chione. Even Apollodorus (see App.VI, no.19), who provides additional data concerning Cleopatra, Zetes and Calais, records nothing more than Chione's name. Hecataeus of Abdera makes mention of the union of Chione and Boreas (see App.VI, no.12), but this is not exactly pertinent here and will be discussed in the appropriate place below. Given the lack of ancient evidence about Chione, it seems reasonable to suggest that she played a less prominent role in Greek mythology than her sister and brothers, and that accordingly her personality was not clearly defined.

Chione's sister Cleopatra features more frequently in ancient literature, although she is by no means as prominent a figure as her brothers Zetes and Calais. She appears in Apollodorus and Diodorus Siculus (see App.VI, no.s 19 and 21)<sup>(46)</sup> as the (first) wife of Phineus and as the mother of his two sons, Plexippus and Pandion,

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(45)

Cf Apollodorus, *Bibliotheca* III.15.2-3 (see App.VI, no.19); and also the Scholiast on Apollonius Rhodius I.211-215. The latter mentions a fifth offspring, Cthonia, but as the existence of a fifth appears to be contrary to the generally accepted tradition, no reference will be made to Cthonia in the present discussion.

(46)

Cf, too, Apollonius Rhodius and Valerius Flaccus (see App.VI, no.s 17 and 25).

both of whom are unjustly treated by Phineus at the instigation of their stepmother Idaea.<sup>(47)</sup> Because Phineus forms the central focus of these two accounts, little is said about Cleopatra in her own right. The opposite is true of a passage in Sophocles' *Antigone*, however. In the passage concerned (see App.VI, no.6), Sophocles first refers to the wicked punishment inflicted on the two sons of Cleopatra,<sup>(48)</sup> and to the piteous plight of all three as a result of Cleopatra's ill-starred marriage to Phineus, then proceeds to give a brief description of the parentage, childhood and character of Cleopatra. She is described as belonging to the line of Erechtheus (through her mother Oreithyia), as being the daughter of Boreas, as having been nourished in far-distant caves on the wild winds of her father, and as possessing the speed of horses over steep rocky cliffs. Given the ancient association of wind and horse, and the closely connected belief that horses could be sired by the wind (see chapter III, above), there can be little doubt that Sophocles intends us to understand that Cleopatra was endowed with the speed of the wind(s). It is interesting to note that as well as being wind-swift, Cleopatra is also said to have been 'nourished on the wild winds'. This reference brings to mind the passage in Ariosto (see App.I, no.35) where Duke Astolfo's horse Rabican is said to have been conceived by fire and wind, to feed not on hay or oats but on pure air, and to have the ability to outstrip the wind. Sophocles' image of Cleopatra as wind-swift and wind-nourished serves to provide an additional link

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(47)

According to Apollodorus, Phineus blinded his two sons; according to Diodorus, he had them shut in a burial vault and subjected to continual blows of the whip.

(48)

The are said to be blinded, not by Phineus, but by their evil stepmother.



between the Boreas-Zephyrus-complex and the epic strand of the horse tradition.

Of the four offspring of Boreas and Oreithyia, the best known - in ancient as well as in modern times - are Zetes and Calais. There appear to be two inter-related reasons for their prominence, firstly, the fact that they were traditionally accepted as being amongst those heroes who participated in the voyage of the Argo in search of the golden fleece, and secondly, the fact that, from the early fifth century BC,<sup>(49)</sup> numerous references were made to them - especially in their role as Argonauts<sup>(50)</sup> - in ancient literature. But how are Zetes and Calais portrayed? Do they display any of the characteristics of their father Boreas? Have they any remarkable traits or capabilities?

The first point that must be made is that Zetes and Calais are generally described as winged,<sup>(51)</sup> and that in this respect they may

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(49)

The earliest reference to the pair is to be found in Simonides (see App.VI, no.2).

(50)

Zetes and Calais are mentioned in connection with their voyage on the Argo in Pindar (see App.VI, no.4a), Acusilaus (see App.VI, no.5), Apollonius Rhodius (see App.VI, no.s16 and 17), Apollodorus (see App.VI, no.s18 and 19), Diodorus Siculus (see App.VI, no.21), Propertius (see App.VI, no.23), Ovid (see App.VI, no.24), Valerius Flaccus (see App.VI, no.26), Hyginus (see App.VI, no.30), Pausanias (see App.VI, no.33), and Orpheus (see App.VI, no.s41 and 42).

(51)

Cf P.W.XA.239, s.v. Zetes. Specific references will be given in discussion below.

be said to have inherited one of the attributes of their father Boreas.<sup>(52)</sup> Differing descriptions are given of the wings themselves. Pindar, in his fourth Pythian ode (see App.VI, no.4a), suggests that the pair had two wings on their backs, and that these were of a purple hue. In an equally striking version (see App.VI, no.16) Apollonius Rhodius relates that their wings were two in number, that they were attached to their ankles, and, moreover, that they gleamed with golden scales. According to Hyginus (see App.VI, no.s29 and 30), Zetes and Calais were endowed with two sets of wings, one set arising from their heads, and the other from their feet. Orpheus, on the other hand, records that the two possessed only one set of wings, and that these were situated beneath their ears, that is, on their shoulders (see App.VI, no.41). In a unique passage (see App. VI, no.24) Ovid suggests that Zetes and Calais had wings like their father, but that they were not born with these : it was only when the first signs of a beard appeared on their chins, that feathers began to grow on either shoulder too. The one conclusion that is to be drawn from the fact that Zetes and Calais are generally described as winged is, of course, that they thereby had the means to propel themselves through the air at the same speed as the winds. Clearly, then, the pair were endowed not merely with the form, but also with the speed, of their father Boreas.

In addition to these features derived from Boreas, certain other notable traits were attributed to Zetes and Calais. Apollonius

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(52)

Cf P.W.V.723, 729, s.v. Boreas. It would appear that although Boreas is portrayed as winged on Greek vases dating from as early as the fifth century BC, it is not until the time of Ovid that he is described in literature as possessing wings.

Rhodius describes them as having long dark tresses that shake hither and thither in the wind (see App.VI, no.16). Hyginus, on the other hand, records that the pair is reportedly possessed of hair of a sky-blue colour (see App.VI, no.29). One further feature noted by Orpheus (see App.VI, no.41) is that Zetes and Calais are similar in form to the gods. In their individual contexts these characteristics serve to enhance the heroic nature of the two male offspring of Boreas and Oreithyia.

Mention of the heroic status of Zetes and Calais brings us to a further important point : their conduct in their capacity as heroes. Nothing could provide a better illustration of the heroic character and conduct of the pair than the well-known incident in which the Argonauts encounter Phineus, the Thracian seer, who - according to some accounts<sup>(53)</sup> - has been blinded by the gods and is constantly tormented by a plague of Harpies who steal or defile his food, or who - according to other versions<sup>(54)</sup> - has inflicted or is in the throes of inflicting, a terrible punishment on his two sons by Cleopatra, at the instigation of their stepmother Idaea. Zetes and Calais immediately respond to the situation with which they are confronted : according to the first set of accounts, they rid Phineus of the Harpies by pursuing the latter through the air either to the point where another divine being (Iris or Typho) intervenes

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(53)

Cf Apollonius Rhodius (see App.VI, no.17), Apollodorus (see App.VI, no.18), Valerius Flaccus (see App.VI, no.26), and Hyginus (see App.VI, no.30).

(54)

Cf Apollodorus (see App.VI, no.19), Diodorus Siculus (see App.VI, no.21), Hyginus (see App.VI, no.30) and Orpheus (see App.VI, no.42).

and informs them that the Harpies will no longer plague Phineus, or to the point where the Harpies fall to the ground in exhaustion; according to the second set of accounts, they go to the aid of Cleopatra's sons (who are, of course, their nephews), and they assist in the punishment of Phineus.

The heroic status of Zetes and Calais and the courageous deeds effected by them in the Phineus-episode bring to mind the fact that in the epic strand of the horse tradition (see chapter III, above) the horse that has been sired by the wind is generally associated with a particular heroic figure and is considered - because of its remarkable origin - to be an appropriate battle-companion for such a hero. Thus we have on the one hand, Zetes and Calais, the winged sons of Boreas who have the ability to move with the speed of the wind and are renowned for their heroic actions, and on the other hand, the wind-sired horse which is endowed with the swiftness of the wind and is the perfect partner for the hero. This parallel between the equine and the heroic offspring of the wind serves to reinforce the connections already delineated between the epic sub-tradition concerning horses and the Boreas-Zephyrus-complex.

At this point, before the transition is made from the subject of Boreas' liaison with Oreithyia to that of his associations with other women, it is not inappropriate to mention that there are certain striking similarities between the figures of Zetes and Calais and that of Hiawatha, the hero of Longfellow's poem The Song of Hiawatha.<sup>(55)</sup>

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(55)

Longfellow's poem is a literary composition inspired by a series of North American Indian tales about a culture hero Manabozho. A sample of these tales (which are apparently common to all Central Woodland

Near the outset of the poem Longfellow devotes several lines to a moving description of the seduction of the beautiful maiden Wenonah by the West wind Mudjekeewis, an act which results in the birth of the 'child of wonder' Hiawatha (see App.VI, no.49). Hiawatha is thus the offspring of the wind, even as his Greek counterparts Zetes and Calais are. Moreover, just as the two Greek heroes are said to be as swift as the wind, Hiawatha is likewise described as being possessed of outstanding speed:

Swift of foot was Hiawatha;  
He could shoot an arrow from him,  
And run forward with such fleetness,  
That the arrow fell behind him!

(The Song of Hiawatha Part 4)

Hiawatha's speed, together with his other remarkable attributes, enables him to endure the various ordeals which he encounters during the course of the poem. The same may be said to be true of Zetes and Calais : thanks to their extraordinary swiftness, they are able to rid Phineus of the vicious Harpies.

The traditional association of Boreas with Oreithyia, so frequently recorded in ancient literature, is complemented by a series of associations with other women, all of which receive nothing more than the fleeting attention of the ancients. It is convenient to begin with the liaison between Boreas and Chione, for the woman in question is presumably Boreas' own daughter by Oreithyia (see above). There are two extant references to this union, one of which is to

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tribes of North America), together with a set of references to other versions, is to be found in Stith Thompson, Tales of the North American Indians, Indiana University Press, Bloomington and London, 1973 (repr.), pp.8-14, 277.

be found in the late fourth/early third century BC historian Hecataeus of Abdera.<sup>(56)</sup> In the passage in question (recorded by Aelian : see App.VI, no.12) Hecataeus discusses the race of the Hyperboreans and their worship of Apollo, and reports that this god has as his priests the three sons of Boreas and Chione who are brothers by birth and are six cubits in height. This passage is noteworthy on three counts : firstly, for the fact that the sons of Boreas and Chione are said to inhabit the Hyperborean Isles, isles which are situated 'beyond Boreas' and are therefore in close proximity to his realm; secondly, for the fact that the magic number three, held in awe and reverence in antiquity,<sup>(57)</sup> occurs twice in the one passage, once in relation to the number of sons of Boreas and Chione, and once in regard to their height ( $6 = 3 \times 2$ ); and thirdly, because Boreas' sons are described as being remarkably tall,<sup>(58)</sup> a quality that is no doubt derived from their supernatural origin.<sup>(59)</sup>

Another passage of Hecataeus (this time recorded by Diodorus Siculus : see App.VI, no.11) confirms and extends the information found in the

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(56)

The other reference (which has proved unobtainable) occurs in [Plutarch], De Fluviis V.3 and apparently concerns Hyrpax, the son of Boreas and Chione; see P.W.V.726, s.v. Boreas.

(57)

Cf chapter III, n.30.

(58)

Six cubits is approximately equal to nine feet.

(59)

Here it is interesting to compare a New Guinea tale (see App.VI, no.50) in which a woman is said to be impregnated by the wind and to produce two large sons, twins in this instance. Once again the size of the offspring seems to be directly attributable to the miraculous manner of their conception.

first. Hecataeus relates that on the Hyperborean Isles the kings and the supervisors of the sacred precinct to Apollo are called Boreades as they are descendants of Boreas and the succession to these positions is always kept in their family. The focus of this passage is broader than that of the first : it refers not merely to one generation of Boreas' offspring, but to several, and it suggests that these descendants of Boreas perform the role not merely of priests but also of kings. No mention is made of Chione; but this is possibly to be attributed to the wider focus of the passage.

Diodorus Siculus, the scholar responsible for the preservation of this last mentioned passage of Hecataeus, was likewise responsible for recording details of two further associations of Boreas, both with women who must unfortunately remain anonymous. In a discussion of the history of the island of Naxos (see App.VI, no.22) Diodorus records the myth of Butes and Lycurgus, two sons who were born to Boreas by different mothers : Butes, the younger son, plotted against his elder brother Lycurgus, was exiled from Thrace together with his accomplices, and some time subsequently settled with them on the island of Naxos, originally called Strongyle.<sup>(60)</sup> Since neither of the women with whom Boreas is linked is named, and since very little information is provided about Butes and Lycurgus, no further comment can be made concerning the liaison in question or the offspring produced.

The accounts of Hecataeus and Diodorus discussed above concern male offspring produced by Boreas; two additional accounts - one in

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(60)

Cf Virgil, Aeneid X.350.

Callimachus and the other in Quintus Smyrnaeus - make specific reference to female offspring. In the former, that of Callimachus (see App.VI, no.15), <sup>(61)</sup> mention is made of Upis, Loxo and Hecaerge, three daughters of Boreas, who are said to have brought offerings (destined for Apollo) from the fair-haired Arimaspi. This passage is interesting in that it shows certain correspondences with the two passages of Hecataeus just discussed. In the first instance, the number of daughters cited, namely, three, is identical to the number of sons recorded in Hecataeus. It seems probable that here, too - even as in Hecataeus - this number has been selected because of its mysterious and mystical nature. <sup>(62)</sup> Secondly, there is the fact that these three daughters are closely associated with the Arimaspi, a legendary people who, like the Hyperboreans, lived in the far north - a region equally appropriate for the daughters of the North wind Boreas as for his sons. The third correspondence is the reference to Apollo : just as the sons (and descendants) of Boreas are said by Hecataeus to act as priests of Apollo, so the daughters of Boreas are portrayed by Callimachus as being amongst those who were originally responsible for conveying offerings to Delian Apollo.

One aspect of the Callimachean passage that has not been mentioned is the fact that it omits any reference to the mother of Boreas' daughters. The same is unfortunately true of the passage found in

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(61)

It is worth mentioning here that, as well as this reference to the daughters of Boreas, Callimachus may also have had occasion to refer to the myth of Boreas and Oreithyia; cf R. Pfeiffer, *Callimachus*, Vol.I: Fragmenta, Oxford, Clarendon Press, 1965 (repr.), p.285, fr.321 (γαμβρός Ἐρεχθίδος).

(62)

See n.57 above.



Quintus Smyrnaeus (see App.VI, no.40). Here Quintus relates that it was the *Aurae* (Breezes), the swift daughters of the North wind *Boreas*, who brought to *Ares*, as he strode through the sky, the news of the death of his daughter. It seems evident that the connection drawn by Quintus between *Boreas* and the *Aurae* stems from the very nature of the latter who are in fact personified winds or breezes. Quintus' description of the *Aurae* as the swift daughters of *Boreas* - a description which is nothing other than appropriate - is significant in that it recalls the instance of *Zetes* and *Calais*, the fleet-winged offspring of *Boreas* (see above), and likewise that of the wind-sired horse, endowed with the speed of its sire (see chapter III, above).

The evidence found in *Hecataeus*, *Diodorus Siculus*, *Callimachus* and *Quintus Smyrnaeus* thus provides an interesting insight into the relationships of *Boreas* with women other than *Oreithyia*, although these women themselves receive scant attention and, aside from *Chione*, are left unnamed. Before we leave the subject of *Boreas* and his various relationships, and turn to the associations of *Zephyrus* with both *Iris* and *Flora*, it is important to note one further example of a mythological figure said to be the son of the wind, an example which forms a close parallel with the series of wind-offspring just examined. The figure in question is *Hephaestus*, the son of *Hera*. According to *Lucian* (see App.VI, no.31), *Hera* gave birth to *Hephaestus* - a wind-child - without having had intercourse with her husband. *Lucian's* reference to *Hephaestus* as a wind-child (ὕπνεμον παῖδα) is the only such reference extant : other ancient authors from the time of *Hesiod* onwards<sup>(63)</sup> limit themselves to the description of

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(63)

There are a number of references to *Hephaestus* in *Homer* (cf *Iliad* I.571 ff; XVIII. 391 ff) but nowhere does *Homer* explicitly state that *Hera* gave birth to *Hephaestus* parthenogenetically.

Hephaestus as 'fatherless',<sup>(64)</sup> and/or to the suggestion that Hera gave birth to Hephaestus by her own begetting, without intercourse with the opposite sex.<sup>(65)</sup> This being the case, it seems reasonable to suggest that Lucian, in terming Hephaestus a wind-child, deliberately adapted the accepted tradition on analogy with other instances of wind-produced offspring.<sup>(66)</sup>

Lucian's version of the birth of Hephaestus appears to have provided, the inspiration - many centuries later - for a passage that is found in Ben Jonson's Underwood (see App.VI, no.47). Here Jonson refers to Vulcan (the Latin equivalent of Hephaestus) as the son of the wind, suggesting that his mother conceived him when filled with lust, and that he had no father. Given the parallel between the accounts of Lucian and Jonson, and the fact that the former is the single account of its type to have survived from antiquity, it seems probable that Jonson drew on Lucian for his material in this instance.<sup>(67)</sup>

There is one further point that must be made concerning the Hephaestus

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(64)

Cf Hyginus, Fabulae, Pref.; Nonnus, Dionysiaca IX.228.

(65)

Cf Hesiod, Theogony 927-928; Homeric Hymn to Apollo 316-317; Apollodorus, Bibliotheca I.3.5; Nonnus, Dionysiaca XI.228-229.

(66)

Given Lucian's use of the term ὑπνέμιον with reference to Hephaestus, it may well be that Lucian was also familiar with the ancient tradition concerning wind-eggs and that this served as an influence here as well.

(67)

For this reason a statement found in Ian Donaldson (ed.), Ben Jonson, Poems, London, Oxford University Press, New York, Toronto, 1975, p.198, n. on Underwood 111-117, to the effect that Juno's (i.e. Hera's) impregnation by the wind is Jonson's invention, must be dismissed as incorrect.

tradition. In the versions of several ancient authors,<sup>(68)</sup> as well as in that of Jonson (see App.VI, no.47), it is recorded that when Hera gave birth to Hephaestus, she was so repulsed by his weakly nature and his deformed legs and feet, that she cast him out of heaven. The impression gained from the versions concerned is that Hephaestus' weakness and deformity is to be attributed to the fact that he was born of Hera alone, without a father. The instance of Hephaestus may profitably be compared with the equine offspring of the wind described in the zoological strand of the horse tradition (see chapter III, above) : these foals are frequently said to have a life-span of no more than three years. An even closer parallel, however, is to be found in a tale from Formosa about a country or, rather, community of women.<sup>(69)</sup> According to the tale in question (see App.VI, no.51), the women of the community are desirous of offspring, so they go out onto a mountain and expose themselves to the wind; as a result they become pregnant and give birth to female children, but all the children are weakly and crippled. Just as Hera is portrayed in Greek mythology as having produced Hephaestus without the assistance of a male (and - as reported by Lucian - with the aid of the wind), so the women in the Formosan tale, who dwell in a village where there are no men, are said to become impregnated by means of the wind and give birth to female children. Moreover, even as Hephaestus, the son of Hera, is described as being sickly and lame, traits which are to be attributed to the nature of his birth, so, too, the children produced in the community of women are

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(68)

Cf Homer, *Iliad* XVIII.394-399; *Homeric Hymn to Apollo* 316-319; Servius on *Aeneid* VIII.454; Nonnus, *Dionysiaca* IX.228-231.

(69)

Cf n.1, above.

said to be crippled and lacking in strength, likewise as a result of the manner in which they were conceived. It does not seem unreasonable to suggest that the Greek accounts about Hephaestus, as well as the tale from Formosa, provide evidence of a certain hesitation concerning the possibility of parthenogenesis, or, more specifically, concerning the ability of a woman to produce normal, healthy children without the assistance of a male.

It is now appropriate to leave the subject of Boreas (and other matters connected with him) and to pass on to the subject of Zephyrus. As was stated at the outset of this chapter, Zephyrus is linked by ancient authors with one or other of two women : Iris and Flora. Zephyrus' association with Iris is recorded exclusively in Greek literature, whereas his union with Flora is found solely in Latin literature. This being the case, it seems convenient to begin by discussing pertinent evidence relating to Iris, then to proceed to relevant evidence concerning Flora.

So far as can be ascertained, the poet Alcaeus (late seventh/early sixth century BC) was the first to mention the relationship of Zephyrus and Iris. A three-line fragment of Alcaeus' work (see App.VI, no.1) contains an allusion to Eros, describing him as the most powerful of the gods, and as the son of 'well-sandalled Iris and golden-haired Zephyrus'. This fragment provides little more than the essential information that Zephyrus was considered to have united with Iris, and that the product of their union was Eros (the god of love). By consulting earlier Greek literature, however, it is possible to gain a greater insight into the union in question.

In Homer's *Iliad*, Iris is portrayed as the messenger of the gods,<sup>(70)</sup> and as such she is described as 'swift' (ταχεῖα, ὠκέα),<sup>(71)</sup> 'wind-swift' (ποδὶνέμος),<sup>(72)</sup> 'storm-footed' (ἀελλόπος),<sup>(73)</sup> and 'golden-winged' (χρυσόπτερος).<sup>(74)</sup> Particularly significant here is the fact that Iris is said to be winged and, in addition, to be endowed with the speed of the wind. It may well be that these characteristics gave rise to the suggestion, first found in Alcaeus, that Zephyrus and Iris were closely connected. Also relevant to this discussion is Hesiod's description of Iris as a sister of the Harpies.<sup>(75)</sup> It will be recalled that, according to Homer (see App.I, no.1) Zephyrus (possibly in the form of a stallion) mated with the Harpy Podarge (in the shape of a mare) and that their offspring were the wind-swift horses Xanthos and Balios. Given the relationship between Iris and the Harpies, it seems possible that the union of Zephyrus and Podarge served as a model for that of Zephyrus and Iris.

That Eros, the winged god of love, was the offspring produced by the union of Zephyrus and Iris is confirmed by later sources (see

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(70)

Cf P.W.IX.2038, s.v. Iris.

(71)

Cf *Iliad*, passim.

(72)

Cf *Iliad* II.786; V.353, 368; XI.195; XV.168, 200.

(73)

Cf *Iliad* VIII.409; XXIV.77.

(74)

Cf *Iliad* VIII.398; XI.185.

(75)

*Theogony* 265-267.

discussion below). However, as is revealed in a passage ascribed to the late fourth/early third century BC philosopher Crantor (see App.VI, no.10), there was some dispute in antiquity over the exact identity of Eros' parents. In the passage in question Crantor suggests that he is in doubt as to whether to call Eros the oldest of all the children born to Erebus and Night, or the son of Cypris (i.e. Aphrodite), or of Earth, or of the Winds. The general reference made by Crantor to the 'Winds' (plural) appears to be an allusion to the traditional view - expressed in Alcaeus - that Eros was the son of Zephyrus by Iris. Of the other genealogies given,<sup>(76)</sup> the only one of particular interest to this study is that involving Erebus and Night, a genealogy which is likewise recorded in Aristophanes' Birds, in a passage which has already been discussed in relation to the wind-egg (see App.II, no.3; and also chapter IV, n.8 above. In the passage concerned Aristophanes relates that, in the beginning, all that was in existence was Chaos, Night, Erebus and Tartarus, but that at length, in the infinite bosom of Erebus black-winged Night bore a wind-egg, from which, as time went on, sprang Eros 'his back gleaming with golden wings, swift as the whirling winds'.

Two aspects of this passage require comment. The first is the suggestion that the cosmic egg from which Eros is said to have sprung was a wind-egg. It has previously been stated (see chapter IV, no.8, above) that Aristophanes' use of the term wind-egg in this instance may well derive from the concept of the wind-fertilised cosmic egg found in the Orphic cosmogony. It seems appropriate

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(76)

For a discussion of these and other variations, see P.W.VI.487-489, s.v. Eros.

to add here that Aristophanes' application of the term wind-egg to the egg from which Eros was produced may also have been influenced by the traditional connection between Eros and Zephyrus. Whether or not this was so, there is undoubtedly a strong parallel between the birth of Eros from a wind-fertilised egg laid by Night (as depicted in Aristophanes), and the birth of Eros by Iris as a result of her union with the West wind Zephyrus (as described in Alcaeus).

The second noteworthy aspect of the passage under study is the vivid description which it provides of Eros. Thus he is said not merely to be endowed with golden wings, but also to have the speed of the winds. It need hardly be said that these attributes are as fitting for Eros, the son of Zephyrus and Iris, as they are for Eros the wind-offspring of Night. Indeed, they might even be said to be more appropriate, given that Iris herself is traditionally described as golden-winged (see above).

The union of Zephyrus and Iris, first mentioned in Alcaeus, then later in Crantor, does not recur again in ancient literature until the time of Nonnus in the fifth century AD.<sup>(77)</sup> In his epic poem, the *Dionysiaca*, Nonnus makes reference to the couple in question on three separate occasions.<sup>(78)</sup> One of these three passages (see

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(77)

It should be noted, however, that the passage ascribed to Crantor (see App.VI, no.10; cf App.VI, no.37) is recorded by Diogenes Laertius in the ? 3rd century AD.

(78)

In two out of three instances (see App.VI, no.s45 and 46), these references are found side by side with references to Boreas and Oreithyia; cf n.44 and associated discussion above.

App.VI, no.45) contains nothing more than a fleeting allusion to Iris as the wife of Zephyrus and the messenger of Zeus. The two remaining passages, however (see App.VI, no.s 43 and 46), deserve closer attention.

In the first (see App.VI, no.43), a passage which concerns a visit paid by Hera to Iris, the latter is described in terms which mirror those found in Homer and Alcaeus. Not only is she called the messenger of Zeus and is she said to be wind-swift and golden-winged (details reminiscent of Homer), but she is also termed the bride of Zephyrus, and the mother of Eros (exactly as she is in Alcaeus). This passage, then, provides a synthesis of those attributes traditionally ascribed to Iris.

The second passage mentioned (see App.VI, no.46) comprises several lines spoken by the deserted Ariadne. During the course of her lament, she refers to Zephyrus, then, in the very same breath to Iris, the bride of Zephyrus and the mother of Pothos (Desire). Here Nonnus apparently uses the term Pothos as a synonym for Eros.<sup>(79)</sup> Thus, far from contradicting the traditional association of Zephyrus and Iris with Eros, he in fact confirms the same.

With Nonnus we effectively reach the end of this series of references in ancient literature to the union of Zephyrus and Iris.<sup>(80)</sup> Such is the nature of the evidence that there appears to be little ground

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(79)

Cf P.W.VI.484-485, s.v. Eros.

(80)

Further confirmation of this union is however, to be found in Eustathius, Commentarii ad Homeri Iliadem 391, 24-25; 555, 31 (a work dating to the twelfth century AD).



for suggesting that the details of this union were transmitted orally from one person to another. The lack of any connection between Zephyrus and Iris in the oral epic of Homer, the infrequency of later references to their union, the absence of any data (either internal or external) pertinent to the possibility of oral transmission, the existence of a number of different genealogies for Eros, plus the fact that his connection with Zephyrus and Iris appears to be a literary invention,<sup>(81)</sup> are all important factors which lend support to the view that the relationship between Zephyrus and Iris was nothing more than a literary phenomenon. That versions of the union in question, although not actively passed on by word of mouth, were nonetheless passively transmitted by those familiar with them through their reading, seems quite probable, however.

Before turning to the relationship of Zephyrus and Flora, it is worth noting that in Apuleius' Metamorphoses<sup>(82)</sup> Zephyrus is portrayed as the servant of Eros, and that in this role he conveys Psyche down from the rocky height above Eros' palace to the valley below. The image of the West wind Zephyrus gently wafting Psyche (or Soul) through the air immediately brings to mind the ancient belief that souls were carried on the winds, a belief which led to the association of wind and soul (see chapter III, no.4, above; and also chapter IX, below). There can be little doubt that the role attributed to Zephyrus in Apuleius is closely connected with - and indeed inspired by - this ancient belief. Zephyrus and Psyche may thus be interpreted as personifications of the elements involved.

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(81)

Cf P.W.VI.489, s.v. Eros.

(82)

Metamorphoses IV.28 - VI.24, passim.

Even as Zephyrus is associated with Iris in Greek literature, so in Latin literature he is linked with Flora. The earliest reference to this liaison is to be found in a memorable passage composed by the Augustan poet Ovid.<sup>(83)</sup> In the passage concerned (see App.VI, no.25) Ovid begins by mentioning the games held annually in late April/early May in honour of Flora, then has Flora herself tell how she was pursued and raped by Zephyrus - even as his brother Boreas had carried off Oreithyia - and how, now, having been made his bride, she enjoys perpetual spring, and is the queen of flowers, tending a fruitful garden with blooms of innumerable colours.

This passage is noteworthy on a number of counts. In the first instance it provides valuable evidence concerning the Floralia, games held each year in springtime in honour of Flora, the goddess of blossoming or flowering plants. Evidence found elsewhere in Ovid and in other ancient sources<sup>(84)</sup> points to the antiquity of the cult of Flora, and indicates that her festival (initially movable)

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(83)

Although Ovid was the first to record the union of Zephyrus and Flora, these two are already found in close association in Lucretius V.737-740:

it Ver et Venus, et Veneris praenuntius ante  
pennatus graditur, Zephyri vestigia propter  
Flora quibus mater praespargens ante viai  
cuncta coloribus egregiis et odoribus opplet...

On come Spring and Venus, and Venus' winged harbinger marching  
before, with Zephyr and mother Flora a pace behind him strewing  
the whole path in front and filling it with brilliant colours  
and scents...

(Translation by W.H.D. Rouse)

(84)

For exact references see P.W.VI.2747-2750, s.v. Flora; Floralia.

was, from 173 BC, fixed to 28 April, a date which in the late Republic/early Empire was expanded into six days, namely, 28 April to 3 May. The second significant aspect of Ovid's account is that the union of Zephyrus and Flora described therein forms a direct parallel - as Ovid himself states - with the union of Boreas and Oreithyia. Together, these relationships may be said to provide the framework of the Boreas-Zephyrus-complex. The third point that must be stressed here is that the mythical tale of Zephyrus and Flora as recorded in Ovid effectively comprises a personified version of the traditional view of Zephyrus as the fertilising wind of spring, whose gentle breezes promote growth, renewal and regeneration in the plant world (see, in particular, chapters III and IV, above; see also chapter IX, below).

Given that Zephyrus was traditionally regarded as the fertilising spring wind, that Flora was worshipped in her own right as a spring goddess, and that these two figures were already - in the time prior to Ovid - to some extent associated because of their mutual connection with the spring season, it does not seem unreasonable to suggest - in the absence of any earlier versions of the tale of Zephyrus and Flora - that this tale may have been composed by Ovid himself, drawing upon the traditional concepts and associations just mentioned, and perhaps also using the tale of Boreas and Oreithyia as a model. (85)

This suggestion that the tale under study may have been nothing other than a literary composition should not be interpreted as an indication

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(85)

The possibility that Ovid may have been influenced by an earlier Greek tale featuring the goddess Chloris - described by Ovid (see App.VI, no.25) as Flora's Greek predecessor - cannot, however, be completely ruled out; cf P.W.III.2348-2349, s.v. Chloris.

that it was known only within literary circles: on the contrary, it seems highly probable that it almost immediately passed into oral currency. The fact that the tale focuses on the well-known figures of Zephyrus and Flora, presenting them in their traditional roles, and that Flora was annually honoured by the people of Rome in the Floralia, appears to lend support to this view.

This being the case, it is somewhat surprising to find that, in the centuries immediately following Ovid, very little attention is paid to the tale of Zephyrus and Flora in ancient literature.<sup>(86)</sup> Indeed, only one pertinent reference of any length is to be found, and this presents a very different perspective from that seen in Ovid. The passage in question is recorded by the late third/early fourth century Christian scholar Lactantius. In the first book of his Divinae Institutiones (see App.VI, no.38) Lactantius suggests that the Floralia were first instituted following the death of a prostitute named Flora, who had amassed so much money through her profession that she left a fixed sum to the people of Rome so that they might celebrate her birthday with public games; but, continues Lactantius, the senate considered this so disgraceful, it pretended that Flora was the goddess who presides over flowers, and that she must be appeased if crops, trees and vines are to flourish; this, he adds, is what provided the inspiration for the account found in Ovid's Fasti, an account which it is unbecoming and shameful to accept.

The negative stance adopted by Lactantius towards the Floralia, and likewise towards Ovid's tale of Zephyrus and Flora, appears to have

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(86)

Although this should not be seen as a negation of the view just expressed concerning the oral transmission of the tale.

its origin in the nature of the Floralia themselves.<sup>(87)</sup> These games, because they were celebrated with the express purpose of promoting the fertility of crops and plants, tended to be rather bawdy and lascivious in nature. This aspect of the Floralia appears to have angered Lactantius and led him to attribute the institution of the games to a prostitute. Such a stance may be said to provide greater insight into the moral attitudes of a third to fourth century Christian than into the history of the Floralia and the associated myth of Zephyrus and Flora.

It is evident, then, that Ovid's account remains our central source for the tale of Zephyrus' rape of Flora. Here it is appropriate to make two further points. The first is that the tale of Zephyrus and Flora as recorded by Ovid (and as subsequently summarised by Lactantius) contains no mention of the birth of any offspring to the couple concerned. In this respect the tale differs considerably from that pertaining to Boreas and Oreithyia (see above). However, in view of the direct parallel between the traditional concept of Zephyrus as the wind which fertilises the plant world in the spring season, and the mythical union of Zephyrus and Flora, the mention of offspring may possibly have been considered superfluous.<sup>(88)</sup>

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(87)

Cf P.W.VI.2749, s.v. Flora.

(88)

It is worth noting here that in his commentary on Virgil's Eclogues (see Comm. in Virg. Buc. V.48) Servius refers to a mythical tale about Carpos and Calamus, in which the former is said to be the offspring of Zephyrus and 'one of the Hours'. If the wife ascribed to Zephyrus in this instance is, in fact, Flora, then the tale recorded by Servius may represent an alternative version of the union of Zephyrus and Flora to that found in Ovid.

The second point to be made is that, although there is a distinct lack of references to the relationship of Zephyrus and Flora in both ancient and modern literature, an allusion to a comparable relationship undertaken by Zephyrus is to be found in Milton's L'Allegro (see App.VI, no.48). Here two versions of the birth of Euphrosyne (or Mirth) are given, in one of which it is suggested that she was conceived when Zephir, 'the frolic wind that breathes the spring', took advantage of Aurora 'on beds of violet blue/And fresh blown roses washed in dew.' Both the description of Zephir (i.e. Zephyrus) as the wind of spring and the colourful floral portrait are reminiscent of the account in Ovid.

It is evident, then, that the sexual relationships entered upon by Boreas and Zephyrus with members of the opposite sex are such that they form one traditional unit, appropriately termed the Boreas-Zephyrus-complex. Boreas' abduction of Oreithyia and the parallel rape of Flora by Zephyrus effectively provide the framework of the complex. Other important elements are the individual liaisons of Boreas with certain (mostly unnamed) women, and the union of Zephyrus with Iris.

The association of Boreas and Oreithyia is the most frequently recorded element of the B.-Z.-complex. Because of the assistance given to the Athenians by their son-in-law Boreas during the Persian Wars, numerous allusions to Boreas' rape of Oreithyia are to be found in Greek literature of the fifth and fourth centuries BC; and in subsequent centuries, although no longer as topical, the tale is nonetheless repeated - in both Greek and Latin literature - on a number of occasions. In contrast, Boreas' union with other women receives scant attention. Likewise, extant evidence concerning

Zephyrus and the two women with whom he is associated, Iris and Flora, is by no means as abundant as that pertaining to Boreas and Oreithyia. It is noteworthy that the association of Zephyrus and Iris is found solely in Greek literature, the earliest reference dating from the late seventh/early sixth century BC, whilst the association of Zephyrus and Flora occurs only in Latin literature, the most significant (and the earliest) account being that found in Ovid's Fasti.

On the question of the transmission of the major elements of the B.-Z.-complex, it would appear that, to some extent at least, the literary accounts were accompanied by an active oral tradition. It seems highly probable that in the fifth and fourth centuries BC the tale of Boreas and Oreithyia - so frequently recorded in literature - was actively transmitted by word of mouth, but that in subsequent times it was solely a literary phenomenon, being transmitted in a passive fashion by those familiar with the written versions. In the instance of Zephyrus, it would seem that, on the one hand, his union with Iris was a subject that did not pass beyond the confines of literature (and should therefore be assumed to have been transmitted passively rather than actively), whilst, on the other hand, his relationship with Flora was a topic which quickly passed from literature into oral circulation.

Finally, the B.-Z.-complex displays a number of important parallels with the other traditions concerning wind impregnation, especially the horse tradition. Thus the two winds noted in antiquity for their sexual aggression towards women are Boreas and Zephyrus, the very same winds as those that are responsible for the fertilisation of mares in the epic strand of the horse tradition. Similarly, even

as the wind-sired horses produced by these unions are described as being wind-swift and remarkable in nature, so the offspring of Boreas and Oreithyia are portrayed as being endowed with the speed of the winds and - in the instance of Zetes and Calais - as being possessed of special characteristics thanks to their parentage. Furthermore, the union of Zephyrus and Flora may be said to provide the mythological equivalent of the traditional concept of the fertilisation of the plant world by the West wind Zephyrus, a concept particularly evident in the zoological strand of the horse tradition. As will be emphasised in the following chapter, the ancient belief in the fertilising powers of the West wind appears to have been one of the significant factors influencing the formation and development of a number of the Graeco-Roman traditions pertaining to wind impregnation.



## IX CONCLUSION

The ancient concept of wind impregnation is thus found in a variety of forms, according as the wind is linked with one of six different animate beings : mares, hens, tigers, vultures, sheep, and (mythical or legendary) women. Of the six traditions concerned, that pertaining to mares comprises two separate - although at times interconnected - strands : the so-called epic sub-tradition which focuses on the wind-sired horse endowed with the characteristics of its sire; and the so-called zoological sub-tradition which concentrates on the fertilisation of mares by the wind. In the tradition concerning hens, special emphasis is placed on their laying of wind-eggs, eggs that are infertile and are produced without the assistance of the male. The tiger tradition has a dual focus : on the one hand, it stresses that tigers are wind-sired and wind-swift; on the other, it emphasises that all tigers are female, and that they rely on the wind for the purposes of procreation. According to the vulture tradition, the race of vultures is likewise entirely female, as a result of which these birds also resort to a parthenogenetic means of reproduction. The tradition about sheep, distinct from the others, focuses not so much on the fertilising powers of the wind as on the ability of the wind to influence sex determination. The last of the six traditions, that pertaining to women, has as its central concern the relationships of two (personified) winds with members of the opposite sex.

The literary - and likewise the oral - transmission of the six traditions mentioned is a matter of particular importance. Of these traditions the first (that on mares) begins with Homer in the eighth century BC (although the zoological strand is first recorded by Aristotle in the

fourth century BC), the second (that on hens) has its origin in the fifth century BC, the third (that on tigers) is first mentioned early in the third century AD, the fourth (that on vultures) does not appear in Greek literature before the late first/early second century AD, the fifth (that on sheep) is found as early as the fourth century BC, and the sixth (that on mythical or legendary women) has its beginning in the late seventh/early sixth century BC. Literary versions representing all six categories continue to appear throughout following centuries, and in every instance persist beyond the fall of the Roman empire. Two of the traditions concerned - those pertaining to tigers and women - do not last beyond the twelfth century, but that concerning sheep endures until the sixteenth, and those on mares, hens and vultures continue until the seventeenth century. That none of the traditions persist beyond this point is to be attributed to the growth of scientific knowledge in the period, and the accompanying rejection of the possibility of wind impregnation.

In four out of six instances, the scholarly literary tradition seems to have been accompanied - at least for some part of its existence - by an active oral tradition. In the tradition concerning mares, the epic strand - first found in Homer - can be said to have had oral origins, although subsequently existing only as a literary phenomenon; the zoological strand likewise appears to have had oral origins (both in Crete and in Spain), and in subsequent times also shows some evidence of a coexistent oral tradition. At certain points in the history of the hen tradition - namely, in the fifth and fourth centuries BC, the first centuries BC and AD, and the thirteenth century AD - evidence exists to show that the concept of the wind-egg was in active oral circulation, and there seems to be no reason to

suppose that the oral tradition did not persist in the intervening periods as well; what is more, the popular concept of the wind-egg found in thirteenth century England and Germany appears to have flourished throughout following centuries, only passing out of circulation at the end of the nineteenth century. Literary accounts relating to the influence of the wind on the sex determination of sheep likewise appear to have been accompanied - at least in the period up until the early third century AD - by an oral tradition, actively transmitted amongst shepherds. Finally, with regard to the wind fertilisation of women, it seems probable that the tale of Boreas and Oreithyia, recorded so frequently in the fifth and fourth centuries BC, was circulating orally at this same period; and that the tale of Zephyrus and Flora related in Ovid's Fasti passed into oral currency early in the empire. There is little, if any, evidence to show that the two remaining traditions - those about tigers and vultures - were anything other than literary traditions.

During their transmission, the literary accounts pertaining to mares, hens, vultures and women<sup>(1)</sup> all undergo a number of changes. The following is a summary of the major variables found in these four traditions:

1. the location
2. the wind
3. the nature of the animate being
4. the method of conception
5. the product/offspring
6. the characteristics of the product/offspring

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(1)

Here the major component of the Boreas-Zephyrus-complex, the tale of Boreas and Oreithyia, is referred to.

The one tradition in which all six variables are evident is that concerning horses; the other three traditions cited display differing combinations of the variables concerned. As for the two remaining traditions - those relating to tigers and sheep - very little variation is evident in the course of their transmission.

It has been claimed by certain scholars that the Graeco-Roman concept of wind impregnation in all its varying forms is to be attributed to an ignorance or misunderstanding of the prerequisites for procreation on the part of the ancients. The inaccuracy and inadequacy of this view is demonstrated by an examination of the various theories of conception proposed by Greek and Roman scholars in the period from the early fifth century BC to the late second century AD. These theories show that the ancient Greeks and Romans took a considerable interest in, and had a detailed knowledge of the process of conception. This being the case, it is inappropriate to suggest that a lack of knowledge concerning the requirements for procreation gave rise to the ancient concept of wind impregnation.

There is, in fact, no single explanation for the existence of the concept in question. However, by examining the several forms in which it exists, it is possible to gain an insight into those factors which may have influenced the origin and development of the concept.

The first point that arises from a perusal of the ancient evidence is that certain individual winds tend to recur more frequently than others. In the epic sub-tradition about horses, and likewise in the tradition pertaining to women, two winds feature, namely, the North wind Boreas and the West wind Zephyrus. In both traditions these winds are seen to fulfil an aggressive role, taking advantage of

certain mares and women, and producing offspring endowed with wind-like characteristics.<sup>(2)</sup> It is noteworthy that the role ascribed to the two winds in question is in harmony with the so-called masculine characteristics attributed to them by epic poets from the time of Homer on.<sup>(3)</sup> It therefore seems probable that this view of Boreas and Zephyrus as strong, powerful and aggressive winds was an important factor contributing to their traditional association with both mares and women. Moreover, given the parallel between the epic strand of the horse tradition and the ancient tradition concerning the wind-sired tiger possessed of the speed of its sire Zephyrus, it is possible that the connection between Zephyrus and tigers also derives, at least in part, from the attributes ascribed to this wind by Homer and his successors.

The northerly wind likewise plays a role in the tradition concerning sheep, this time in partnership with the southerly wind. Here the function ascribed to these two opposing breezes is closely connected with - and, indeed, dependant on - their essential nature. Thus the cold northerly wind is said to cause the birth of male offspring, whilst the warmer southerly wind is said to produce female offspring (a phenomenon that results from the different effects of these two winds on the metabolism of the sheep at time of conception). The point to be stressed here is that the two winds in question are polar opposites. The early Greek predilection for such pairs of opposites (as witnessed in ancient theories of conception) may well have been

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(2)

In the instance of the Boreas-Zephyrus-complex, this reference to offspring applies more to Boreas than to Zephyrus.

(3)

Cf Roscher VII. Supplementband 1.70-71, s.v. Βορέας; 143, s.v. Ζέφυρος.

one of the factors giving rise to the series of accounts about the role of the northerly and the southerly winds in the reproduction of sheep.

Of all the winds mentioned in ancient evidence concerning wind impregnation, it is, however, the West wind Zephyrus which predominates; and not the aggressive Zephyrus described above, but rather a gentler Zephyrus, closely associated with spring and the regeneration and renewal of the plant world. In the zoological strand of the horse tradition, the West wind is mentioned on a number of occasions as the impregnating breeze. Particularly noteworthy is a passage in Pliny (see App.I, no.9) which describes this springtime wind as 'the generating breath of the universe' and suggests that it has the power to generate life not merely in the plant kingdom, but, by extension, in the animal kingdom as well. The view expressed here by Pliny may be said to provide an important insight into the ideas underlying the zoological sub-tradition. It would appear that the ancient concept of the westerly breeze as the force which promotes growth in the plant world during spring<sup>(4)</sup> was one of the essential factors contributing to the formulation and development of the tradition about the wind impregnation of mares.

The West wind Zephyrus also features in the traditions pertaining to hens and vultures. Indeed, the tradition about hens and their laying of wind-eggs appears to have its origin in the visible effects

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(4)

A concept that was widespread, as is shown by numerous references in ancient literature. Cf Anthologia Palatina X.1; X.4; X.6; Varro, Res Rusticae I.28.2; Lucretius, De Rerum Natura V.737-738; Horace, Carmina I.4.1; III.7.2; IV.7.9; Virgil, Georgics I.43-44; Pliny, Naturalis Historia XVIII.77.337; Nonnus, Dionysiaca XXXI.110.

of the West wind on hens in springtime. Moreover, the acceptance into Graeco-Roman literature of the Egyptian concept of the wind-impregnated vulture seems to have been facilitated by the pre-existing belief in the fertilising powers of the West wind.

One further point remains concerning Zephyrus. It is significant that, in ancient accounts about the wind fertilisation of women, Zephyrus (in his personified form) is closely associated with Flora the goddess of flowers. This tale of the rape of Flora by Zephyrus (although portraying the West wind in an aggressive role) is evidently the mythological version of the ancient concept of Zephyrus as the springtime wind which fertilises plants and flowers. Thus the Zephyrus connected with spring and fertility also features in the ancient tradition pertaining to women.

Even as the nature of the individual winds, and the attitudes of the ancients towards them, appear to have given an impetus to the formation of the concept of wind impregnation, so too does this concept seem to have been influenced by the ancient connection of wind and soul. The significance of the wind/soul association is first apparent in the Homeric passage which initiates the epic strand of the horse tradition. The passage in question (see App.I, no.1) refers to Achilles' horses Xanthos and Balios as being the offspring of the West wind Zephyrus and the Harpy-mare Podarge. The description of Podarge as a Harpy is of particular importance : from early times the Harpies were regarded by the ancients as wind-spirits whose role was to carry off the souls of the dead.<sup>(5)</sup> It is evident that the role

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(5)

Cf Roscher I.2.1841-1847, s.v. Harpyia; cf, too, Anna Sacconi, *Anemoi, Studi e Materiali di Storia delle Religioni* 35 (1964), pp.137-159 (espec. 141-142).

attributed to Podarge (whereby she gives birth to two offspring) is very different from that traditionally assigned to the Harpies. Indeed, it may be said to correspond much more closely to that traditionally assigned to the ancestral spirits or winds called Tritopatores, whose function was to bring souls into the world.<sup>(6)</sup> However that may be, Homer's reference to the Harpy-mare Podarge serves to illuminate the ancient association of wind and soul.

It is worth noting here that, aside from traditional beliefs concerning the Harpies and Tritopatores, the idea of souls being carried on the winds is by no means rare in antiquity. According to the Orphics, the soul left the body at death and travelled on the wind for a short period before being sent by that wind into a new body.<sup>(7)</sup> In Pythagorean doctrine the soul is said to separate from the body at death, then, following a period of purgation in Hades, to return to the upper air where it moves about on the breezes together with numerous other souls until such time as it enters another body, animal or human.<sup>(8)</sup> Democritus proposes the existence in the body of countless soul-atoms which are constantly being replaced - through the process of breathing - by fresh soul-particles drawn in from the surrounding air.<sup>(9)</sup> Plato, in a discussion of the immortality of the

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(6)

Cf P.W.I.2178, s.v. Anemoi; Erwin Rohde, Psyche, New York, 1972 repr., p.171 and espec. p.204, n.124; and A. Sacconi, op.cit., pp.146-148.

(7)

Cf Rohde, op.cit., p.342 and the references cited therein (p.356, n.45); also A. Sacconi, op.cit., p.155.

(8)

Cf Rohde, op.cit., p.375 and the refs cited there (p.396, nn.38-42); also A. Sacconi, loc.cit.

(9)

Cf Rohde, op.cit., pp.385-386 and associated refs (p.407, nn.100 and 101).



soul, refers to the popular belief that, when the soul leaves the body on death, the wind blows it away.<sup>(10)</sup> Similarly, Epicurus suggests that the soul-atoms present in the body withdraw from there at death and are blown away in the wind, a view that is also put forward by Lucretius.<sup>(11)</sup> Evidence for the persistence of the wind/soul association in the Roman world is far from substantial, but it is nonetheless sufficient to confirm the continued existence of the concept of the wind-borne soul.<sup>(12)</sup>

Given the ancient belief that souls were carried on the winds and were breathed into the body, it does not seem unreasonable to suggest that both Virgil - in his description of the wind impregnation of mares (see App.I, no.5) - and Aelian - in his account of the procreation of vultures by means of the wind (see App.IV, no.13) - were inspired by the notion of the wind-borne soul. Virgil specifically refers to mares sniffing the breezes and becoming pregnant in this way; Aelian suggests that, in order to conceive, vultures open their beaks to the wind. In both instances the method of conception specified runs counter to previous suggestions that the creatures concerned are impregnated via the sexual organ. It therefore seems probable that Virgil and Aelian envisaged the process of conception in mares and vultures respectively as involving the inhalation of soul-material into the body.

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(10)

Cf Rohde, op.cit., pp.463-467, and the refs given there (espec. p.477, n.5); also A. Sacconi, op.cit., p.154.

(11)

Cf Rohde, op.cit., p.505, and associated refs (see espec. p.522, n.77); cf, too, A. Sacconi, op.cit., p.156.

(12)

Cf A. Sacconi, op.cit., pp.156-157.

In the same way as the nature of the winds and the connection of wind and soul appear to have contributed to the formation of the concept of wind impregnation, so, too, does the character of the individual animals concerned seem to have played a significant role. One of

APPENDIX I: Passages concerning the wind impregnation of mares.

The following is a chronological list of all passages cited by number in chapter III.

1. Homer (8th century B.C.)

τῷ δὲ καὶ Αὐτομέδων ὕπαγε ζυγὸν ὤκτας ἵππους,  
 Ξάνθον καὶ Βαλῖον, τῷ ἅμᾳ πνοιῇσι πετέσθην,  
 τοὺς ἔτεκε Ζεφύρῳ ἀνέμῳ Ἄρπυια Ποδάργη,  
 βοσκομένη λειμῶνι παρὰ ῥόον Ὠκεανοῖο.

(Iliad XVI 148 - 151)

For him Automedon led the fast-running horses under  
 the yoke, Xanthos and Balios, who tore with the winds' speed,  
 horses stormy Podarge once conceived of the West wind  
 and bore as she grazed in the meadow beside the swirl  
 of the Ocean.

(Translation by Richmond Lattimore)

2. Homer (8th century B.C.)

Δάρδανος αὖ τέκεθ' υἱὸν Ἐριχθόνιον βασιλῆα,  
 ὃς δὴ ἀφνειότατος γένετο θνητῶν ἀνθρώπων·  
 τοῦ τρισχίλια ἵπποι ἔλος κάτα βουκολέοντο  
 θήλειαι, πῶλοισιν ἀγαλλόμεναι ἀταλῆς.  
 τῶν καὶ Βορέης ἠράσσατο βοσκομενῶν,  
 ἵππῳ δ' εἰσάμενος παρελέξατο κυανοχαίτη·  
 αἱ δ' υποκυσάμεναι ἔτεκον δυοκαίδεκα πῶλους.

αἰ δ' ὅτε μὲν σκιρτῶεν ἐπὶ ζείδωρον ἄρουραν,  
 ἄκρον ἐπ' ἀνθερίκων καρπὸν θεὸν οὐδὲ κατέκλων·  
 ἀλλ' ὅτε δὴ σκιρτῶεν ἐπ' εὐρέα νῶτα θαλάσσης,  
 ἄκρον ἐπὶ ῥηγμῖνος ἁλὸς πολιοῖο θέεσκον.

(Iliad XX. 219 - 229)

Dardanos in turn had a son, the king, Erichthonius,  
 who became the richest of mortal men, and in his possession  
 were three thousand horses who pastured along the low grasslands,  
 mares in their pride with their young colts; and with these the  
 North Wind  
 fell in love as they pastured there, and took on upon him  
 the likeness of a darkmaned stallion, and coupled with them,  
 and the mares conceiving of him bore to him twelve young horses.  
 Those, when they would play along the grain-giving tilled land  
 would pass along the tassels of corn and not break the divine yield,  
 but again, when they played across the sea's wide ridges  
 they would run the edge of the wave where it breaks on the  
 grey salt water.

(Translation by Richmond Lattimore)

### 3. Aristotle (384 - 322 B.C.)

λέγονται δὲ καὶ ἐξανεμοῦσθαι περὶ τὸν καιρὸν τοῦτον·  
 διὸ ἐν Κρήτῃ οὐκ ἐξαιροῦσι τὰ ὀχεῖα ἐκ τῶν θηλειῶν. ὅταν  
 δὲ τοῦτο πάθωσι, θέουσιν ἐκ τῶν ἄλλων ἵππων. ἔστι δὲ τὸ  
 πάθος ὅπερ ἐπὶ τῶν ὕν λέγεται τὸ καπρίζειν. θέουσι δ'  
 οὔτε πρὸς ἑω οὔτε πρὸς δυσμᾶς, ἀλλὰ πρὸς ἄρκτον ἢ νότον ὅταν  
 δ' ἐμπέσῃ τὸ πάθος, οὐδένα ἑωσι πλησιάζειν, ἕως ἂν ἡ ἀπείπωσι

διὰ τὸν πόνον ἢ πρὸς θάλατταν ἔλθουσιν \* τότε δ' ἐκβάλλουσι τι.  
καλοῦσι δὲ καὶ τοῦτο, ὥσπερ <τὸ> ἐπὶ τοῦ τικτομένου <πάλου>,  
ἵππομανές \* ἔστι δ' οἶον ἡ καπρία, καὶ ζητοῦσι τοῦτο μάλιστα  
πάντων αἱ περὶ τὰς φαρμακείας.

(Historia Animalium 572 a 12 - 22)

Mares are also said to <be aroused> by the wind at this season;  
and that is why in Crete they never take the stallions away from  
the mares, for when they get into that state they run away from  
all other horses. (This is the condition which in sows is  
known as being boar-mad.) They run off neither to the east nor  
to the west, but either to the north or the south. When this  
condition overtakes them, they allow no one to come near until  
they are either exhausted by the effort or have got to the sea;  
at that stage they discharge a certain substance which is known  
by the same name as that which appears on the offspring mares  
produce, <that is> , hippomanes : it is similar to the sow-virus,  
and is the chief thing sought after by women who deal in philtres  
and drugs.

(Adapted from the translation by A.L. Peck)

## 4. Varro (116 - 27 B.C.)

In fetura res incredibilis est in Hispania, sed est vera, quod in Lusitania ad Oceanum in ea regione ubi est oppidum Olisipo, monte Tagro quaedam e vento concipiunt certo tempore equae, ut hic gallinae quoque solent, quarum ova hypenemia appellant. Sed ex his equis qui nati pulli non plus triennium vivunt.

(Res Rusticae II.1.19)

On the subject of breeding, there is something incredible, but nonetheless true, which happens in Spain, namely that near the ocean in Lusitania, in that region where the town of Olisipo is situated, certain mares on Mount Tagrus conceive from the wind at a particular time of the year, just as is the case here with hens, whose eggs are called 'hypenemia' or wind-eggs. But the foals born of these mares do not live more than three years.

## 5. Virgil (70 - 19 B.C.)

Scilicet ante omnes furor est insignis equarum;  
 Et mentem Venus ipsa dedit, quo tempore Glauci  
 Potniades malis membra absumpsere quadrigae.  
 Illas ducit amor trans Gargara transque sonantem  
 Ascanium; superant montes et flumina tranant.  
 Continuoque avidis ubi subdita flamma medullis,  
 (Vere magis, quia vere calor redit ossibus), illae  
 Ore omnes versae in Zephyrum stant rupibus altis,  
 Exceptantque leves auras, et saepe sine ullis  
 Coniugiis vento gravidae (mirabile dictu)  
 Saxa per et scopulos et depressas convalles

Diffugiunt, non, Eure, tuos neque solis ad ortus,  
 In Borean Caurumque, aut unde nigerrimus Auster  
 Nascitur et pluvio contristat frigore caelum.  
 Hic demum, hippocmanes vero quod nomine dicunt  
 Pastores, lentum destillat ab inguine virus,  
 Hippomanes, quod saepe malae legere novercae  
 Miscueruntque herbas et non innoxia verba.

(Georgics III. 266 - 283)

But of all, beyond doubt, the fury of mares is the  
 most remarkable;

Venus herself incited

The chariot-team that day they champed the limbs of  
 Glaucus.

In heat, they'll range over Gargarus and across the roaring  
 Ascanius, they'll climb mountains and swim rivers.

The moment that flame is kindled within their passionate  
 flesh

(In spring above all, when warmth returns to their bones) the  
 whole herd

Wheels to face the west wind high up there on the rocks;

They snuff the light airs and often without being mated

Conceive, for the wind - astounding to tell - impregnates  
 them:

Over the rocks and cliffs then, and down the deep dales

They gallop scattering, not towards the east and the dayspring

But to the north and north-west

And where the south wind arises glooming the sky with cold  
 rain.

Whereupon a clammy fluid, which herdsmen call  
 Correctly 'hippomanes', oozes from out their groin -  
 Hippomanes, by wicked stepmothers much sought after  
 And mixed with herbs and malignant cantrips to brew a spell.

(Translation by C. Day Lewis)

6. Columella (1st century A.D.)

Maxime itaque curandum est praedicto tempore anni, ut tam feminis quam admissariis desiderantibus coeundi fiat potestas, quoniam id praecipue armentum, si prohibeas, libidinis exstimulatur furiis, unde etiam veneno inditum est nomen ἵππομανές, quod equinae cupidini similem mortalibus amorem accendit. Nec dubium quin aliquot regionibus tanto flagrent ardore coeundi feminae, ut etiam si marem non habeant, assidua et nimia cupiditate figurando sibi ipsae venerem cohortalium more avium vento concipiant.

Neque enim poeta licentius dicit:

Scilicet ante omnes furor est insignis equarum;

Illas ducit amor trans Gargara transque sonantem

Ascanium; superant montes et flumina tranant.

Continuoque avidis ubi subdita flamma medullis

(Vere magis quia vere calor redit ossibus) illae

Ore omnes versae ad Zephyrum stant rupibus altis,

Exceptantque leves auras et saepe sine ullis

Coniugiis vento gravae (mirabile dictu).

Cum sit notissimum etiam in Sacro monte Hispaniae qui procurrat in occidentem iuxta Oceanum, frequenter equas sine coitu ventrem pertulisse fetumque educasse, qui tamen inutilis est, quod triennio, prius quam adolescat, morte absumitur. Quare, ut dixi, dabimus



operam ne circa aequinoctium vernum equae desideriiis naturalibus angantur.

(De Re Rustica VI. 27. 3-7)

The greatest care, therefore, must be taken that at the said time of year every opportunity is given equally to mares as to their stallions to couple if they desire to do so, because, if you prevent them from doing so, horses beyond all animals are excited by the fury of their lust. (Hence the term "horse-madness" is given to the poison which kindles in human beings a passion like the desire in horses). Indeed, in some regions, there is no doubt that the mares are affected by such a burning desire for intercourse, that, even though there is no stallion at hand, owing to their continuous and excessive passion, by imagining in their own minds the pleasures of love they <conceive by the wind, just as farmyard hens do> . Indeed the poet is not indulging his fancy too much when he says:

But of all, beyond doubt, the fury of mares is the most  
remarkable;

In heat, they'll range over Gargarus and across the roaring  
Ascanius, they'll climb mountains and swim rivers,  
The moment that flame is kindled within their passionate  
flesh

(In spring above all, when warmth returns to their bones) the  
whole herd

Wheels to face the west wind high up there on the rocks;  
They snuff the light airs and often without being mated  
Conceive, for the wind - astounding to tell - impregnates them.

For it is also well-known that on the Holy Mountain of Spain, which runs westward near the ocean, mares have often become pregnant without coition and reared their offspring, which, however, is of no use, because it is snatched away by death at three years of age, before it can come to maturity. Therefore, as I have said, we shall take care that the brood-mares are not tormented by their natural desires about the time of the spring equinox.

(Adapted from the translation by E.S. Forster and  
Edward H. Heffner; Virgilian insert translated by  
C. Day Lewis)

7. Pliny (A.D. 23/24 - 79)

Oppida a Tago memorabilia in ora Olisipo equarum e Favonio vento conceptu nobile ...

(Naturalis Historia IV. 22. 116)

Beginning at the Tagus, the notable towns on the coast are : Olisipo, famous for its mares that conceive from the west wind ...

8. Pliny (A.D. 23/24 - 79)

Constat in Lusitania circa Olisiponem oppidum et Tagum amnem equas Favonio flante obversas animalem concipere spiritum, idque partum fieri et gigni pernicissimum ita, sed triennium vitae non excedere.

(Naturalis Historia VIII 67. 166)

It is generally known that in Lusitania, near the town of Olisipo and the river Tagus, the mares, by facing the westerly breeze, conceive a living breath, and that that becomes a foal which is extremely swift from birth, but which does not live more than three years.

## 9. Pliny (A.D. 23/24 - 79)

Ordo autem naturae annuus ita se habet : primus est conceptus flare incipiente vento Favonio, ex a.d. fere VI idus Febr. Hoc maritantur vivescencia e terra, quippe cum etiam equae in Hispania, ut diximus : hic est genitilis spiritus mundi a fovendo dictus, ut quidam existimavere. Flat ab occasu aequinoctiali ver inchoans.

(Naturalis Historia XVI. 39. 93)

The following is the order which nature observes throughout the year. First comes fertilisation, taking place when the west wind begins to blow, which is generally from February the 8th. This wind impregnates the creatures that derive life from the earth - indeed in Spain even the mares, as we have stated: this is the generating breath of the universe, its name Favonius being derived, as some have supposed, from 'fovere', 'to foster'. It blows from due west and marks the beginning of spring.

(Translation by H. Rackham)

## 10. Silius Italicus (A.D. c.26 - c.101)

At Vettonum alas Balarus probat aequore aperto.  
Hic adeo, cum ver placidum flatusque tepescit,  
Concubitus servans tacitos, grex perstat equarum  
Et Venerem occultam genitali concipit aura.  
Sed non multa dies generi, properatque senectus,  
Septimaque his stabulis longissima ducitur aestas.

(Punica III. 378 - 383)

The squadrons of the Vettones were reviewed on the open plain by Balarus. In that country, when spring is mild and airs are warm, the drove of mares stand still, mating in secret, and conceive a mysterious progeny begotten by the wind. But their stock is short-lived : old age comes quick upon them, and the life of these horses lasts but seven years at the longest.

(Translation by J.D. Duff)

11. Silius Italicus (A.D. c.26 - c.101)

At docilis freni et melior parere Pelorus  
 Non unquam effusum sinuabat devius axem;  
 Sed laevo interior stringebat tramite metam,  
 Insignis multa cervice et plurimus idem  
 Iudentis per colla iubae. Mirabile dictu,  
 Nullus erat pater : ad Zephyri nova flamina campis  
 Vettonum eductum genetrix effuderat Harpe.  
 Nobilis hunc Durius stimulabat in aequore currum...  
 Incubuit campo Durius misitque citatos  
 Verbere quadrupedes, nec frustra : aequare videtur,  
 Aut etiam aequavit iuga praecedentia dexter.  
 Attonitus tum spe tanta : "genitore, Pelore,  
 Te Zephyro eductum nunc nunc ostendere tempus.  
 Discant, qui pecudum ducunt ab origine nomen,  
 Quantum divini praecellat seminis ortus.  
 Victor dona dabis statuesque altaria patri."

(Punica XVI. 359 - 365; 423 - 430)

Pelorus, on the other hand, was more tractable and obedient to the rein; never did he swerve aside and drive the car in crooked lines, but kept to the inside and grazed the turning-post with his near wheel. He was conspicuous for the size of his neck and the thick mane that rippled over it. Strange to say, he had no sire : his dam, Harpe, had conceived him of the Zephyr of spring and foaled him in the plains of the Vettones. This chariot was driven along the course by the noble Durius... Durius pressed on along the plain, and increased the pace of his team by the whip. Nor was the effort vain : coming up on the right, he seemed to be, or even was, running neck and neck with his rival. Then, amazed by the prospect of such glory, he cried out : "Now, Pelorus, now is the time to show that the West-wind was your sire! Let steeds that spring from the loins of mere animals learn how far superior is the issue of an immortal parent. When victorious, you shall offer gifts to your sire and rear an altar in his honour."

(Translation by J.D. Duff)

12. Aelian (A.D. c.170 - 235)

ἐξηνεμῶσθαι δὲ ἵππους πολλὰκις ἵπποφορβοὶ τεκμηριοῦσι καὶ κατὰ τὸν νότον ἢ τὸν βορρᾶν φεύγειν . εἰδότα οὖν τὸν αὐτὸν ποιητὴν εἰπεῖν

τῶν καὶ βορέης ἡράσσατο βοσκομένων.

καὶ Ἀριστοτέλης δέ, ὡς ἐμὲ νοεῖν, λαβὼν ἐντεῦθεν εὖθι τῶν προειρημένων ἀνέμων οἰστροθεύσας διδράσκειν ἔφατο αὐτάς.

(De Natura Animalium IV.6.)

And horse-keepers frequently testify that horses are impregnated by the wind and that they run off towards the south or the north wind. The same poet knew this when he said

With these Boreas fell in love as they pastured.

Aristotle too, borrowing - in my mind - from there, said that when they are aroused, they rush off directly in the face of the aforesaid winds.

13. Solinus (3rd century A.D.)

In proximis Olisiponis equae lasciviunt mira fecunditate : nam aspiratae Favonii vento concipiunt et sitientes viros aurarum spiritu maritantur.

(Collectanea Rerum Memorabilium 23.7)

In the neighbourhood of Olisipo, the mares lust for intercourse and are endowed with marvellous fertility : for they conceive when the west wind blows upon them and, athirst for males, are impregnated by the breath of the breezes.

14. Solinus (3rd century A.D.)

Edunt equae et ventis conceptos : sed hi nunquam ultra triennium aevum trahunt.

(Collectanea Rerum Memorabilium 45.18)

Mares even produce foals which have been conceived by the wind : but these never live beyond three years.

15. Lactantius (A.D. c.240 - c.320)

[N.B. It is appropriate to cite the following passage at this point, for it is very likely that the general phrase 'animalia quaedam' is intended to include mares.]

Descendens itaque de caelo sanctus ille Spiritus Dei sanctam Virginem cuius utero se insinuaret elegit. At illa divino Spiritu hausto repleta concepit et sine ullo adtactu viri repente virginalis uterus intumuit. Quodsi animalia quaedam vento et aura concipere solere omnibus notum est, cur quisquam mirum putet, cum Dei Spiritu, cui facile est quidquid velit, gravatam esse Virginem dicimus?

(Divinae Institutiones IV.12)

Therefore the Holy Spirit of God, descending from heaven, chose the holy Virgin, that He might enter into her womb. But she, being filled by the possession of the Divine Spirit, conceived; and without any intercourse with a man, her virgin womb was suddenly impregnated. But if it is known to all that certain animals are accustomed to conceive by the wind and the breeze, why should anyone think it wonderful when we say that a virgin was impregnated by the Spirit of God, to whom whatever He may wish is easy?

(Translation by William Fletcher)

16. Justin (? 3rd century A.D./? 4th century A.D.)

In Lusitanis iuxta fluvium Tagum vento equas fetus concipere multi auctores prodidere. Quae fabulae ex equarum fecunditate

et gregum multitudine natae sunt, qui tanti in Gallaecia ac Lusitania et tam pernices visuntur, ut non immerito vento ipso concepti videantur.

(Epitoma Historiarum Philippicarum Pompei Trogi XLIV.3.1)

Many authors have recorded that in Lusitania, near the river Tagus, the mares conceive their offspring by the wind. These fictitious accounts have arisen as a result of the fecundity of the mares and the large number of herds which are so vast in Gallaecia and Lusitania and so swift that they not undeservedly seem to have been conceived by the wind itself.

17. Quintus Smyrnaeus (4th century A.D.)

... γενεῇ γε μὲν οὐ κακός, ἀλλὰ θεοῖο  
θεοπέσιον γένος ἔσκεν Ἀρίονος, ὃν τέκεν ἵππων  
Ἄρπυια Ζεφύρῳ πολυχηεῖ φέρτατον ἄλλων  
πολλὸν ἐπεὶ ταχέεσσιν ἐριδιμαίνεσκε πόδεσσι  
πατρὸς ἔοιο θεῶσι καταιγίσι ...

(Posthomerica IV 568 - 572)

... yet of lineage

Noble was he, for in his veins the blood  
Of swift Arion ran, the foal begotten  
By the loud-piping West-wind on a Harpy,  
The fleetest of all earth-born steeds, whose feet  
Could race against his father's swiftest blasts.

(Translation by Arthur S. Way)



## 18. Quintus Smyrnaeus (4th Century A.D.)

ἵπποι δ', οἳ φορέουσιν, ἐμοῦ πατρὸς ἀντιθέοιο,  
 οὓς τέκεθ' Ἄρπυια Ζεφύρῳ πάρος εὐνηθεῖσα,  
 οἳ τε καὶ ἀτρύγετον πέλαγος διὰ ποσσὶ θέουσιν  
 ἀφρονυχὶ ψαύοντες, ἴσον δ' ἀνεμοῖσι φέρονται.

(Posthomerica VIII. 154 - 157)

The steeds which bear me were my godlike sires;  
 These the West-wind begat, the Harpy <bore>:  
 Over the barren sea their feet can race  
 Skimming its crests : in speed they match the winds.

(Adapted from the translation by Arthur S. Way)

## 19. Quintus Smyrnaeus (4th Century A.D.)

... φῶρεον δέ μιν ἐς μόθον ἵπποι  
 Αἴθων καὶ Φλόγιος, Κόναβος δ' ἐπὶ τοῖσι φόβος τε,  
 τοὺς βορέη κελάδοντι τέκε βλοσυρῶπις Ἐρινὺς  
 πῦρ ὅλοδν πνείοντας· ὑπέστενε δ' αἰόλος αἰθήρ  
 ἐσσυμένων ποτὶ δῆριν.

(Posthomerica VIII. 241 - 245)

Red-fire and Flame, Tumult and Panic-fear,  
 His car-steeds, <bore> him down into the fight,  
 The coursers which to roaring Boreas  
 Grim-eyed <Eriny's bore> , coursers that breathed  
 Life-blasting flame : groaned all the shivering air,

As battleward they sped.

(Adapted from the translation by Arthur S. Way)

20. Augustine (A.D. 354-430)

Verum tamen homines infideles, qui, cum divina vel praeterita vel futura miracula praedicamus quae illis experienda non valemus ostendere, rationem a nobis earum flagitant rerum, quam quoniam non possumus reddere - excedunt enim vires mentis humanae - existimant falsa esse quae dicimus, ipsi de tot mirabilibus rebus quas vel videre possumus vel videmus debent reddere rationem. Quod si fieri ab homine non posse perviderint, fatendum est eis non ideo aliquid non fuisse vel non futurum esse, quia ratio inde non potest reddi, quando quidem sunt ista de quibus similiter non potest.

Non itaque pergo per plurima, quae mandata sunt litteris, non gesta atque transacta sed in locis quibusque manentia, quo si quisquam ire voluerit et potuerit, utrum vera sint explorabit, sed pauca commemoro... In Cappadocia etiam vento equas concipere, eosdemque fetus non amplius triennio vivere...

(De Civitate Dei XXI. 5.)

Nevertheless, when we preach the marvellous works of God, whether past or future, and cannot show them to the unbelievers to be put to the test, they demand of us an explanation of these things, and since we cannot give it (for they are beyond the grasp of the

human mind), they think that what we say is false. To be consistent, they themselves should give an explanation of the many marvellous things which we can see, or do see. If they perceive that no man can do this, they should admit that the inability to give an explanation is no proof that a thing has not been or will not be, since these admitted marvels exist, of which likewise no explanation can be given.

There are many things recorded in books, not as events of the past, but as descriptions of things which remain today, each in its place, so that anyone who is able and willing to go there will discover whether they are true. I will not go on through all of these, but will mention a few ... In Cappadocia the mares are also impregnated by the wind, and their offspring do not live more than three years...

(Translation by William Green)

21. Martianus Capella ( ? late 4th/early 5th century A.D.)

in eius <i.e. Olisiponis> quoque confinio equarum fetura ventis maritantibus inolefcit; volucres proli cursus ipso spirante Favonio.

(De Nuptiis Philologiae et Mercurii VI.629)

Also in the neighbourhood of Olisipo, it is customary for the mares to breed when impregnated by the winds; when the west wind itself blows, they produce swift-footed offspring.

## 22. Nonnus (5th century A.D.)

... ὠκυπόδην δὲ

Ξάνθον ἄγων πρῶτιστος ὑπὸ ζυγὰ δῆσεν Ἑρεχθεὺς  
 ἄρσενα, καὶ θήλειαν επεσφῆκωσεν Ποδάρκην,  
 οὐς Βορέης ἔσπειρεν εὐπτερύγων ἐπὶ λέκτρων  
 Σιθονίην Ἀρπυιαν ἀελλόπον εἰς γάμον ἔλκων,  
 καὶ ἀρεας, Ὀρεΐθυιαν δ' ἥρπασεν Ἀτθίδα νύμφην,  
 ὥπασεν ἔδον ἔρωτος Ἑρεχθεὶ γαμβρὸς ἀήτης.

(Dionysiaca XXXVII.155 - 161)

First Erechtheus led up and yoked his swift-footed horse Xanthos, and fastened in his mare Podarke, both of them sired by Boreas in a winged union as he dragged a stormfooted Sithonian Harpy to him, and given by him as a gift of love to his father-in-law Erechtheus when he carried off Attic Oreithyia for his bride.

## 23. Nonnus (5th century A.D.)

Σκέλμις, ἐνικῆθης· σέο φέρτερός ἐστιν Ἑρεχθεύς,  
 ὅτι τεδὸν Βαλῖον, Ζεφυρηίδος αἷμα γενέθλης,  
 ἄρσενα καὶ νέον ἵππον ὀδοιπόρον ἄβροχον ἄλμης  
 γηραλέη νίκησεν ἐμῇ θήλειᾳ Ποδάρκῃ.

(Dionysiaca XXXVII. 334 - 337)

Scelmis, you're beaten! Erechtheus is a better man than you, for my old mare Podarke has beaten your Balios, with Zephyrus for sire, a young horse, and one that can run on the sea without getting wet!

24. Isidore (A.D. c.570 - 636)

(N.B. It is appropriate to cite the following passage at this point, for there can be little doubt that the general expression 'Quaedam animalia' is intended to include mares.)

Item spurius patre incerto, matre vidua genitus, velut tantum spurii filius; quia muliebrem naturam veteres spurium vocabant; velut ἀπὸ (τοῦ) σπέρου, hoc est seminis; non patris nomine. Eosdem et Favonios appellabant, quia quaedam animalia Favonio spiritu hausto concipere existimantur.

(Etymologiae IX.5.24 - 25)

Likewise the term 'spurius' is given to a male child born of an unknown father and a widowed or single mother, as though he is simply the son of the 'spurius'; because the ancients called the female sexual organ 'spurius'; as if ἀπὸ [τοῦ] σπέρου, that is, from the seed; it does not derive from the name of the father. These same offspring were also called 'Favonii', because certain animals are thought to conceive by drawing in Favonius, the westerly breeze.

## 25. Avicenna (A.D. 980-1037)

Et equa quando appetit ventrem suum offert vento, et declarat in eo quod penetrat ipsum ventus: et ex eo quod generatur in ventre suo ventus. Et iccirco recalcitrat vento cum pede. Et audiui senem de honestis dicentem quod femina equa arabica in terra de alchufa appetunt [sic] ad coitum in die de colonis, et recalcitravit : et involutus est ventus in ventre eius, et non cessavit sudare : et currere donec pervenit ad partes insulae : et in illo cursu pertransiuit 8 leucas. Et memoravit Aristoteles in doctrinam primam quod eius recalcitratio erat versus austrum: et septentrionem : et non ad aliam partem.

(De Natura Animalium VII.1)

When the mare desires intercourse, it offers its womb to the wind, showing by that action that the wind enters its womb, and, moreover, reproduces there. For that purpose, it kicks up its leg at the wind. I have heard an honest old man say that an Arabian mare in the land of Alchufa was desirous of coition on farmers' day, and it kicked up its leg; when the wind whirled into its womb, it sweated continuously, and did not stop galloping until it reached the edges of the island; in that journey it covered eight miles. Aristotle mentioned in his first work that the process of kicking was carried out towards the south and the north, and not in any other direction.

## 26. Honorius Augustodunensis (fl. early 12th century A.D.)

Illi vero Cappadocia, a civitate eiusdem nominis dicta, in hac equae a vento concipiunt, sed foetus non amplius triennio vivunt.

(De Imagine Mundi I.19)

Next to that lies Cappadocia, called after the city of the same name; here, mares conceive from the wind, but their offspring do not live more than three years.

27. Enéas (mid 12th century A.D.)

Poutrels orent de Capadoce,  
 Qui n'bnt mehaig, jale ne boce,  
 D'un merveilllos haraz de mer,  
 Et molt sont legier a armer;  
 Chevals n'a soz ciel plus vaillant  
 Mais ne vivent ne mes joant;  
 Avant n'en puet uns sols durer;  
 Né sont des eves de la mer  
 Qui en mer vivent solement,  
 Si conçoivent totes del vant;  
 Molt par an sont buen li poltrel  
 Et a mervuille sont isnel,  
 Et molt seroient de grant pris  
 Se vivoient nuef anz ou dis.

(Enéas 3935 - 3948)

They had colts of Capadocia, born of a marvellous stud of the sea, which have no defects, mange, or sores, and which are very easy to arm; there are no horses under the sun more valiant, but they never live beyond youth: not a single one can last longer. They are born of sea-mares, which live only in the sea and conceive wholly from the wind. These colts are extremely good and wonderfully fast, and would be of great value if they would live nine or ten years.

(Translation by John A. Yunck)

## 28. Heinrich von Veldeke (late 12th century A.D.)

Here ros wâr lussam,  
 Snelle end vele goede,  
 Van einre slachte stoeden,  
 Die dâ wonen in den mere.  
 Er end allet sîn here  
 Hadden solike vâris.  
 Si enleveden aver neheine wîs  
 Langer danne vier jâr.  
 Dat weten wir wale vor wâr,  
 Die et van den boeken haven.  
 Die moeder, die sî dragen,  
 Die ontvân sî van den winde  
 An des meres onden.  
 Van den rossen ende van den volen -  
 Dat es genoeg onverholen -  
 Enkomet niemer nehein frocht.

(Eneide 5092-5107)

Their steeds were lissome, swift and very good, of a sort of  
 mares which dwell there in the sea. He and all his army had  
 such a means of conveyance. They lived however in no wise  
 longer than four years. That we know very well to be true,  
 we who have it from books. The mothers which bear them, they  
 conceive them from the wind at the outermost extremities of the  
 ocean. From the steeds and from the foals - that is sufficiently  
 clear - there arises no fruit whatsoever.

(Translation by David Carrad (unpublished))



29. Alexander Neckam (A.D.1157 - c.1217)

Ferunt equam, cum copia masculi ei deest, ex flatu aurae  
venti borealis concipere, sed foetus paucis diebus superstes  
erit.

(De Naturis Rerum II, pp.260-261(1863 edit.))

They say that the mare, when the opposite sex is lacking,  
conceives from the breath of the northerly wind, but that  
the offspring will survive only a few days.

30. Jacobus de Vitriaco (A.D. ? - 1240)

Sunt equae in Cappadocia quae a vento concipiunt, sed  
foetus earum non nisi triennio vivere possunt.

(Historia Hierosolymitana sive Orientalis Ch.88)

There are mares in Cappadocia that conceive by the wind, but  
their offspring are not able to live more than three years.

31. Gossouin de Metz (13th century A.D.)

Si y a une maniere de jumanz qui conçoivent du vent, et sont  
en une contrée qui a non Cappadoce. Mais il ne durent que  
iii anz.

(L'Image du Monde Ch.II <sup>2</sup>D)

There are certain mares that conceive from the wind, and they  
are found in a country by the name of Cappadocia. But they  
<i.e. the offspring> live no more than three years.

## 32. Albertus Magnus (A.D. c.1200-1280)

Et de proprietatibus autem equae est, ut dicit Avicenna, pede et coxa aliquantulum recalcitrare, quando est in desiderio coitus et illa calcitratione aperit vulvam et capit ventum meridionalem aut septentrionalem intra uterum et delectatur in illo forti delectatione. Ita quod veridicus senex in terra, quae dicitur Arabice Dealcufa, quae est insula quaedam, narravit Avicennae, quod equa Arabica ibi concepto vento non cessavit currere ex desiderio coitus, donec pervenit ad fines insulae, et tunc cucurrerat per octo leucas.

(De Animalibus VI.2.118)

And one of the characteristics of the mare is, as Avicenna says, that it kicks up its leg and hip when it desires coition, and by that kicking opens its vulva and captures the south or north wind within its womb, taking immense delight in that. Hence an honest old man in the land which goes by the Arabic name Dealcufa and is in fact an island, told Avicenna that an Arabian mare there drew in the wind and did not stop running out of desire for intercourse, until it reached the ends of the island, and by that stage it had covered eight miles.

## 33. Roger Bacon (A.D. c.1214 - c.1292)

Et excitari potest mens humana ad partum Virginis per hoc quod quaedam animalia in virginitate permanentia concipiunt et pariunt, ut vultures et apes, sicut dicit Ambrosius in Hexaemeron. Et equae in pluribus regionibus concipiunt quoque sola virtute ventorum quando masculas desiderant, sicut Plinius quinto libro

Naturalium dicit, et Solinus narrat libro de Mirabilibus Mundi.

(Opus Maius 7.1)

And the human mind can be influenced to accept the Virgin birth by the fact that certain animals, whilst remaining in a state of virginity, conceive and bear offspring, as, for example, vultures and bees, as Ambrose says in his Hexaameron. Also, mares in many regions conceive by virtue of the winds alone when they desire the opposite sex, as Pliny says in the fifth book of his Naturalis Historia and Solinus states in his book, the De Mirabilibus Mundi.

34. Nicolaus Perottus (A.D. 1430 - 1480)

Ferunt in Lusitania iuxta flumen Tagum, vento equas fetus concipere, Favonio flante obversas, et eum partum fieri perniciosissimum, sed triennium non excedere. Ego fabulam esse existimo ex equarum fecunditate, et gregum multitudine natam, qui tanti in Lusitania, et tam pernices visuntur, ut non immerito vento ipso concepti videantur.

(Cornucopiae col. 411 (1521 edit.))

They say that in Lusitania, near the river Tagus, the mares conceive their offspring by the wind, facing the westerly as it blows, and that the offspring is thus extremely swift, but does not live more than three years. I personally think that it is a fictitious account that has arisen as a result of the fecundity of the mares and the large number of herds which are so vast in Lusitania and so swift that they not undeservedly seem to have been conceived by the wind itself.

## 35. Ludovico Ariosto (A.D. 1474 - 1533)

Lungo il fiume Traiano egli cavalca  
 Su quel destrier ch'al mondo è senza pare,  
 Che tanto leggermente e corre e valca,  
 Che ne l'arena l'orma non n'appare:  
 L'erba non pur, non pur la nieve calca;  
 Coi piedi asciutti andar potria sul mare;  
 E sí si stende al corso, e sí s'affretta,  
 Che passa e vento e folgore e saetta.

Questo è il destrier che fu de l'Argalia,  
 Che di fiamma e di vento era concetto;  
 E senza fieno e biada, si nutria  
 De l'aria pura, e Rabican fu detto.

(Orlando Furioso XV. 40 - 41)

He <i.e. Duke Astolfo> rode beside Trajan's canal, mounted on  
 a charger the like of which the world had never seen : he moved  
 so lightly as to leave no traces in the dust. Never a footprint  
 would be set on grass nor snow - he could have trodden the sea  
 dry-shod - and at a flat-out gallop he outstripped wind, lightning,  
 and the arrow.

This is the steed that was once Argalia's; he was conceived by  
 <fire and by wind> , and he fed not on hay or oats but on pure  
 air; Rabican was his name.

(Adapted from the translation by Guido Waldman)

## 36. Johannes Ravisius Textor (A.D. ? - 1524)

Maxime quoque curandum praecipit, ut tam feminis quam admissariis desiderantibus coeundi fiat potestas, quod id armentum (si prohibeas) libidinis extimuletur furiis. Unde etiam veneno inditum nomen hippomanes, quod equinae cupidini similem mortalibus amorem accendat. Constat feminas tanto coeundi ardore plerumque rapi, ut si marem non habeant, nimia cupiditate venerem sibi figurantes vento concipiant. Nam Varro dicit in ulteriore Hispania verno tempore equas nimio calore commotas contra frigidiores plagas et ventos ora patefacere ad sedandum calorem, et eas exinde concipere, pullosque edere, sed non diu victuros licet veloces. Nam triennio priusquam adolescant, morte absumuntur. De hac vehementi libidinis calore, Virgil. lib. iii Georg. sic inquit

Scilicet ante omnes furor est insignis equarum;  
 Illas ducit amor trans Gargara transque sonantem  
 Ascanium; superant montes et flumina tranant.  
 Continuoque avidis ubi subdita flamma medullis,  
 (Vere magis, quia vere calor redit omnibus [sic] ), illae  
 Ore omnes versae in Zephyrum stant rupibus altis,  
 Exceptantque leves auras, et saepe sine ullis  
 Coniugiis vento gravidae (mirabile dictu)  
 Saxa per et scopulos et depressas convalles  
 Diffugiunt

(Epitheta p.141 b (1524 edit.))

He< i.e. Columella> also instructs that the greatest care should be taken that an opportunity is given equally to mares as to their

stallions to couple if they so desire, because, if you prevent them from doing so, horses beyond all animals are excited by the fury of their lust. Hence the term 'hippomanes' is given to the poison which kindles in human beings a passion like the desire in horses. It is widely known that mares are generally seized by such a burning desire for coition that if there is no stallion at hand, owing to their excessive passion, by imagining in their own minds the pleasures of love they conceive by the wind. For Varro says that in Further Spain, during the spring season, the mares are moved by their excessive heat to open their mouths against the cooler blasts of the winds so as to reduce their heat, and that they conceive by that means, and give birth to offspring, but these will not live long, although swift. For within three years, before they come to maturity, they are carried off by death. Concerning this vehement heat of passion, Virgil in book III of the Georgics says the following:

But of all, beyond doubt, the fury of mares is the most  
remarkable

In heat, they'll range over Gargarus and across the roaring  
Ascanius, they'll climb mountains and swim rivers,  
The moment that flame is kindled within their passionate  
flesh

(In spring above all, when warmth returns to their bones) the  
whole herd

Wheels to face the west wind high up there on the rocks;  
They snuff the light airs and often without being mated  
Conceive, for the wind - astounding to tell - impregnates them:

Over the rocks and cliffs then, and down the deep dales  
They gallop scattering ...

(Virgilian insert translated by C. Day Lewis)

37. Konrad Gesner (A.D. 1516 - 1565)

Aliquot regionibus (inquit Columella) tanto flagrant ardore  
coeundi feminae, ut etiam si marem non habeant, assidua et nimia  
cupiditate figurantes sibi ipsae venerem (cohortalium more avium)  
vento concipiant. Quae poeta licentius dicit,

Continuoque avidis ubi subdita flamma medullis

(Vere magis, quia vere calor redit ossibus), illae

Oro [sic] omnes versae in Zephyrum stant rupibus altis,

Exceptantque leves auras, et saepe sine ullis

Coniugiis vento gravidae (mirabile dictu)

Saxa per et scopulos et depressas convalles

Diffugiunt, non, Eure, tuos neque solis ad ortus,

In Borean Caurumque, aut unde nigerrimus Auster

Nascitur et pluvio contristat frigore caelum.

Cum sit notissimum etiam in sacro monte Hispaniae, qui procurrit  
in occidentem iuxta Oceanum, frequenter equas sine coitu ventrem  
pertulisse, fetumque educasse qui tamen inutilis est, quod triennio  
prius quam adolescat morte absumitur : quare, ut dixi, dabimus  
operam ne circa aequinoctium vernum equae desideriiis naturalibus  
angantur, Haec Columella. In fetura (inquit Varro) res incredibilis  
est in Hispania, sed est vera, quod in Lusitania ad Oceanum in  
ea regione ubi est oppidum Olissippo, monte Tagro quaedam e  
vento concipiunt equae, ut hic gallinae quoque solent, quarum  
ova hyphenemia appellant : sed ex his equis qui nati pulli non

plus triennium vivunt. Constat in Lusitania circa Olissipponem oppidum et Tagum amnem, equas Favonio flante obversas animalem concipere spiritum, idque partum fieri, et gigni pernicissimum ita, sed triennium vitae non excedere, Plinius et Solinus. Proprium equae est (ut Albertus ex Avicenna) pede aut coxa aliquantulum recalcitrare cum desiderat coitum : et hoc modo aperit uterum, hauritque eo meridionalem aut septentrionalem ventum, quo plurimum delectatur. Scribit etiam Avicenna senem quendam fide dignum, natum in insula cui Arabicum nomen Dealtufa, sibi narrasse, quod equa Arabica illic concepto vento non cessarit currere per desiderium coitus, donec octo leucas emensa fines insulae attigit. Equi quando eventari (ἐξανεμοῦσθαι) dicantur, supra ex Aristotele docui in mentione libidinis equorum. A coitu solae animalium currunt ex adverso Aquilonum Austrorumve, prout marem aut feminam concepere, Plinius. In Lusitanis iuxta flumen Tagum equas Favonio spirante concipere falso prodidisse complures ait Iustinus, figmentumque ex equarum fecunditate et gregum multitudine, qui in ea provinciamulti et pernices visuntur, fluxisse autumat. Eorum qui aliter opinantur turba eliditur Iustinus, quibus divus Augustinus ascribi potest.

(Historiae Animalium I. p.439 (1617 edit.))

In some regions (says Columella), the mares are affected by such a burning desire for intercourse, that even though there is no stallion at hand, owing to their continuous and excessive passion, by imagining in their own minds the pleasures of love they conceive by the wind (just as farmyard hens do). The poet is not indulging his fancy too much when he says:

The moment that flame is kindled within their passionate  
flesh



(In spring above all, when warmth returns to their bones) the  
whole herd

Wheels to face the west wind high up there on the rocks;  
They snuff the light airs and often without being mated  
Conceive, for the wind - astounding to tell - impregnates  
them:

Over the rocks and cliffs then, and down the deep dales  
They gallop scattering, not towards the east and the dayspring  
But to the north and north-west  
And where the south wind arises glooming the sky with cold  
rain.

For it is also well known that on the holy mountain of Spain, which runs westward near the ocean, mares have often become pregnant without coition and reared their offspring, which, however, is of no use, because it is snatched away by death at three years of age, before it can come to maturity. Therefore, as I have said, we shall take care that the brood-mares are not tormented by their natural desires about the time of the spring equinox. These are the words of Columella. On the subject of breeding (says Varro), there is something incredible, but nonetheless true, which happens in Spain, namely that near the ocean in Lusitania, in that region where the town of Olissippo is situated, certain mares on Mount Tagrus conceive from the wind, just as is the case here with hens, whose eggs are called 'hypoemia' or wind-eggs. But the foals born of those mares do not live more than three years. It is generally known that in Lusitania, near the town of Olissippo and the river Tagus, the mares, by facing the westerly breeze,

conceive a living breath, and that that becomes a foal which is extremely swift from birth, but which does not live more than three years. This is recorded by Pliny and Solinus. It is characteristic of the mare (as Albertus Magnus states, following Avicenna) to kick up its leg or hip when it desires intercourse: in this way it opens its womb and takes in the southerly or northerly wind, gaining the greatest delight from that. Avicenna also records that a certain trustworthy old man, born on an island which bears the Arabic name Dealtufa, told him that an Arabian mare there drew in the wind and did not stop running out of desire for intercourse, until it had covered eight miles and reached the ends of the island. When horses do this, the Latin term 'eventari' (in Greek ἐξανεμοῦσαι) is applied to them, as I (following Aristotle) mentioned above in my discussion of the lust of horses. After coition, they alone of animals gallop in the face of the north or south winds, according as they have conceived a male or a female, states Pliny. Justin says that many authors have wrongly related that in Lusitania, near the river Tagus, the mares conceive when the westerly wind is blowing, and declares that the fictitious account has arisen because of the fecundity of the mares and the large number of herds which are numerous and swift in that province. Justin's view is crushed by the mass of authors who think otherwise, authors amongst whom St. Augustine can be numbered.

(Virgilian insert translated by C. Day Lewis)

38. Conrad Heresbach (A.D. 1496 - 1576)

Equae tempore maxime observandum ut tam feminis quam admissariis  
coeundi fiat potestas. Quoniam hoc praecipue armentum, si prohibeas,  
libidinis excitatur furiis, unde et veneno nomen inditum hippomanes,

quod equinae cupidini similem mortalibus amorem accendat ...

Nec dubium quin flagrent aliquot regionibus equae tanta libidine, ut etiam si marem non habeant, nimia cupiditate figurantes ipsae sibi venerem cohortalium more avium vento concipiant. Id quod poeta notat : Scilicet ante omnes furor est ingens [sic] equarum. Vento enim concepisse in Hispania equas proditum, fetumque educasse, sed triennii vitam non excedere.

(De Re Rustica III. pp209 b - 210 a (1570edit))

At that time of year, the greatest care must be taken that an opportunity for coition is given equally to mares as to their stallions. Since, if you prevent them from coupling, horses beyond all animals are excited by the fury of their lust. (Hence the term "horse-madness" is given to the poison which kindles in human beings a passion like the desire in horses)... Indeed, in some regions, there is no doubt that the mares burn with such great lust that, even though there is no stallion at hand, owing to their excessive passion, by imagining in their own minds the pleasures of love they conceive by the wind, just as farmyard hens do. The poet notes this when he says : But of all, beyond doubt, the fury of mares is the most remarkable. For it has been recorded that in Spain the mares have conceived by the wind, and have reared their offspring, but that they do not live more than three years.

39. Torquato Tasso (A.D. 1544 - 1595)

Questo su'l Tago nacque, ove talora  
L'avida madre del guerriero armento,  
Quando l'alma stagion, che n'innamora,

Nel cor le instiga il natural talento,  
 Volta l'aperta bocca in contra l'ôra,  
 Raccoglie i semi del fecondo vento;  
 E de' tepidi fiati (oh meraviglia!)  
 Cupidamente ella concepe e figlia.

E ben questo Aquilin nato diresti  
 Di qual aura del ciel più lieve spiri;  
 O se veloce sì ch'orma non resti,  
 Stendere il corso per l'arena il miri;  
 O se 'l vedi addoppiar leggieri e presti  
 A destra ed a sinistra angusti giri.  
 Sovra tal corridore il conte assiso  
 Move a l'assalto, e volge al cielo il viso ...

(La Gerusalemme Liberata VII. 76-77)

He was born on the Tagus, where from time to time, the avid mother  
 of the warlike herd (when the life-giving season which inspires  
 in us love and instils in her heart natural desire) turning her  
 open mouth towards the breeze, gathers the seeds of the fecund  
 wind; and from these warm breaths - wondrous to tell - with  
 desire she conceives and gives birth.

And indeed you would say this Aquilino was born of heaven's  
 lightest breath of wind - whether you see him gallop across the  
 sands so swift that no footprint shows, or whether you see him  
 doubling in tight circles to left or right, nimble and agile.  
 Mounted on such a steed and moving to the attack, the count lifts  
 his face to heaven ...

(Translation by David Groves (unpublished))

## 40. Ulisse Aldrovandi (A.D. 1522 - 1605)

Adhaec aliquot regionibus, ut ex Columella diximus, tanto coeundi ardor feminae flagrant, ut etiam si mas desit, et assidua et nimia cupiditate figurantes sibi ipsae venerem vento concipiant. Quae poeta (inquit idem Columella) licentius dicit:

Continuoque avidis ubi subdita flamma medullis  
 (Vere magis, quia vere calor redit ossibus), illae  
 Ore omnes versae in Zephyrum stant rupibus altis  
 Exceptantque leves auras, et saepe sine ullis  
 Coniugiis vento gravidae (mirabile ductu [sic] )  
 Saxa per et scopulos et depressas convalles  
 Diffugiunt, non, Eure, tuos neque solis ad ortus,  
 In Borean Caurumque, aut unde nigerrimus Auster  
 Nascitur et pluvio contristat frigore caelum.

Cum sit notissimum etiam in sacro monte Hispaniae, qui procurrit in occidentem iuxta Oceanum, frequenter equas sine coitu ventrem pertulisse, fetumque educasse, qui tamen inutilis est, quod triennio priusquam adolescat, morte absumitur : quare, ut dixi, dabimus operam ne circa aequinoctium vernum equae desideriiis naturalibus angantur. Hactenus Columella : sed verumne an falsum sit, ita vento concipere, alii astruunt, alii negant. Ex affirmantibus est M. Varo [sic]: In fetura (inquit) res incredibilis est in Hispania, sed est vera, quod in Lusitania ad Oceanum in ea regione ubi est oppidum Olissipo, monte Targo quaedam e vento concipiunt equae, ut hic gallinae quoque solent, quarum ova hypenemia appellant [sic]: sed ex his equis qui nati pulli non plus triennium vivunt. Ubi pro Targo legi debet sacro, ut ex allatis Columellae

verbis optime restituit Scaliger iunior in suis notis. Affirmat etiam Plinius, et Solinus, constare dicentes in Lusitania circa Olissiponem oppidum, et Tagrum amnen, equas Favonio flante obversas animalem concipere spiritum idque partum fieri, et gigni perniciosissimum ita, sed triennium vitae non excedere. Albertus quoque ex Avicenna, cum equae proprium esse dixisset, pede aut coxa aliquantulum recalcitrare, cum desiderat coitum; addit, et hoc modo aperit uterum, hauritque eo meridionalem aut septentrionalem ventum, quo plurimum delectatur. Scribit etiam Avicenna senem quendam fide dignum, natum in insula cui Arabicum nomen Dealtufa, sibi narrasse quod equa Arabica illic concepto vento non cessarit currere per desiderium coitus, donec octo leucas emensa fines insulae attigit. Homerus itidem hoc non impossibile existimans neque incredibile hominibus, visum esse ait equorum subventaneorum genus. Ait enim Borean adamasse Troicas quasdam equas easque implevisse semine, genusque equorum inde procreatum celerrimum, ut supra ex eo recitavimus. Et Silius Italicus:

Hic adeo, cum ver placidum flatusque tepescit

Concubitus servans tantos [sic], grex prostat [sic] equarum

Et Venerem occultam genitalis [sic] concipit aura.

Sed non multa dies generi, properatque senectus,

Septimaque his stabilis longissima ducitur aetas [sic].

Divus Augustinus idem et in Cappadocia scribit contingere. Sed et Aristoteles equas scribit ἐξανεμοῦσαι, cum innuit ex vento concipere, Gaza vertit eventari. Equae, inquit, itaque equiunt : unde vocabulum id ab hoc uno animali trahitur, maledicto in mulieres libidinosas. Necnon eventari per id tempus dicuntur : quapropter in Creta insula equos admissarios nimine [sic] a feminis semovendos censeant. Cum vero ita

affectae fuerint, currunt relictæ societate : simile hoc vitium est, quod subare in suis dicitur. Currunt non in orientem aut occidentem versus, sed ex adverso Aquilonis aut Austri, nec appropinquare quemquam patiuntur, donec vel defatigatae desistant, vel ad marem deveniant, tum aliquid emittunt, quod hippomanes appellatur. Hinc Virgilium accepisse, quae supra citavimus, ostendit Petrus Victorius. Eos vero qui per os in ventum obversum apud poetam, equarum naturalia intelligunt, eos errare putat Pontanus. Rabicanum celerrimum equum similiter Lud. Ariostus absque patris opera conceptum fingit, sed ex igne et vento :

Questo e il destrier che fu del [sic] Argalia

Che di fiamma e di vento era concetto

Et [sic] senza fieno e biada si nutria

Da [sic] l'aria pura, e Rabican fu detto.

E contrario equas ita in Lusitanis Favonio spirante concipere falso a compluribus proditum existimat Iustinus, fabulasque vocat, quae ex equarum Lusitaniae natae sint fecunditate, pedumque et cursus pernecitate.

(De Quadrupedibus Solidipedibus I.pp90F-91B (1639 edit.))

Moreover, in some regions, (here we follow Columella as we have said), the mares are affected by such a burning desire for intercourse that, even though there is no stallion at hand, owing to their continuous and excessive passion, by imagining in their own minds the pleasures of love they conceive by the wind. The poet (says the same Columella) is not indulging his fancy too much when he says:

The moment that flame is kindled within their passionate flesh

(In spring above all, when warmth returns to their bones) the whole  
herd

Wheels to face the west wind high up there on the rocks;

They snuff the light airs and often without being mated

Conceive, for the wind - astounding to tell - impregnates them:

Over the rocks and cliffs then, and down the deep dales  
 They gallop scattering, not towards the east and the dayspring  
 But to the north and north-west  
 And where the south wind arises glooming the sky with cold rain

For it is also well-known that on the Holy Mountain of Spain, which runs westward near the ocean, mares have often become pregnant without coition and reared their offspring, which, however, is of no use, because it is snatched away by death at three years of age, before it can come to maturity. Therefore, as I have said, we shall take care that the brood-mares are not tormented by their natural desires about the time of the spring equinox. Thus far Columella : but whether it is true or false that conception from the wind occurs thus is a question which is answered positively by some and negatively by others. One of those who takes a positive stance is M. Varro : On the subject of breeding (he says), there is something incredible, but nonetheless true, which happens in Spain, namely that near the ocean in Lusitania, in that region where the town of Olissipo is situated, certain mares on Mount Targus conceive by the wind, just as is the case here with hens, whose eggs are called 'hyphenemia' or wind-eggs. But the foals born of these mares do not live more than three years. In this passage, 'sacro' should be read instead of 'Targo', an excellent restoration proposed by Scaliger the younger in his notes, on the basis of comparison with the text of Columella. An affirmative approach is also taken by Pliny, and Solinus, who say that it is generally known that in Lusitania, near the town of Olissipo and the river Tagrus, the mares, by facing the westerly breeze, conceive a living breath, and that that becomes a foal which is extremely swift from birth, but which does not live more than three years. Albertus



Magnus, too, following Avicenna, says that it is characteristic of the mare to kick up its leg or hip when it desires intercourse; he adds that in this way it opens its womb and takes in the southerly or northerly wind, gaining the greatest delight from that. Avicenna also writes that a certain trustworthy old man, born on an island which bears the Arabic name Dealtufa, told him that an Arabian mare there drew in the wind and did not stop running out of desire for intercourse, until it had covered eight miles and reached the ends of the island. Homer likewise believes that this is neither impossible nor incredible in the eyes of men, and says that a race of horses seems to have been derived from the wind. For he relates that Boreas fell in love with certain Trojan mares and filled them with semen, thereby giving rise to an extremely swift race of horses, as we recorded above. And Silius Italicus states:

In that country, when spring is mild and airs are warm, the drove of mares stand still, mating in secret, and conceive a mysterious progeny begotten by the wind. But their stock is short-lived: old age comes quick upon them, and the life of these horses lasts but seven years at the longest.

St. Augustine writes that the same thing also occurs in Cappadocia. Aristotle, too, applies the term *ἐξαιεμῶσθαι* to mares, believing in conception by the wind; Gaza translates the Greek by the Latin term 'eventari'. When mares are in heat, he says, the term 'equire' is used; and that word appropriate to this one animal is applied as a term of abuse to lustful women. Indeed, at that time, mares are said to be aroused by the wind; for which reason the inhabitants of the island of Crete are of the opinion that the stallions should not be removed from

the mares. When they are affected in this manner, they run away, abandoning all company; this is a similar vice to that which is said to occur in pigs. They run not towards the east or the west, but in the face of the north or the south wind, and they allow no-one to approach them until they either desist through exhaustion, or reach the sea (/a male?); then, they emit a substance which is called hippomanes.

Petrus Victorius has shown that it is from here that Virgil took the lines which we quoted above. Those who think that the action of turning to face the wind, as described by the poet, reflects the natural processes of mares, are held to be wrong by Pontanus. The extremely swift horse, Rabican, is similarly portrayed by Ludovico Ariosto as having been conceived, not from a sire, but out of fire and wind:

This is the steed which was once Argalia's;  
 he was conceived by wind out of fire, and  
 he fed not on hay or oats but on pure  
 air; Rabican was his name.

On the contrary, Justin believes that many authors have wrongly related that the mares in Lusitania conceive thus when the westerly wind is blowing; he calls their accounts fictitious, and says that they have arisen as a result of the fecundity of the mares of Lusitania, and their swift-footed legerity.

(Poetic inserts translated by C. Day Lewis, J.D. Duff and Guido Waldman  
 respectively)

41. Giulio Cesare Cortese (A.D. 1575 - ? )

... Che haveva no cavallo gioveniello,  
 Ch'era de viento a Spagna gnetato...

(Lo Cerriglio 'Ncantato II.p.14 (1645 edit.))

... He had a young horse,

That had been sired by the wind in Spain...

42. Joannes Jonstonus (A.D. 1603 - 1675)

Equas in Lusitania vento concipere refert Varro. Plinius et Solinus partu evanido affirmant. Natos quippe pullos non plus triennium vivere. Fabulas appellat Iustinus.

(Thaumatographia Naturalis VII.15)

Varro records that the mares in Lusitania conceive by the wind. Pliny and Solinus state that the offspring is fruitless; indeed, the foals born do not live longer than three years. Justin calls these accounts fictitious.

43. Giambattista Basile (A.D.1575 - 1632)

... A lo stesso tiempo, trasette l'uerco pe pigliarese na vista de lo giardino; e, avenno pigliato granne omedetà de lo terreno, se lassaje scappare no vernachio, cossì spotestato, e co tanto remmore e strepeto, che Viola, pe la paura, strillava : << O mamma mia, ajutamé! >> E, votatose l'uerco, e vistose dereto sta bella figliola, allecordatose d'avere ntiso na vota da certe stodiante, che le cavalle de Spagna se mprenano co lo viento, se penzaje che lo corzo de lo pideto avesse ngravedato quarche arvolo, e ne fosse sciuta sta pintata criatura. E perzo, abbracciatola co grann' amore, decette : <<Figlia, figlia mia, parte de sto cuorpo, shiato de lo spireto mio, e chi me l'avesse ditto mai, che co na ventositate avesse dato forma a ssa bella facce?, chi me l'avesse ditto, ca

n'effetto de fredezza avesse gnetato sto fuoco d'ammore?>> ...

(Il Pentamerone Day II. Tale 3 : Viola)

At that very moment the ogre came out to have a look at the garden, and feeling the dampness of the ground he broke wind with such a fearful explosion and noise that Viola was terrified and called out: "Oh, Mother mine, help! help!" The ogre turned round, and seeing the beautiful young girl, and remembering once having heard some students say that in Spain mares had been known to become pregnant by the wind, he thought that the rush of air from his fart must have caused some tree to bring forth this lovely creature. So he embraced her most lovingly, saying: "My daughter, my daughter, child of my body, breath of my soul; who would have thought that with a fart I could give life to such a beauteous form, that the effect of a cold could produce such a fire of love!"...

(Translation by N.M. Penzer)

44. Joannis E. Nierenberg (A.D. 1595 - 1658)

Constans inter veteres fuit fama et admiratio, circa Olissiponensis  
urbis confinia equarum feturam ventis maritantibus inolescere.

Unde Silius Italicus lib.3.

Hic adeo, cum ver placidum flatusque tepescit,  
Concubitus servans tacitos, grex prostat [sic] equarum  
Et Venerem occultam genitali concipit aura  
Sed non multa dies generi, properatque senectus,  
Septimaque his stabulis longissima ducitur aetas [sic].

Luculenter idem confirmat Plinius l.8.c.42. sed de aetate multum  
 a poeta diversus. Constat in Lusitania circa Olissiponem opidum  
 [sic] et Tagum amnem, equas Favonio flante obversas animalem  
 concipere spiritum, idque partum fieri et gigni pernicissimum,  
 sed triennium vitae non excedere. Sed suspectae fidei ne sit  
 Plinius, ex M. Varrone haec hausit lib.2 de Re Rustica cap.1. In  
 fetura, Varro inquit, res incredibilis est in Hispaniae, sed est  
 vera, quod in Lusitania ad Oceanum in ea regione ubi est opidum [sic]  
 Olissipo, monte Tagro quaedam e vento certo tempore concipiunt equae,  
 ut hic gallinae quoque solent, quarum ova ὀρνέμια appellant. Sed  
 ex his equis qui nati pulli non plus triennium vivunt. Haec  
 ille. De equabus aliis Graeciae idem affirmavit S. Augustinus.  
 Et Columellae res certissima est, et quae suo tempore in dubium  
 vocari non posset. Miror ita asseverare hoc serios istos auctores  
 et philosophos, atque sapientissimos naturae doctores, quales Varro  
 et Columella fuerunt, quasi compertum ipsis esset ex aliquo experimento  
 evidenti aut minime reprobando. Quare non credunt aliqui hoc  
 omnino fabulosum, cum non sit extra naturae vires; nam et pisces  
 multi sine mare fecundantur. Et equa visa in Hispania edere mulam  
 alia mula gravidam, quemadmodum de muribus refert Aelianus. Sed  
 nec leve vestigium priscae, hoc est immaritatae fecunditatis, nunc  
 apparet ex iis quae Resendius sic narrat. Sed quamquam de conceptu  
 ex vento disputandum a me negavi, referam tamen quod inquirendae  
 rei gratia percunctanti mihi indicatum est. Diverti abhinc  
 septennium apud colonum agri Beneventani iuxta Tagum, et cum ab  
 illo quaererem, ecquid de huiusmodi conceptu aut sciret ipse, aut  
 ab aliis auditum meminisset, respondit neque se neque vicinos,

qui equarias haberent, de ea umquam re fuisse sollicitos; tantum ut equire feminas animadverterent, admitti eas curare : se tamen, cum pulchram equam haberet, cuperetque bene vendibilem in proximas nundinas efficere, ante hinnitum in insula quae in medio Tago est, solam inclusisse ut abundantia pabuli saginaretur. Post menses duos reperisse gravidam, miratumque eo quod illuc numquam accessisset admissarius. Eventum expectasse. Septem fere iam menses cum tulisset uterum, enixa, non quidem animal, sed concreti sanguinis informem materiam, abortumque suspicatum. De hac equarum genitura aliud novi nihil. Hactenus Resendius. Quare Ludovicus Carrion et Eduardus Wetonus famam antiquam veram fuisse censent. Accedit quod natura saepe mutari soleat; nec convincit, Non est hodie, ergo non fuit heri.

(De Miris et Miraculosis Naturis in Europa I.66)

Amongst the ancients, there was constant report and marvel that in the environs of the city of Olissipo, the mares were accustomed to breed by being impregnated by the winds. Hence Silius Italicus Book III:

In that country, when spring is mild and airs are warm, the drove of mares stand still, mating in secret, and conceive a mysterious progeny begotten by the wind. But their stock is short-lived : old age comes quick upon them, and the life of these horses lasts but seven years at the longest.

The same phenomenon is undoubtedly confirmed by Pliny Book VIII, Chapter 42; but concerning the age of the offspring, he differs considerably from the poet. It is generally known that in Lusitania, near the town of Olissipo and the river Tagus, the mares,

by facing the westerly breeze, conceive a living breath, and that that becomes a foal which is extremely swift from birth, but which does not live more than three years. But, to prevent Pliny's credibility from being impaired, it is from Varro *Res Rustica* Book II Chapter 1 that he derived these things. On the subject of breeding, Varro says, there is something incredible, but nonetheless true, which happens in Spain, namely that near the ocean in Lusitania, in that region where the town of Olissipo is situated, certain mares on Mount Tagrus conceive from the wind at a particular time of the year, just as is the case here with hens, whose eggs are called 'hyphenemia' or wind-eggs. But the foals born of these mares do not live more than three years. These are the words of Varro. The same thing is stated about other mares of Greece by St. Augustine. For Columella, the matter is one of utmost certainty which, in his time, could not be called into doubt. I marvel that this assertion is made by those weighty authors and philosophers, and by the wisest of natural historians, such as Varro and Columella, as though the phenomenon had been discovered by them, as a result of some obvious or indisputable experiment. For this reason, some do not believe it to be fictitious, since it is not outside the powers of nature; for many fish, too, are impregnated without a male. And a mare in Spain was seen to give birth to a mule that was pregnant with another mule, in the same way as mice produce pregnant offspring, according to Aelian. But no trace of this former parthenogenesis now appears in Resendius' narrative which proceeds as follows: Although I have said that I do not intend to debate the subject of wind-conception, I shall nonetheless relate what I, in my uncertainty, discovered by means of an inquiry

into the matter. Seven years ago, I visited a farmer at Beneventa beside the Tagus, and when I asked him whether he himself knew anything about conception of this sort, or whether he remembered having heard anything about it from others, he replied that neither he, nor any of his neighbours who kept horses had ever worried about it; only that as they noticed that the mares were in heat, they made sure that they were put to the stallions; however, since he had a beautiful mare, and wanted it to be highly saleable at the next market, before it started neighing he shut it up alone on an island in the middle of the Tagus so that it would be fattened by the abundant food. After two months he found that it was pregnant, and was astounded because no stallion had ever had access to the island. He awaited the result. When it had been pregnant almost seven months, it gave birth, not to a living creature, but to an unformed mass of congealed blood, which he thought to be an abortion. Concerning the reproduction of mares, I know nothing more. So much for Resendius. Ludovicus Carrion and Eduardus Wetonus believe the ancient report to have been true. There remains the fact that nature is often accustomed to be changed; the statement "It does not exist today, therefore it did not exist yesterday" is unconvincing.

45. Juan de Caramuel Lobkowitz (A.D. 1606 - 1682)

Solent Hispani honorare equos suos ventorum nomine ... Et hinc patet esse verum quod Plinius ex Aristotele recenset, videlicet equos Baeticos esse ventorum filios : nempe equorum (sic rem intellige) qui ventorum nominibus indigitantur.

(Rhythmica Campaniae pp 65 - 66 (1668 edit))



The Spanish are accustomed to honour their horses with the names of winds ... Hence it is evident that there is truth in what Pliny (following Aristotle) reports, namely that the horses of Baetica are the offspring of the winds : assuredly they are the offspring of horses that are endowed with the names of winds (and thus should the matter be understood).

46. Rudolf Camerarius (A.D. 1665 - 1721)

Ova ista volucrum infecunda, nec maris vim experta, solent vocari subventanea, hypenemia, Zephyria, eo quod, ut Aristoteles rationem dat, aves verno tempore flatu fecundos ex Favonio recipere videantur. Eo respexit quoque Virgilius Georg. 1. 1 equarum furorem describens:

Continuoque avidis ubi subdita flamma medullis

(Vere magis, quia <vere> redit calor [sic] ossibus), illae

Ore omnes versae in Zephyrum stant rupibus altis,

Exceptantque leves auras, et saepe sine ullis

Coniugiis vento gravidae (mirabile dictu)

Saxa per et scopulos et depressas convalles

Diffugiunt

Possent isthaec verba conceptioni plantarum melius applicari, quam animalium; haec enim utut vento moveri sive excitari concedantur, fetus tamen inde non concipiunt : At illae plus utique vento debent, siquidem vere tubae feminarum, totidem quasi ova, versa in Zephyrum stant exceptantque leves auras, sparsamque in eis florum farinam, et sine aliis coniugiis vento tali gravidae (mirabile dictu) concipiunt. Fecundum ita esset, quod hic sub

vento sive aere, principio masculino infecto, a planta concipitur ovum, nec amplius aequipollerent subventaneum et sterile. Favonii etiam energiam deprædicet, sed et nimis extollit Plinius lib.10 cap.25 ubi annum naturæ ordinem in generatione arborum talem recenset: conceptus ipsi in germine, partus in flore, educatio in pomo. Primus, inquit, conceptus flare incipiente Favonio, hoc enim maritantur virescentia ex terra, quo etiam equæ in Hispania. Hic est genitalis spiritus mundi, a fovendo dictus ... ver inchoans. Catulitionem rustici vocant, gestiente natura semina accipere, eoque animam inferente omnibus satis. Quæ utique non sine grano salis accipienda; quis enim iuxta antiquam fabulam equarum Hispanicarum vento gravidarum possit esse fetus, nisi fatuus, Zephyrius, mola?

(De Sexu Plantarum Epistola pp 254 - 255 (1701 edit))

Those infertile birds' eggs, produced without the influence of the male, are generally called wind-eggs (the Latin terms being 'subventanea', 'hyphenemia', or 'Zephyria'), because, as Aristotle explains, in spring-time the birds seem to receive a fertilising breath from the west wind. Virgil, in Book I of the Georgics, also refers to that when he describes the frenzied state of the mares:

The moment that flame is kindled within their passionate  
flesh

(In spring above all, when warmth returns to their bones) the  
whole herd

Wheels to face the west wind high up there on the rocks;

They snuff the light airs and often without being mated

account about the wind-impregnated Spanish mares, how can the offspring be other than a sterile thing, a wind-egg, a misbirth?

47. Manas ( ? 18th century A.D.)

... And hard after him came Orongu's racer Urku-kula. Fearing lest the winds might enter her mare's rear, Orongu had thrust in nine felt saddle-pillows stuffed with chiy-grass...

(cf Hatto, The Memorial Feast for Kokotoy-Khan, p.65)

48. Manas ( ? 18th century A.D.)

If night without moon is on the earth,  
If earth is lost in mist and gloom,  
The horse's ears shine upon it,  
As if lights were kindled in them!  
A whirlwind made its mother pregnant.

(cf Bowra, Heroic Poetry, p.157)

APPENDIX II: Passages concerning hens and the laying of wind-eggs.

The following is a chronological list of all passages cited by number in chapter IV:

1. Sophocles (c.496 - 406 B.C.)

λήθουσι γάρ τοι κἀνέμων διέξοδοι  
 θήλειαν ὄρνιν πλὴν ὅταν τόκος παρῇ.

(Oenomaus, fr.477 (Pearson))

For the hen is unaware of the passage of the winds (through its body), except when brooding-time is near.

2. Aristophanes (c.450 - c.385 B.C.)

ἔν ἴστε· πολλὰ τῶν ἀλεκτρυόνων βίᾳ  
 ὑπνέμια τίκτουςιν ὥς πολλάκις.

(Daedalus, fr.186 (Edmonds I. pp.624 - 625))

I'll tell you one thing : many hens have no choice but to lay wind-eggs time and again.

3. Aristophanes (c.450 - c.385 B.C.)

Χάος ἦν καὶ Νῦξ Ἐρεβός τε μέλαν πρῶτον καὶ  
 Τάρταρος εὐρύς,  
 γῆ δ' οὐδ' ἀήρ οὐδ' οὐρανὸς ἦν \* Ἐρεβους δ' ἐν ἀπείροσι  
 κόλποις  
 τίκτει πρῶτιστον ὑπνέμιον Νῦξ ἢ μελανόπτερος ὦν,  
 ἐξ οὗ περιτελλομέναις ἡραῖς ἔβλασταν Ἐρως ὁ ποθεινός,  
 στίλβων νῦτον πτερύγοιν χρυσαῖν, εἰκὼς ἀνεμώνεσι  
 δίναις.

(Birds 693 - 697)

First there was Chaos and Night and black Erebus and broad Tartarus,  
but there was no earth nor air nor sky. Then in the infinite  
bosom of Erebus first of all black-winged Night bore a wind-egg,  
and from this egg, as the seasons revolved, sprang Eros the desired,  
his back gleaming with golden wings, swift as the whirling winds.

4. ? Aristophanes (c.450 - c.385 B.C.)

... το[ύτ]ωι γὰρ ὥπερ τοῖσιν [ώ]οις  
τ[οῖς] ἀνεμιαίοις ὅτι νεοτ[τ]...

(Thesmophoriazusae II?, P. Oxy.212a(cf Austin 62))

... For with this, it's just as it is with  
wind-eggs, in that a chick...

5. Araros (early-mid 4th century B.C.)

... ἀνεμιαῖον ᾠόν ...

(Caeneus, fr.6 (Edmonds II, pp.12-13))

... wind-egg ...

6. Plato (c.429 - 347 B.C.)

ΣΩ. Εὖ γε καὶ γενναίως, ὦ παῖ· χρὴ γὰρ οὕτως  
ἀποφαινόμενον λέγειν. ἄλλα φέρε δὴ αὐτὸ κοινῇ  
σκεψάμεθα, γόνιμον ἢ ἀνεμιαῖον τυγχάνει ὄν.

(Theaetetus 151 E)

SOCRATES. Good! Excellent, my boy! That is the way one  
ought to speak out. But come now, let us examine your  
utterance together, and see whether it is a real offspring  
or a mere wind-egg.

(Translation by Harold M. Fowler)

## 7. Plato (c.429 - 347 B.C.)

ΣΩ. Οὐ μνημονεύεις, ὦ φίλε, ὅτι ἐγὼ μὲν οὐτ' οἶδα οὔτε ποιοῦμαι τῶν τοιούτων οὐδὲν ἐμὸν, ἀλλ' εἰμι αὐτῶν ἄγονος, σὲ δὲ μαιεύομαι καὶ τούτου ἕνεκα ἐπαίω τε καὶ παρατίθημι ἐκάστων τῶν σαφῶν ἀπογεύσασθαι, ἕως ἂν εἰς φῶς τὸ σὸν δόγμα ξυνεξαγάγω· ἐξαχθέντος δὲ τότε ἤδη σκέψομαι εἴτ' ἀνεμιαῖον εἴτε γόνιμον ἀναφανήσεται.

(Theaetetus 157 C-D)

SOCRATES. You forget, my friend, that I myself know nothing about such things, and claim none of them as mine, but am incapable of bearing them and am merely acting as a midwife to you, and for that reason am uttering incantations and giving you a taste of each of the philosophical theories, until I may help to bring your own opinion to light. And when it is brought to light, I will examine it and see whether it is a mere wind-egg or a real offspring.

(Translation by Harold M. Fowler)

## 8. Plato (c.429 - 347 B.C.)

ΣΩ. Τοῦτο μὲν δὴ, ὡς ἔοικεν, μόλις ποτὲ ἐγεννήσαμεν, ὃ τι δὴ ποτε τυγχάνει ὄν. μετὰ δὲ τὸν τόκον τὰ ἀμφιδρόμια αὐτοῦ ὡς ἀληθῶς ἐν κύκλῳ περιθρεκτέον τῇ λόγῳ σκοπούμενους μὴ λάθῃ ἡμᾶς οὐκ ἄξιον ὄν τραφῆς τὸ γιγνόμενον, ἀλλὰ ἀνεμιαῖόν τε καὶ ψεῦδος.

(Theaetetus 160 E)

SOCRATES: Well, we have at last managed to bring this forth, whatever it turns out to be; and now that it is born, we must in very truth perform the rite of running round with it in a circle - the circle of our argument - and see whether it may not turn out to be after all not worth rearing, but only a wind-egg, an imposture.

(Translation by Harold M. Fowler)

9. Plato (c.429 - 347 B.C.)

ΣΩ. Οὐκοῦν ταῦτα μὲν πάντα ἡ μαιευτικὴ ἡμῖν τέχνη

ἀνεμιαῖά φησι γεγενῆσθαι καὶ οὐκ ἄξια τροφῆς;

ΘΕΑΙ. Παντάπασι μὲν οὖν.

(Theaetetus 210 B)

SOCRATES: Then does our art of midwifery declare to us that all the offspring that have been born are mere wind-eggs and not worth rearing?

THEAETETUS: It does, decidedly.

(Translation by Harold M. Fowler)

10. Aristotle (384 - 322 B.C.)

... Τὰ δὲ θήλεα μὲν ἐστίν, ἄρρενα δ' οὐκ ἐστίν· ἐξ ὧν γίγνεται  
 <ῥα> ὥσπερ ἐν τοῖς ὄρνισι τὰ ὑπηνέμια. τὰ μὲν οὖν τῶν ὀρνίθων  
 ἅπαντά ἐστιν ἄγωνα· μέχρι γὰρ τοῦ ὧν γεννησθαι δύναται ἡ φύσις  
 αὐτῶν ἐπιτελεῖν, ἐὰν μὴ τις αὐτοῖς συμβῇ τρόπος ἄλλος τῆς κοινωνίας  
 πρὸς τοὺς ἄρρενας· περὶ ὧν ἀκριβέστερον ἔσται δηλοῦν ἐν τοῖς  
 ὑστερον.

(Historia Animalium 539 a 30 - 539 b 2)

There are yet others <i.e. fishes> which are female and have no males : these produce eggs just as birds produce wind-eggs. With birds all such eggs are infertile (their nature is capable of generation up to and including the egg), unless some other mode of intercourse with the male is available to them : it will be possible to explain this in greater detail later.

(Translation by A.L. Peck)

11. Aristotle (384 - 322 B.C.)

Οἱ δὲ λέγοντες ὅτι ὑπολείμματά ἐστι τὰ ὑπηνέμια τῶν ἐμπροσθεν ἐξ ὀχέας γενομένων, οὐκ ἀληθῆ λέγουσιν· ᾧπται γὰρ ἱκανῶς ἦδη ἀνόχευτοι νεοττίδες ἀλεκτορίδων καὶ χηνῶν τίκτουςαι ὑπηνέμια. τὰ δ' ἄρ' αὖ τὰ ὑπηνέμια ἐλάττω μὲν τῷ μεγέθει γίγνεται καὶ ἥττον ἡδέα καὶ ὑγρότερα τῶν γονίμων, πλήθει δὲ πλείω· ὑποτιθεμένων δὲ τῇ ὄρνιθι οὐδὲν παχύνεται τὸ ὑγρὸν, ἀλλὰ τό τ' ὥχρον διαμένει καὶ τὸ λευκὸν ὅμοια ὄντα. γίγνεται δ' ὑπηνέμια πολλῶν, οἷον ἀλεκτορίδος, πέρδικος, περιστερᾶς, ταῦνος, χῆνος, χηναλώπεκος... τὰ δὲ καλούμενα ὑπὸ τινων κυνόσουρα καὶ οὐρία γίγνεται τοῦ θέρους μᾶλλον. Ξεφύρια δὲ καλεῖται τὰ ὑπηνέμια ὑπὸ τινων, ὅτι ὑπὸ τὴν ἐαρινὴν ὥραν φαίνονται δεχόμεναι τὰ πνεύματα αἱ ὄρνιθες· τοιοῦτον δὲ ποιοῦσι καὶ τῇ χειρὶ πως ψηλαφῶμεναι. γίγνεται δὲ τὰ ὑπηνέμια γόνιμα καὶ τὰ ἐξ ὀχέας ἐνυπάρχοντα ἦδη μεταβάλλει τὸ γένος εἰς ἄλλο γένος, ἔαν πρὶν μεταβάλλειν ἐκ τοῦ ὥχρου εἰς τὸ λευκὸν ὀχεύηται ἢ τὰ ὑπηνέμια ἔχουσα ἢ τὰ γόνυ εἰλημμένα ἐξ ἐτέρου ὄρνιθος· καὶ γίγνεται τὰ μὲν ὑπηνέμια γόνιμα, τὰ δὲ προϋπάρχοντα κατὰ τὸν ὕστερον ὀχεύοντα ὄρνιθα. ἔαν δ' ἦδη μεταβαλλόντων εἰς τὸ λευκόν, οὐδὲν μεταβάλλει οὔτε τὰ ὑπηνέμια ὥστε γίγνεσθαι γόνιμα, οὔτε τὰ γόνυ κυούμενα ὥστε μεταβαλεῖν εἰς τὸ τοῦ ὀχεύοντος γένος.

(Historia Animalium 559 b 21 - 560 a 17)



Some people allege that wind-eggs are the remains of eggs previously produced by copulation. They are wrong, because we have sufficient observations to establish that chickens of the domestic fowl and of geese lay wind-eggs though they have never copulated. Wind-eggs are smaller in size than fertile ones, less tasty and more fluid, and they are more numerous. If they are put under a hen, their fluid part does not thicken, but both yolk and white remain unchanged. Wind-eggs are produced by many kinds of birds, e.g. domestic hens, partridges, pigeons, peahen, geese, vulpanders... What some people call 'kynosoura' and 'ouria' tend to be produced more in summer. Wind-eggs are called 'zephyria' by some, because hen-birds can be seen in springtime inhaling the breezes : they do a similar thing if stroked by the hand in a particular way. Wind-eggs become fertile, and eggs already impregnated can change their breed, if before they change from yellow to white the hen-bird which has the wind-eggs or the impregnated eggs is trodden by another cock : when this happens, the wind-eggs become fertile and the previously impregnated eggs take after the breed of the second cock. But if the second impregnation occurs while the change from yellow to white is in progress, then neither alteration is effected : the wind-eggs do not become fertile, nor do the fertile eggs change over to the breed of the second cock.

(Translation by A.L. Peck)

12. Aristotle (384 - 322 B.C.)

αἱ δὲ κῆραι καὶ αἱ τῶν ὑπηνεμίων ὥν συλλήψεις ταχέως γίνονται ταῖς πλείσταις τῶν ὀρνίθων...

(Historia Animalium 560 b 11-13)

The conception of fertile eggs and the originating of wind-eggs take place quickly in most birds...

(Translation by A.L. Peck)

13. Aristotle (384 - 322 B.C.)

καὶ ἔτι αἱ θήλειαι ἀλλήλας ἀναβαίνουσιν, ὅταν ἄρρην μὴ παρῇ, κύσασθαι ὥπερ οἱ ἄρρενες· καὶ οὐδὲν προΐεσθαι εἰς ἀλλήλας τίκτουσιν ἢ πλεῖω ἢ τὰ γόνυ γιγνόμενα, ἐξ ὧν οὐ γίγνεται νεοττὸς οὐδεὶς, ἀλλ' ὑπηνέμια πάντα τὰ τοιαῦτά ἐστιν.

(Historia Animalium 560 b 30 - 561 a 3)

Furthermore, female pigeons mount one another if no male is present, having first kissed as the males do; and although nothing passes between them, they lay more eggs than if they had been impregnated. These eggs, of course, produce no chicks; all such are wind-eggs.

(Translation by A.L. Peck)

[14. Aristotle (384 - 322 B.C.)

τίκτει μὲν οὖν, ὥπερ εἴρηται, καὶ τρία ποτέ· ἀλλ' ἐξάγει οὐδέποτε δυοῖν πλεον νεοττοῖν, ἐνίοτε δὲ καὶ ἓνα μόνον· τὸ δ' ὑπολειπόμενον τῶν ᾧν ἀεὶ οὖριόν ἐστιν.

(Historia Animalium 562 b 8-11)

As I have said, the pigeon sometimes lays three eggs, but it never brings up more than two chicks, sometimes only one : the remaining egg is always "windy".

(Translation by A.L. Peck)]

## 15. Aristotle (384 - 322 B.C.)

...Τίκτουσι δ' οἱ τὰς καὶ ὑπηνέμια...

(Historia Animalium 564 a 31)

...Peahens also lay wind-eggs...

(Translation by A.L. Peck)

## 16. Aristotle (384 - 322 B.C.)

Μέγιστον δὲ σημεῖον τὸ συμβαῖνον περὶ τοὺς ὄρνιθας καὶ τὸ τῶν  
 ἰχθύων γένος τῶν φυτόνων τοῦ μήτε ἀπὸ πάντων ἶέναι τὸ σπέρμα  
 τῶν μορίων, μήτε προῖεσθαι τὸ ἄρρεν τοιοῦτόν τι μόριον ὃ ἔσται  
 ἐνυπάρχον τῷ γεννηθέντι, ἀλλὰ μόνον τῇ δυνάμει τῇ ἐν τῇ γονῇ  
 ζωοποιεῖν, ὥπερ εἴπομεν ἐπὶ τῶν ἐντόμων, ἐν οἷς τὸ θῆλυ προῖεται  
 εἰς τὸ ἄρρεν. ἔάν τε γὰρ ὑπηνέμια τύχη κύουσα ἢ ὄρνις, ἐὰν μετὰ  
 ταῦτα ὀχεύηται, μήπω μεταβεβληκότος τοῦ ὥρου ἐκ τοῦ ὥχρον ὅλον  
 εἶναι εἰς τὸ λευκαίνεσθαι, γόνιμα γίνεται ἀντὶ ὑπηνεμίων· ἔάν τε  
 ὑφ' ἑτέρου ὠχευμένη <ῆ> καὶ ἔτι ὠχροῦ ὄντος, κατὰ τὸν ὕστερον  
 ὀχεύσαντα τὸ γένος ἀποβαίνει πᾶν τὸ τῶν νεοτῶν. διὸ ἔνιοι τοῦτον  
 τὸν τρόπον τῶν περὶ τὰς ὄρνιθας τὰς γενναίας σπουδαζόντων ποιοῦσι,  
 μεταβάλλοντες τὰ πρῶτα ὀχεῖα καὶ τὰ ὕστερα, ὥς οὐ συμμειγνύμενον  
 καὶ ἐνυπάρχον, οὐδ' ἀπὸ παντὸς ἐλθὼν τὸ σπέρμα· ἀπ' ἀμφοῖν γὰρ ἀν  
 ῆλθεν, ὥστ' εἶχεν ἂν δις ταῦτα μέρη. ἀλλὰ τῇ δυνάμει τὸ τοῦ  
 ἄρρενος σπέρμα τὴν ἐν τῷ θήλει ὕλην καὶ τροφὴν ποιᾶν τινα κατασκευάζει.  
 τοῦτο γὰρ ἐνδέχεται ποιεῖν τὸ ὕστερον ἐπεισελθὼν ἐκ τοῦ θερμᾶναι καὶ  
 πέψαι· λαμβάνει γὰρ τροφὴν τὸ ὦρον ἕως ἂν αὐξάνηται...

Ὅτι μὲν οὖν οὐτ' ἀπὸ παντὸς ἀπέρχεται τὸ σπέρμα τοῖς προῖεμένοις  
 σπέρμα τῶν ζώων, οὔτε τὸ θῆλυ πρὸς τὴν γένεσιν οὕτω συμβάλλεται τοῖς  
 συνισταμένοις ὥς τὸ ἄρρεν, ἀλλὰ τὸ μὲν ἄρρεν ἀρχὴν κινήσεως, τὸ δὲ

θήλυ τὴν ὕλην, δῆλον ἐκ τῶν εἰρημένων. διὰ γὰρ τοῦτο οὐτ' αὐτὸ καθ' αὐτὸ γεννᾷ τὸ θῆλυ, δεῖται γὰρ ἀρχῆς καὶ τοῦ κινήσοντος καὶ διορισίντος (ἀλλ' ἐνίοις γε τῶν ζῴων οἷον τοῖς ὄρνισι, μέχρι τινὸς ἢ φύσις δύναται γεννᾶν· αὗται γὰρ συνιστᾶσι μὲν, ἀτελεῖ δὲ συνιστᾶσι τὰ καλούμενα ὑπηνέμια ὥα), ἣ τε γένεσις ἐν τῷ θήλει συμβαίνει τῶν γινομένων, ἀλλ' οὐκ εἰς τὸ ἄρρεν οὐτ' αὐτὸ τὸ ἄρρεν προῖεται τὴν γονὴν οὔτε τὸ θῆλυ, ἀλλ' ἅμω εἰς τὸ θῆλυ συμβάλλονται τὸ παρ' αὐτῶν γιγνόμενον, διὰ τὸ ἐν τῷ θήλει εἶναι τὴν ὕλην ἐξ ἧς ἐστὶ τὸ δημιουργούμενον.

(De Generatione Animalium 729 b 33 - 730 b 2)

However, it is the behaviour of birds and the group of oviparous fishes which provides us with our strongest proof a) that the semen is not drawn from all the parts of the body, and b) that the male does not emit any part such as will remain situated within the fetus, but begets the young animal simply by means of the 'dynamis' residing in the semen (just as we said happened with those insects where the female inserts a part into the male). Here is the evidence. Supposing a hen bird is in process of producing wind-eggs, and then that she is trodden by the cock while the egg is still completely yellow and has not yet started to whiten : the result is that the eggs are not wind-eggs but fertile ones. And supposing the hen has been trodden by another cock while the egg is still yellow, then the whole brood of chickens when hatched out takes after the second cock. Some breeders who specialize in first-class strains act upon this, and change the cock for the second treading. The implication is a) that the semen is not situated inside the egg and mixed up with it, and b) that it is

not drawn from the whole of the body of the male : if it were in this case, it would be drawn from both males, so the offspring would have every part twice over. No; the semen of the male acts otherwise; in virtue of the 'dynamis' which it contains it causes the material and nourishment in the female to take on a particular character; and this can be done by that semen which is introduced at a later stage, working through heating and concoction, since the egg takes in nourishment so long as it is growing...

What has been said makes it clear that, in the case of animals which emit semen, the semen is not drawn from the whole of the body, and also that in generation the contribution which the female makes to the embryos when they are being "set" and constituted is on different lines from that of the male; in other words, the male contributes the principle of movement and the female contributes the material. This is why a) on the one hand the female does not generate on its own : it needs some source or principle to supply the material with movement and to determine its character (though in some <female> animals, as in birds, Nature can generate up to a point : the females of these species do actually "set" a fetation, but what they "set" is imperfect, viz., what are known as wind-eggs); b) on the other hand, the formation of the young does in fact take place in the female, whereas neither the male himself nor the female emits semen into the male, but they both deposit together what they have to contribute in the female - it is because that is where the material is out of which the creature that is being fashioned is made.

(Translation by A.L. Peck)

## 17. Aristotle (384 - 322 B.C.)

... καὶ τὰ καταμήνια σπέρμα, οὐ καθαρὸν δέ. ἔν γὰρ οὐκ ἔχει μόνον, τὴν τῆς ψυχῆς ἀρχήν. καὶ διὰ τοῦτο ὅσοις ὑπηνέμια γίνεται τῶν ζώων, ἀμφοτέρων ἔχει τὰ μέρη τὸ συνιστάμενον ὥσιν, ἀλλὰ τὴν ἀρχὴν οὐκ ἔχει, διὸ οὐ γίνεται ἐμψυχον· ταύτην γὰρ τὸ τοῦ ἄρρενός ἐπιφέρει σπέρμα. ὅταν δὲ μετάσχη τοιαύτης ἀρχῆς τὸ περίττωμα τὸ τοῦ θήλεος, κύημα γίνεται.

(De Generatione Animalium 737 a 28 - 34)

... and the menstrual discharge is semen, though in an impure condition; i.e., it lacks one constituent, and one only, the principle of Soul. This explains why, in the case of the wind-eggs produced by some animals, the egg which takes shape contains the parts of both sexes, but it has not this principle, and therefore it does not become a living thing with Soul in it; this principle has to be supplied by the semen of the male, and it is when the female's residue secures this principle that a fetation is formed.

(Translation by A.L. Peck)

## 18. Aristotle (384 - 322 B.C.)

... ἐπεὶ ὅτι γ' ἔχει λόγον ἢ λεχθεῖσα ἀπορία, φανερὸν ἐπὶ τῶν ὀρνίθων τῶν τὰ ὑπηνέμια τικτόντων, ὅτι δύναται μέχρι γέ τινος τὸ θήλυ γεννᾶν. ἔτι δ' ἔχει καὶ τοῦτο ἀπορίαν, πῶς τις αὐτῶν τὰ ὥα φήσει ζῆν. οὔτε γὰρ οὕτως ὡς τὰ γόνιμα ὥα ἐνδέχεται (ἐγίγνετο γὰρ ἂν ἐξ αὐτῶν ἐνεργεῖα ἐμψυχον) οὐθ' οὕτως ὥσπερ ξύλον ἢ λίθος. ἔστι γὰρ καὶ τούτων τῶν ὥων φθορά τις ὡς μετεχόντων τρόπον τινὰ ζωῆς πρότερον. δῆλον οὖν ὅτι ἔχει τινὰ δύναμει ψυχῆν. ποῖαν οὖν ταύτην; ἀνάγκη δὴ τὴν ἐσχάτην. αὕτη

δ'έστιν ἡ θρεπτικὴ· αὕτη γὰρ ὑπάρχει πᾶσιν ὁμοίως ζῴοις  
 τε καὶ φυτοῖς. διὰ τί οὖν οὐκ ἀποτελεῖ τὰ μόρια καὶ τὸ ζῶον;  
 ὅτι δεῖ αἰσθητικὴν αὐτὰ ἔχειν ψυχὴν· οὐ γὰρ ἐστὶν ὥσπερ φυτοῦ  
 τὰ μόρια τῶν ζῴων. διὸ δεῖται τῆς τοῦ ἄρρενος κοινωνίας·  
 κενώριστα γὰρ ἐν τούτοις τὸ ἄρρεν. ὅπερ καὶ συμβαίνει· τὰ  
 γὰρ ὑπηνέμια γίνεται γόνιμα, ἐὰν ἐν τινι καιρῷ τὸ ἄρρεν ἐποχεύσῃ.  
 ἀλλὰ περὶ μὲν τῆς τούτων αἰτίας ὕστερον διορισθήσεται.

(De Generatione Animalium 741 a 16 - 32)

... Still, it is not unreasonable to raise the puzzle we have  
 stated, as is shown by the instance of those birds which lay wind-  
 eggs : this proves that up to a point the female is able to generate.  
 But there is a puzzle here too : In what sense are we to say that  
 these eggs are alive? We cannot say that they are alive in the  
 same sense as fertile eggs, for in that case an actual living  
 creature would hatch out from them; nor are they on a par with  
 wood and stone, because these eggs go bad just as fertile ones do,  
 and this seems to indicate that to start with they were in some  
 way alive. Hence it is clear that potentially they possess Soul  
 of a sort. What sort, then? The lowest, it must be, obviously;  
 and this is nutritive Soul, because this it is which is present  
 alike in all animals and plants. Why then does this Soul fail  
 to bring the parts to their completion and so produce an animal?  
 Because the parts of an animal are bound to possess sentient Soul,  
 since they are not on a par with those of a plant; and that is  
 why the male is required to take its share in the business (the  
 male being separate from the female in such animals). The facts  
 bear this out : wind-eggs become fertile if the male treads the

female within a certain period. However, the cause of these things will be fully determined later on.

(Translation by A.L. Peck)

19. Aristotle (384 - 322 B.C.)

Συνίσταται μὲν οὖν κυήματα τοῖς ὄρνισι καὶ αὐτόματα, ἃ καλοῦσιν ὑπηνέμια καὶ ζεφύριά τινες, γίνεται δὲ ταῦτα τοῖς μὴ πτητικοῖς μηδὲ γαμφώνυξι τῶν ὀρνίθων, ἀλλὰ τοῖς πολυγόνοις, διὰ τὸ πολὺ περίττωμα ταῦτ' ἔχειν (τοῖς δὲ γαμφώνυξιν εἰς τὰς πτέρυγας καὶ τὰ πτερὰ τρέπεσθαι τὴν τοιαύτην ἀπόκρισιν, τὸ δὲ σῶμα μικρὸν ἔχειν καὶ ξηρόν τε καὶ θερμόν), τὴν δ' ἀπόκρισιν τὴν καταμηνιώδη καὶ τὴν γονὴν περίττωμα εἶναι· ἐπεὶ οὖν καὶ ἡ τῶν πτερῶν φύσις καὶ ἡ τοῦ σπέρματος γίνεται ἐκ περιττώσεως, οὐ δύναται ἡ φύσις ἐπ' ἀμρότερα πολυχοεῖν.

(De Generatione Animalium 749 a 34 - 749 b 9)

Fetations arise in birds spontaneously as well <as in the normal way>; some people call them wind-eggs or 'zephyria'. They occur in those birds which are neither good fliers nor crook-taloned but which are prolific. The reason is : a) these have a great deal of residue, whereas in the crook-taloned birds this secretion is diverted to produce wings and wing feathers and their body is small and solid and hot; and b) the menstrual secretion and the male semen are residue; therefore, as both feathers and semen alike are formed out of residue, Nature cannot provide a large supply for both purposes.

(Translation by A.L. Peck)



## 20. Aristotle (384 - 322 B.C.)

Γίνεται δὲ τὰ ὑπηνέμια, καθάπερ εἴρηται καὶ πρότερον, διὰ τὸ ὑπάρχειν ἐν τῷ θήλει τὴν ὕλην τὴν σπερματικὴν, τοῖς δ' ὀρνέοις μὴ γίνεσθαι τὴν τῶν καταμηνίων ἀπόκρισιν ὥσπερ τοῖς ζυγοτόκοις τοῖς ἐναίμοις· πᾶσι γὰρ τούτοις γίνεται, τοῖς μὲν πλείων, τοῖς δ' ἐλάττων, τοῖς δὲ τοσαύτῃ τὸ πλῆθος ὥστε ὅσον γε ἐπισημαίνειν. ὁμοίως δ' οὐδὲ τοῖς ἰχθύσι, καθάπερ τοῖς ὄρνισιν· ... ἡ δὲ γινομένη τοῖς ζυγοτόκοις ἀπόκρισις τῶν καταμηνίων συνίσταται τοῖς ὄρνισι κατὰ τοὺς ἰκνουμένους χρόνους τοῦ περιττώματος, καὶ διὰ τὸ τὸν τόπον εἶναι θερμὸν τὸν πρὸς τῷ διαζώματι τελειοῦται τοῖς μεγέθεσιν, πρὸς δὲ τὴν γένεσιν ἀτελεῖ καὶ ταῦτα καὶ τὰ τῶν ἰχθύων ὁμοίως ἄνευ τῆς τοῦ ἄρρενος γονῆς· ἡ δ' αἰτία τούτων εἴρηται πρότερον. οὐ γίνεται δὲ τὰ ὑπηνέμια τοῖς πτητικοῖς τῶν ὀρνίθων διὰ τὴν αὐτὴν αἰτίαν δι' ἣν περ οὐδὲ πολυτοκεῖ τὰ τοιαῦτα· τοῖς γὰρ γαμψώνυξιν ὀλίγον τὸ περίττωμα, καὶ προσδέονται τοῦ ἄρρενος πρὸς τὴν ὀρμὴν τῆς τοῦ περιττώματος ἐκκρίσεως. πλείω δὲ τὰ ὑπηνέμια γίνεται τῶν γονίμων ὥων, ἐλάττω δὲ τὸ μέγεθος διὰ μίαν αἰτίαν καὶ τὴν αὐτήν· διὰ μὲν γὰρ τὸ ἀτελεῖ εἶναι ἐλάττω τὸ μέγεθος, διὰ δὲ τὸ τὸ μέγεθος ἐλάττων πλείω τὸν ἀριθμὸν. καὶ ἥττον δὲ ἡδέα διὰ τὸ ἀπειπτότερα εἶναι· ἐν πᾶσι γὰρ τὸ πεπεμμένον γλυκύτερον.

(De Generatione Animalium 750 b 3 - 26)

Why are wind-eggs formed? As has been said earlier, their formation is due to the fact that though seminal matter is present in the female, with birds no discharge of the menstrual fluid takes place as it does with the blooded vivipara; in all of the last-named it does take place, and it is greater in some, smaller in others, and in some just enough to serve as an indication. Similarly,

there is no discharge in fishes, any more than in birds...

What corresponds to the secretion of the menstrual fluid which occurs in viviparous animals arises in birds at the times proper for that residue, and as the region by the diaphragm is hot these fetations reach perfection in respect of size, though for the purpose of generation they are imperfect, both in birds and fishes, without the semen of the male. The cause of these things has been given earlier. Wind-eggs are not formed in the birds that are fliers; the reason why this is so and why birds of this sort are not very prolific layers is one and the same : in the crook-taloned birds the residue is scanty, and they need the male to give the impulse for the discharge of the residue. The wind-eggs are formed in larger numbers than the ones which are fertile but they are smaller in size; both facts are due to one and the same cause : they are smaller in size because they are imperfect, and they are more in number because their size is smaller. They are less pleasant to eat because they are more unconcocted, for that which has been concocted always makes the more tasty morsel.

(Translation by A.L. Peck)

21. Aristotle (384 - 322 B.C.)

τοῦτο γὰρ αὖξει τὸ φύον, ὥσπερ τὰ ἐμβρυα τὰ τῶν ζῳοτόκων <τὸ> διὰ τοῦ ὀμφαλοῦ, τὸ ἐπιρρέον διὰ τῆς ὑστέρας, ἐπεὶ ὅταν ἀπαξ ὀχευθῇ τὰ ὄρνεα, πάντα σχεδὸν αἰεὶ διατελεῖ ᾧ ἔχοντα, μικρὰ δὲ πάντα. διὸ καὶ περὶ τῶν ὑπηνεμίων τινὲς εἰώδασι λέγειν ὡς οὐ γιγνομένων ἀλλ' ὡς ὑπολειμμάτων ἐκ προτέρας ὀχείας ὄντων. τοῦτο δ' ἐστὶ ψεῦδος· ᾧπται γὰρ ἱκανῶς καὶ ἐπὶ νεοτῶν ἀλεκτορίδος καὶ χηνὸς γενόμενα ἄνευ ὀχείας.

(De Generatione Animalium 751 a 6 - 13)

This liquid, of course, which percolates through the uterus <i.e. menstrual secretion>, makes the egg grow, just as that which passes through the umbilical cord makes the embryos of vivipara grow, for when once the birds have been trodden, they all continue almost always to have eggs, albeit quite small ones. In view of this, some people are in the habit of saying that wind-eggs are not formed <independently> either, but are merely relics of an earlier impregnation. This, however is untrue. It has been sufficiently established by observation that they have been formed in chickens and goslings without impregnation.

(Translation by A.L. Peck)

22. Aristotle (384 - 322 B.C.)

...Τὰ δὲ τοιαῦτα τῶν ὀρνέων ὀχευτικὰ καὶ πολὺσπερμα τὴν φύσιν ἐστίν, ὥστε μικρᾷς δεῖσθαι τῆς κινήσεως, ὅταν ὀργῶντα τύχη, καὶ γίνεσθαι ταχὺ τὴν ἐκκρισιν αὐτοῖς, ὥστε τοῖς μὲν ἀνοχεύτοις ὑπηνέμια συνίστασθαι, τοῖς δ' ὠχευμένοις αὐξάνεσθαι καὶ τελειοῦσθαι ταχέως.

(De Generatione Animalium 751 a 20 - 24)

... Birds of this sort <i.e. such as partridges> are by nature inclined to frequent intercourse and have abundance of semen, so that when they are in heat the impulse they need to set them off is small, and emission quickly takes place; the result is that in those which have not been impregnated wind-eggs take shape, and in those which have been impregnated the eggs quickly grow and reach perfection.

(Translation by A.L. Peck)

## 23. Aristotle (384 - 322 B.C.)

... Τὰ δὲ τῶν ὀρνέων καὶ τὰ ὑπηνέμια ἔχει ταύτην τὴν δίχροιαν· ἔχει γὰρ ἐξ οὗ ἐκότερον ἔσται τῶν μορίων, καὶ ὅθεν ἡ ἀρχὴ καὶ ὅθεν ἡ τροφή, ἀλλὰ ταῦτ' ἀτελεῖ καὶ προσδεόμενα τοῦ ἄρρενος· γίνεται γὰρ τὰ ὑπηνέμια γόνιμα, ἐὰν ἐν τινι καιρῷ ὀχευθῇ ὑπὸ τοῦ ἄρρενος.

(De Generatione Animalium 751 b 21 - 25)

... Not only the eggs but also the wind-eggs of birds have this double colouring <i.e. white and yellow>, because they contain that out of which each of the two parts is to come (the part from which the "principle" arises and that from which the nourishment is derived), although they are imperfect, i.e., they lack the male factor; since, as we know, wind-eggs become fertile if they are impregnated by the male within a certain time.

(Translation by A.L. Peck)

## [24. Aristotle (384 - 322 B.C.)

καὶ διαφθείρεται δὲ τὰ ῥα καὶ γίνεται τὰ καλούμενα οὔρια μᾶλλον κατὰ τὴν θερμὴν ἥραν εὐλόγως· ὥπερ γὰρ καὶ οἱ οἶνοι ἐν ταῖς ἀλέαις ὀξύνονται ἀνατρεπομένης τῆς ἰλύος (τοῦτο γὰρ αἷτιον τῆς διαφθορᾶς), καὶ ἐν τοῖς ῥοῖς ἡ λεκίθος· τοῦτο γὰρ ἐν ἀμφοτέροις τὸ γεῶδες, διὸ καὶ ἀναθολοῦται ὁ οἶνος μιγνυμένης τῆς ἰλύος, καὶ τὰ διαφθειρόμενα ῥα τῆς λεκίδου.

Τοῖς μὲν οὖν πολυτόκοις συμβαίνει τὸ τοιοῦτον εὐλόγως (οὐ γὰρ ῥᾶδιον τὴν ἀρμόττουσαν πᾶσιν ἀποδιδόναι θερμασίαν, ἀλλὰ τοῖς μὲν ἐλλείπειν τοῖς δὲ πλεονάζειν, καὶ ἀναθολοῦν οἶον σήπουσαν), τοῖς δὲ γαμψόκοις ὀλιγοτόκοις οὖσιν οὐδὲν ἥττον συμβαίνει τοῦτο·

πολλάκις μὲν γὰρ καὶ τοῖν δυοῖν θάτερον οὔριον γίνεται, τὸ δὲ τρίτον ὡς εἰπεῖν ἀέλ' θερμὰ γὰρ ὄντα τὴν φύσιν οἶον ὑπερζειν ποιεῖ τὴν ὑγρότητα τὴν ἐν τοῖς φύσιν...

(De Generatione Animalium 753 a 21 - 34)

Eggs get spoilt and 'ouria' (as they are called) are produced in the hot season more often than at any other, as is to be expected. In hot, sunny weather wines turn sour because the sediment gets stirred up - this is what is really responsible for their being spoilt - and the same happens with the yolk in eggs. Sediment and yolk are the earthy part in each respectively, and as a result of this earthiness wine becomes turbid when the sediment mixes up with it, and these spoilt eggs also become turbid when the yolk does the same.

It is only to be expected that this should happen in the case of prolific animals, because it is not easy to provide all the eggs with their proper amount of heat; some will get too little, and some too much; and too much heat will make them turbid, by causing them to putrefy, as it were. Nevertheless, the same thing occurs with the crook-taloned birds, although they lay but few eggs; out of two eggs, one will often turn rotten ('ourion'), and pretty well always one out of three. They are hot in their nature, and they cause the fluid in the eggs as it were to boil over...

(Translation by A.L. Peck)]

25. Aristotle (384 - 322 B.C.)

τῶν μὲν οὖν ὀρνίθων τὰ τε υπηνέμια γίνεται γόνιμα, καὶ τὰ προωχευμένα ὑπ' ἑτέρου γένους τῶν ὀρνέων μεταβάλλει τὴν φύσιν εἰς τὸν ὑστερον

ὀχεύοντα... οὐ μέντοι κατὰ πάντα τὸν χρόνον, ἀλλ' ἑάνπερ πρότερον γένηται ἡ ὀχεία πρὶν μεταβαλεῖν εἰς τὴν τοῦ λευκοῦ ἀπόκρισιν... τοῦτο δὲ συμβέβηκεν εὐλόγως· ὅταν γὰρ τὸ λευκὸν ἀφωρισμένον ᾖ καὶ τὸ ὠχρὸν ἀπ' ἀλλήλων, ἔχει ἤδη τὴν ἀπὸ τοῦ ἄρρενος ἀρχήν· [εἰς] ταύτην γὰρ συμβάλλεται τὸ ἄρρεν. τὰ μὲν οὖν ὑπηνέμια λαμβάνει τὴν γένεσιν μέχρι τοῦ ἐνδεχομένου αὐτοῖς. τελεωθῆναι μὲν γὰρ εἰς ζῶον ἀδύνατον (δεῖ γὰρ αἰσθήσεως), τὴν δὲ θρεπτικὴν δύναμιν τῆς ψυχῆς ἔχει καὶ τὰ θήλεα καὶ τὰ ἄρρενα καὶ πάντα τὰ ζῶντα, καθάπερ εἴρηται πολλάκις· διόπερ αὐτὸ τὸ ὦδον ὥς μὲν φυτοῦ κῆμα τέλειόν ἐστιν, ὥς δὲ ζῴου ἀτελές... ἢ μὲν φυτὸν, τετελέωκεν (διόπερ οὐ μεταβάλλει πάλιν μετὰ τὴν ὀχείαν), ἢ δ' οὐ φυτὸν, οὐ τετελέωκεν, οὐδ' ἀποβαίνει ἐξ αὐτοῦ ἕτερον οὐθέν· οὔτε γὰρ ὥς φυτὸν ἀπλῶς οὐδ' ὥς ζῶον ἐκ συνδυασμοῦ γέγονεν.

(De Generatione Animalium 757 b 1 - 27)

In birds, wind-eggs become fertile, and eggs previously impregnated by the treading of one sort of cock change their nature to that of the cock which treads the hen later... This however cannot happen at any and every period : the treading must take place before the change occurs when the white of the egg becomes separate... This situation is what we should expect, for once the white and the yolk have been distinctly separated from each other, they already possess the principle that comes from the male, since the male contributes [towards] this. Thus wind-eggs attain to generation in so far as it is possible for them to do so. It is impossible for them to be perfected to the point of producing an animal, because sense-perception is required for that; the nutritive faculty of the Soul, however, is possessed by females as well as by males and by all living things, as has been said repeatedly; hence the egg itself,

regarded as the fetation of a plant, is perfect, but regarded as the fetation of an animal it is imperfect... qua plant, the wind-egg has reached perfection (and that is why it does not change any more after impregnation), qua non-plant, on the other hand, it has not reached perfection, and nothing else results from it, since it has been formed neither as a plant simply and directly nor as an animal by means of copulation.

(Translation by A.L. Peck)

26. Varro (116 - 27 B.C.)

... in Lusitania ad Oceanum in ea regione ubi est oppidum Olisipo, monte Tagro quaedam e vento concipiunt certo tempore equae, ut hic gallinae quoque solent, quarum ova hypenemia appellant...

(Res Rusticae II.1.19)

... near the ocean in Lusitania, in that region where the town of Olisipo is situated, certain mares on Mount Tagrus conceive from the wind at a particular time of the year, just as is the case here with hens, whose eggs are called 'hypenemia' or wind-eggs... (cf Appendix I, no.4)

27. Columella (1st century A.D.)

... Nec dubium quin aliquot regionibus tanto flagrent ardore coeundi feminae, ut etiam si marem non habeant, assidua et nimia cupiditate figurando sibi ipsae venerem cohortalium more avium vento concipiant...

(De Re Rustica VI.27.4)

... Indeed, in some regions, there is no doubt that the mares are affected by such a burning desire for intercourse, that, even though there is no stallion at hand, owing to their continuous and excessive passion, by imagining in their own minds the pleasures of love they <conceive by the wind, just as farmyard hens do>...

(Adapted from the translation by E.S. Forster and

Edward H. Heffner)

(cf Appendix I, no.6)

28. Pliny (A.D. 23/24 - 79)

Inrita ova, quae hypenemia diximus, aut mutua feminae inter se libidinis imaginatione concipiunt aut pulvere, nec columbae tantum, sed et gallinae, perdices, pavones, anseres, chenalopeces. Sunt autem sterilia, et minora ac minus iucundi saporis et magis umida. Quidam et vento putant ea generari, qua de causa etiam zephyria appellantur; urina autem vere tantum fiunt incubatione derelicta, quae alii cynosura dixere.

(Naturalis Historia X.80.166)

Infertile eggs, which we have termed 'hypenemia' or wind-eggs, are conceived either by the female birds mutually imagining feelings of lust, or else from dust, and not only by female pigeons, but also by farmyard hens, partridges, peahens, geese and ducks. The eggs are, however, sterile, and smaller in size, less pleasant in taste, and more watery. Some people think that they are actually produced by the wind, for which reason they are also called 'zephyria'; those eggs termed 'urina', on the other hand, are only produced in spring, when the hens have left off sitting: another name for them is addle-eggs.



## 29. Galen (late 2nd century A.D.)

... εἴπερ μὴ δεῖται, τί κωλύσει τὸ θῆλυ μόνον εἰς αὐτὸ σπερμαῖνον οὕτω τελεσφορεῖν τὸ κύημα; καὶ μὴν οὐ φαίνεται τοῦτο. δῆλον οὖν, ὥς χρῆζει πάντως τοῦ ἄρρενος... ἔστι δὲ δὴ τοῦτο κἀπὶ τῶν ἀλεκτορίδων εὐδηλον. κυΐσκονται γὰρ αὐταὶ τὰ ὑπηνέμια καλούμενα τῶν ὤων ἄνευ τῆς πρὸς τοὺς ἄρρενας ἀμιλίας, οἷς ὅτι μὲν ἐνδεῖ τι πρὸς τὸ τέλεον, ἐκ τοῦ μὴ δύνασθαι ζῶα ἐξ αὐτῶν γεννηθῆναι δηλοῦται. τὴν γοῦν ἰδέαν ὅτι σύμπασαν ἔχει κἀνταῦθα, οἷαν περ καὶ τὰ λοιπὰ τῶν ὤων, ἐναργῶς φαίνεται· μόνη γὰρ ἡ παρὰ τοῦ ἄρρενος αὐτοῖς ἐνδεῖ θερμότης εἰς τελειότητα.

(De Usu Partium XIV.7)

... if it <i.e. the female semen> does not need to be mixed <i.e. with the male>, what prevents the female alone from emitting semen into herself and thus bringing the fetus to perfection? And yet, this does not appear to happen. The female semen, then, clearly stands absolutely in need of the male... This is very clearly seen in hens; for these conceive the so-called wind-eggs without intercourse with the male, and that these eggs lack something of being perfect is manifest because an animal cannot be generated from them. Now it is clearly evident that they have entirely the same form as other eggs; for the warmth of the male is all they lack to make them perfect.

(Translation by Margaret May)

## 30. Galen (late 2nd century A.D.)

... εἴπερ γὰρ ἐνεχάρει, φασὶ, τὸ θῆλυ μὴ μόνον ὕλης, ἀλλὰ καὶ δυνάμει ἀρχὴν εἶναι, περιττὸν τὸ ἄρρεν. ἔνιοι δὲ καὶ τῶν ὀρνίθων

ἐν τῷδε μνημονεύουσι τῶν τὰ ὑπηνέμια καὶ ζεφύρια καλούμενα τικτόντων  
ὡὰ χωρὶς τῆς πρὸς τὸ ἄρρεν μίξεως.

(De Semine II.3)

... For if it were possible, they say, that the female contributed not only the principle of material but also that of movement, the male would be superfluous. Indeed, some people even mention in this respect those birds that lay wind-eggs ('hypoemia' or 'zephyria') without intercourse with the male.

31. Galen (late 2nd century A.D.)

... ὑγρότερον μὲν οὖν τὸ θῆλυ καὶ ψυχρότερον, θερμότερον δὲ καὶ ξηρότερον τὸ ἄρρεν. εὐλόγως ἄρα τὸ μὲν ἐνδεῖ τι πρὸς τὴν τοῦ σπέρματος ἀκριβῆ κατεργασίαν, τὸ δ' οὐκ ἐγχωρεῖ περίττωμα σχεῖν αἱματικὸν ὑπὸ θερμότητός τε καὶ ξηρότητος ἅπαν ἐξικμαζούσης. διὰ τοῦτο καὶ ὅσα ἐστὶ τῶν ζῴων ξηρότερα ταῖς κράσεσιν, ὥπερ ὄρνιθές τε πολλαὶ καὶ τῶν ἰχθύων οὐκ ὀλίγοι, τὰ ὡὰ πέφυκε γεννᾶν ἄνευ τῆς πρὸς τὸ ἄρρεν ὁμιλίας. ἐνδεῖ γοῦν ὅμως καὶ τούτοις τι πρὸς τὸ τέλειον, εἰ μὴ μεταλάβοι τῆς ἐξ ἐκείνου θερμότητος. οὐ μὴν ἀδύνατόν γε ἐπινοῆσαι τοιαύτην κράσιν ζῶου σώματος, ὥς γεννῆσαι ἀτέλειον ζῶον ἄνευ τῆς πρὸς ἕτερον ὁμιλίας· ζῶον μέντοι γε τέλειον ἐν αὐτῷ κυῆσαι χαλεπὸν ὄντως ἐστὶ καὶ ἴσως ἀδύνατον.

(De Semine II.4)

... Indeed, the female is moister and colder, whilst the male is hotter and drier. Reasonably, then, the one lacks whatever is necessary for the perfect completion of the semen, whilst the other is unable to have menstrual residue due to heat and dryness drying it all up. For this reason, those animals that are drier

in temperature, as are a good many birds and a large number of fishes, are actually in the habit of producing eggs without having intercourse with the male. However, these eggs are also lacking that certain something necessary for completion, unless they receive the heat of the male. It is not impossible to imagine an animal body of such a temperature that it produces an imperfect animal without intercourse with another; however, it is truly difficult, indeed, well nigh impossible, for an animal that is perfect in itself to be conceived.

32. Athenæus (late 2nd/early 3rd century A.D.)

... 'Ἀριστοφάνης' τίκτει πρῶτον ὑπηνέμιον ὄν Νύξ ... ὥα δὲ οὐ μόνον ἀνεμιαῖα ἐκάλουν, ἀλλὰ καὶ ὑπηνέμια ...

(Deipnosophistae II.57.d-e)

... According to Aristophanes, in the beginning Night bore a wind-egg

... Wind-eggs were called not only 'anemiaea', but also 'hypenemia' ...

33. Tertullian (A.D. c.160 - c.220)

Dehinc in illo maerore <Sophia> ex semetipsa sola, nulla opera coniugii, concipit et procreat feminam. Miraris hoc? Et gallina sortita est de suo parere...

(Adversus Valentinianos 10.1)

Subsequently, whilst suffering from that grief, <Sophia> conceived all on her own, without any help from a husband, and gave birth to a female child. Do you marvel at this? The hen, too, is ordained to procreate from its own body...

(Cf App.IV, no.12)

## 34. [Clement] (early 3rd century A.D.)

... Gignuntur autem non solum mares, sed et feminae, ut ex utroque possit rursus constare posteritas. Sed ne ut putant homines, viderentur haec naturae quodam ordine et non dispensatione fieri conditoris, pauca quaedam ad indicium et documentum providentiae suae, mutato ordine genus servare iussit in terris, verbi gratia ut per os conciperet corvus, et per aurem mustela generaret, ut aves nonnullae sicut gallinae, interdum ova vel vento vel pulvere concepta parerent...

(Recognitions VIII. 25)

... And not only males are produced but females also, that by means of both the race may be perpetuated. But lest this should seem, as some think, to be done by a certain order of nature, and not by the appointment of the Creator, He has, as a proof and indication of His providence, ordained a few animals to preserve their stock on the earth in an exceptional way : for example, the crow conceives through the mouth, and the weasel brings forth through the ear; and some birds, such as hens, sometimes produce eggs conceived of wind or dust ...

(Translated by B.P. Pratten, M. Dods, and T. Smith)

## 35. Isidore (A.D. c.570 - 636)

Ova autem quaedam inani vento concipiuntur; sed non sunt generabilia, nisi quae fuerint concubitu masculino concepta et seminali spiritu penetrata.

(Etymologiae XII. 7.81)

Certain eggs, however, are conceived by the empty wind; but they are not fertile, unless they have been conceived through intercourse with the male and penetrated by the seminal spirit.

36. Avicenna (A.D. 980 - 1037)

... et ova venti non ponuntur secundum modum luxuriae : quia pulli qui nunquam coiverunt ponunt ova : ut anseres, et gallinae, et ova venti sunt minora : et minoris dilectionis. Et cum ponuntur sub gallina non mutantur a sua albedine, et citrinitate, licet diu morentur sub gallina. Et quae faciunt ova venti sunt gallinae, et cubeg [?], et modi palumbarum, et pavones : et anseres ...

(De Natura Animalium VI.1)

... and wind-eggs are not produced by means of mating, for young hens that have never had intercourse lay eggs - for example, geese and farmyard hens; and wind-eggs are smaller in size and less tasty. And when they are placed under a hen, they do not change from their white and yellow, although they are left under the hen for a long while. And those birds that produce wind-eggs are farmyard hens, [?], certain types of wood-pigeons, peahens, and geese ...

37. Alexander Neckam (A.D. 1157 - c.1217)

Ferunt equam, cum copia masculi ei deest, ex flatu aurae venti borealis concipere, sed foetus paucis diebus superstes erit. Sic et gallinae, dum pulveris fomento et crebra respersione fungente [sic] vice balnei delectantur, sine coitu ova apala ponunt, sed prolis gratiam non consequuntur. Apala autem dicuntur ova, quasi sine pelle, et quandoque sorbilia hoc nomen sortiuntur. Proprie tamen

dicuntur apala, quae in ventriculis gallinarum sunt, et sine testa reperiuntur.

(De Naturis Rerum II.pp260 - 261 (1863 edit.))

They say that the mare, when the opposite sex is lacking, conceives from the breath of the northerly wind, but that the offspring will survive only a few days. Hens, too, when they happily cover themselves with dust by way of a bath, lay soft eggs without coition, but do not have the pleasure of offspring. The term 'apala' is given to those eggs which are, as it were, without a shell, and they are sometimes also called 'sorbilia', 'able to be supped'. Strictly speaking, however, the name 'apala' is applied to those eggs which are found in the bellies of hens and are without a shell.

(cf Appendix I, no.29)

38. Bartholomaeus Anglicus (13th century A.D.)

... Ova autem quaedam inani vento concipiuntur sed non sunt gignantia nisi quae fuerint masculino concubitu concepta et seminali spiritu penetrata, ut dicit idem ...

Ovant autem multae aves ova venti sicut faciunt gallinae et anseres, ut dicit Aristoteles ibidem libro ii. Et hoc accidit ex superfluitate humoris seminalis in corpore feminae superabundantis. Et sunt ova venti parva et insipida et humidiora aliis et sine dura testa. Et posita sub gallina non alterantur, sed remanet album album, et citrinum citrinum. Talia ova inveniuntur in gallinis et anseribus, pavonibus et columbis...

Item aves multae generationis faciunt saepe ova venti, quod non pertingit avibus boni volatus neque curvorum unguium, quoniam aves multorum ovorum sunt multae superfluitatis. Superfluitas autem avium uncorum unguium transit in plumas et in ungues et in alas et ideo earum corpus parvum est durum et acutum et macilentum. Et propter hoc non sunt tales aves multorum ovorum neque multi coitus. Aves enim corpulentae propter corpulentiam et calorem ventris ovant multotiens. Similiter aves parvi corporis sunt multi coitus et multorum ovorum, sicut patet in quibusdam gallinis quae quanto sunt magis parvae tanto erunt plurium ovorum, quia cibus talium transit in creationem ovorum. Item ova venti non erunt in avibus boni volatus, quia superfluitas earum est pauca et ideo ovant pauca. Ova venti sunt plura avis [sic] convenientibus generationi pullorum et sunt minoris quantitatis, quoniam non sunt completa propter multitudinem suam. Et sunt minoris delectationis quando comeduntur ...

(De Proprietatibus Rerum XIX.79)

... Certain eggs, moreover, are conceived from the empty wind, but they are not fertile unless they have been conceived by coition with a male and penetrated by the seminal spirit, as the same author <Isidore> reports...

Indeed, many birds lay wind-eggs in the same way as hens and geese do, as Aristotle states in the same passage in Book II. This occurs as a result of a residue of seminal fluid in the body of the female. Wind-eggs are small, tasteless, moister than other eggs, and lacking in a hard shell. When placed under a hen, they do not change : both the white and the yolk remain the same. Such

eggs are found in hens and geese, peahens and pigeons... Likewise, birds that frequently reproduce - this does not apply to birds that are good fliers, nor to those that have curved talons - often lay wind-eggs, for prolific birds have a considerable amount of residue. The residue of crook-taloned birds is transferred to their feathers and talons and wings and for that reason their small body is hard and sharp and lean. On this account such birds are not prolific nor do they engage in frequent intercourse. For corpulent birds, because of their corpulence and the heat of their belly, often lay eggs. Similarly, small-bodied birds have frequent intercourse and produce many eggs, as is evident in certain hens whose production of eggs is greater in proportion as their size is smaller, the reason being that their food is directed towards the creation of eggs. Likewise wind-eggs will not exist in birds that are good fliers, because their residue is small and for that reason they lay few eggs. In birds that are suited to the production of offspring, wind-eggs are larger in number and smaller in size, for their greater number prevents them from being full-size. And they are less tasty when they are eaten ...

39. Albertus Magnus (A.D. c.1200 - 1280)

... Aristoteles enim in libro de animalibus suam de hoc explanat intentionem, dicens, quod distinctus masculinus a feminino sexus non exigitur, nisi propter animam sensibilem; et si esset anima generati tantum vegetabilis, non exigeretur sexus distinctus. Cuius dicti causa haec est, quod anima sensibilis magis format et distinguit quam vegetabilis... Propter quod subtiliter valde ratiocinatus est Aristoteles, quod anima sensibilis, quae potentia



habituali est in semine, non potest esse in semine quod est ut passivum tantum, sicut est semen feminae; et ideo dicit, quod ovum venti non vivit, nisi vitae plantae potentia, et non vita animalis; vocans ovum venti, quod non habet semen galli coniunctum sibi.

(De Vegetabilibus I.1.12)

... In his book on animals, Aristotle explains his own point of view on this subject, saying that a distinction between the male and the female sex is not essential, except by reason of the rational soul; and that if the soul of the product generated was only a nutritive soul, a distinction in sex would not be required. The reason for this statement lies in the fact that the rational soul is more able to shape and separate than the nutritive soul... For this reason Aristotle argued with the utmost subtlety that the rational soul, which perpetually exists as a force within the seed, cannot exist in seed that is merely passive, as is the seed of the female; and on that account he says that the wind-egg does not live, except in so far as a plant lives, and not an animal; a wind-egg being that which has not been fertilised by the seed of a cock.

40. Nicolaus Perottus (A.D. 1430 - 1480)

Ova ex quibus nihil gignitur, a nostris irrita, a graecis hypenemia vocantur, quasi ὑπὸ τοῦ ἀνέμου, hoc est a vento concepta, quapropter et zephyria a latinis vocantur. Haec fere sine mare mutua feminarum inter se libidinis imaginatione concipiuntur. Quidam vento putant ea generari. Hoc ab urinis differunt, quod urina fiunt incubatione derelicta, quae alii cynosura appellant...

(Cornucopiae col.365 (1526 - 27 edit.))

Eggs from which nothing is produced are called 'irrita' or infertile eggs by us, and 'hyphenemia' or wind-eggs by the Greeks (just as if they are ὑπο τοῦ ἀνέμου, that is, conceived from the wind), and for that reason they are also called 'zephyria' by the Latins. These eggs are generally conceived without a male as a result of the female birds mutually imagining feelings of lust. Some people think that they are produced by the wind. They differ from those eggs termed 'urina' or 'windy' in that the latter, which are also called 'cynosura' or addle-eggs, are produced when the hens have left off sitting.

41. Konrad Gesner (A.D. 1516 - 1565)

For the text of Historia Animalium I.p.439 (1617 edit.), see Appendix I, no.37.

42. Pierre Belon (A.D. 1517 - 1564)

... car l'on trouve quelques fois aucuns oyseaux qui peuvent concevoir du vent, et pondre des oeufs sans avoir esté conioints le masle à sa femelle. Mais tels oeufs d'oyseaux encor vierges ne peuvent estre couvez pour esclorre, d'autant qu'ils sont infeconds, c'est à dire steriles.

(L'histoire de la nature des oyseaux I.5)

... for one sometimes finds birds that can conceive by the wind, and lay eggs without the male and the female being united. But such eggs produced by virgin birds cannot be used for hatching in as much as they are infertile, that is to say, sterile.

43. Hans Kirchhof (A.D. c.1525 - c.1603)

... das wind ey (denn so ist das letst, so die hūner legen und kein schalen hat, genennet)...

(Wendunmuth I. 198)

... the wind-egg (for such is the name given to that which hens lay and which has no shell)...

44. Conrad Heresbach (A.D. 1496 - 1576)

For the text of De Re Rustica III.pp209 b - 210 a (1570 edit.), see Appendix I, no.38.

45. Conrad Heresbach (A.D. 1496 - 1576)

Ova irrita, quae et hypenemia dicuntur, mutua feminarum imaginatione libidinis gigni tradunt. Alii vento ea putant generari, et ideo zephyria dici, ut Aristoteles ante Plinium tradidit.

(De Re Rustica IV.p.283 a (1570 edit.))

They say that infertile eggs, which are also called 'hypenemia' or wind-eggs, are produced as a result of the female birds mutually imagining feelings of lust. Others think that these eggs are generated by the wind and are for that reason called 'zephyria' or wind-eggs, as Aristotle - and later, Pliny - recorded.

46. Nathan Chytraeus (A.D. 1543 - 1598)

Ovum subventaneum, ventosum, hypenemium, ein Windtey.

(Nomenclator Latinosaxonicus col.394. (1594 edit.))

[Here Chytraeus gives three synonymous Latin terms for a wind-egg,  
plus the German equivalent.]

47. Helfric Emmel (? 16th century A.D.)

Windey, daraus nicht mag gebrirtet werden , Ovum irritum,  
hypenemium, ὠδὸν ὑπηνέμιον, ἀνεμιαῖον, Oeuf que la poulle  
pond sans avoir esté saillie du coq.

(Nomenclator Quadrilinguis, col.132 ( 1592 edit.))

Wind-egg, from which nothing may be generated. Infertile  
egg, [here Emmel gives one Latin and two synonymous  
Greek terms for a wind-egg], egg that the hen lays  
without being mounted by the cock.

48. Bartholomäus Krüger (A.D. c.1540 - ?)

... kompt Clawert ins haus gegangen, rufft sein weib und spricht,  
Margreta du wirst unsern hünern viel brot zu essen geben, traun  
nein, sagt die alte ich gebe ihnen kein brodt, wie kompts dann,  
sagt Clawert, das sie solche windeyer ohn schalen legen ...

(Hans Clawerts Werckliche Historien p.31 (1882 repr.))

... Clawert comes walking into the house, calls to his wife and  
says : Margreta, you must be giving our hens too much bread to eat;  
certainly not, says the old woman, I'm giving them no bread; how  
is it then, says Clawert, that they are laying such shell-less  
wind-eggs? ...

## 49. Ulisse Aldrovandi (A.D. 1522 - 1605)

Ceterum gallinae nonnullae, ut idem Aristoteles alibi author est, ova mollia, hoc est, sine testa pariunt vitio quae Albertus inter subventanea annumerat... Praeterea Albertus ovum se observasse tradit prorsus sphaericum, duabus testis intectum, una intra alteram, cum albumine aquoso tenui inter utramque absque ullo vitello, et altero etiam albumine intra interiorem testam. Idem refert, hypenemia dari exteriori testa carentia, sed membranam tantum habentia, quae testae subiici solet. Putat autem, hoc inde fieri, quoniam talia ova humida sunt, et aquosa, et exiguo calore praedita, maxime si cibo humido gallinae nutriantur.

(Ornithologia XIV. p.104 (1610 - 1635 edit.))

But some hens, as the same Aristotle reports elsewhere, lay eggs which are soft, that is, shell-less, by mistake, and which Albertus (Magnus) counts as wind-eggs... Moreover, Albertus (Magnus) records that, according to his observation, the egg is definitely spherical, and protected by two shells, one within the other, with a thin, watery, yolk-less albumen between each, and yet another albumen within the inner shell. The same author states that wind-eggs, when produced, are lacking in the outer shell, having only the membrane that usually lies under the shell. He thinks, too, that this happens because such eggs are moist and watery and endowed with little heat, especially if the hens are fed on moist food.

## 50. Ulisse Aldrovandi (A.D. 1522 - 1605)

For the text of De Quadrupedibus Solidipedibus I.pp90F - 91B (1639 edit.), see Appendix I, no.40.

51. Randle Cotgrave (A.D. ? - 1634?)

Harde : f. ... also, an egge laied with a soft skin, or  
filme (about it) instead of a shell; a soft-sheld egge;  
a wind egge ...

(A Dictionary of the French and English Tongues (1950repr.))

52. Francis Beaumont and John Fletcher (A.D. 1584 - 1616 and 1579 - 1625)

Tenants. We beseech you for our poor Children's sake.

Valentine. Who bid you get 'em? have you not threshing work  
enough, but Children must be bang'd out o'th' sheaf  
too? other men with all their delicates, and  
healthful diets, can get but wind eggs : you with  
a clove of Garlick, a piece of Cheese would break  
a Saw, and sowre Milk, can mount like Stallions,  
and I must maintain these tumblers.

(Wit Without Money I.1.)

53. Joannis E. Nierenberg (A.D. 1595 - 1658)

For the text of De Miris et Miraculosis Naturis in Europa I.66,  
see Appendix I, no.44)

54. John Milton (A.D. 1608 - 1674)

... So that whether his meaning were to inform his own party, or  
to confute his adversary, instead of shewing us the true Doctrin  
and Discipline of Divorce, hee shews us nothing but his own  
contemptible ignorance... From such a wind-egg of definition as  
this, they who expect any of his other arguments to bee well  
hatcht, let them enjoy the vertu of thir worthy Champion...

(Colasterion 3)

## 55. William Harvey (A.D. 1578 - 1657)

Praecipua autem ovorum differentia est, quod alia sint fecunda, alia infecunda, quae etiam dicuntur improlifca, irrita, hypenemia, sive subventanea, et Zephyria. Hypenemia dicuntur, quae sine maris coitu edita ad pullationem inepta sunt; quasi a vento prognata forent : quemadmodum Varro testatur, equas in Lusitania vento concipere. Est enim Zephyri aura fecundissima, indeque illi nomen quasi ζωηφόρος, vitam ferens. Ita enim Virgilius :

- Zephyrique tepentibus auris

Laxant arva sinus, superat tener omnibus humor,

Parturit omnis ager, etc.

Hinc antiqui, cum verno tempore, flante hoc vento, viderent gallinas citra maris operam ova parere, Zephyrum eorundem procreationis autorem crediderunt.

(Exercitationes De Generatione Animalium pp.37 - 38 (1651 edit.))

Eggs are, above all, distinguished by the fact that some are fertile, others are unfertile; these latter are also termed (in Latin) 'improlifca', 'irrita', 'hypenemia', 'subventanea' and 'zephyria'. The term 'hypenemia' is applied to those eggs which are produced without coition with a male and are unsuitable for hatching, being, as it were, occasioned by the wind, just as - in Varro's words - horses in Lusitania conceive by the wind. For the westerly breeze is extremely fertile, and it is for that reason that it has the name Zephyrus, which is, as it were, ζωηφόρος, 'life-bringing'. Thus Virgil states:

... under a tremulous west wind

The fields unbosom, a mild moisture is everywhere.

Confident grows the grass ...

For this reason, when in spring-time while this wind was blowing the ancients saw hens laying eggs without the help of a male, they believed that the west wind Zephyrus was responsible for the production of those eggs.

(Virgilian insert translated by C. Day Lewis)

56. Edward Stillingfleet (A.D. 1635 - 1699)

... and further this agreement between Paul and Peter then after both had preached so many years, makes it fully clear that the pretended division of Provinces so early among the Apostles, is only the wind-egge of a working fancy, that wants a shell of reason to cover it ...

(Irenicum II.6.2)

57. Gotthilf Treuer (A.D. 1632 - 1711)

... Des Esopi Hund sahe in dem Wasser den Schatten von seinen in den Mund habenden Stücke Fleisch viel ergrössert, schnappete darnach und verlohrt sein Fleisch, der grosse Schatte war ein Windey ...

(Deutscher Dädalus I. p.624 (1675 edit.))

... Aesop's hound saw in the water the shadow of himself holding a very much enlarged piece of meat in his mouth, he snapped at it and lost his meat, for the enormous shadow was a wind-egg...



58. Wolfgang Hohberg (A.D. 1612 - 1688)

... Wind-Eyer dienen nie zum Unterlegen...

(Georgica Curiosa II. p.325 (1682 edit.))

... Wind-eggs cannot be used for hatching ...

59. Rudolf Camerarius (A.D. 1665 - 1721)

For the text of De Sexu Plantarum Epistola pp.254 - 255 (1701 edit.),  
see Appendix I, no.46.

60. Samuel Johnson (A.D. 1709 - 1784)

Windegg. An egg not impregnated; an egg that does not  
contain the principles of life.

Sound eggs sink, and such as are addled swim,  
as do also those termed hypenemia, or windeggs.

Brown, Vulg. Err.

(A Dictionary of the English Language)

61. Gotthold Lessing (A.D. 1729 - 1781)

"Windey, heißt das unfruchtbare Ey, welches eine Henne legt,  
ohne daß sie von dem Hahne getreten worden." Anh. 256.

Ein Windey legt die Henne die keinen Hahn nicht hat. Das  
Wort scheint nach Maaßgebung des Grieschischen gemacht zu seyn :  
οὔριον, ὑπηνέμιον, ζεφύριον ὄν.

(Friedrichs von Logau Sinngedichte (Wörterbuch): Sämtliche  
Schriften VII.p.409 (1886 - 1924 edit.))

"Windegg is the name given to an infertile egg which a hen lays  
without having been trodden by the cock." Suppl. 256.

A wind-egg is that which is laid by the hen that has had no cock.

The word seems to be formed in accordance with the Greek:

οὐρινον, ὑπηνέμιον, ζεφύρινον ὠόν.

62. Gotthold Lessing (A.D. 1729 - 1781)

... Doch ich merke ihre Spötteren. Die Henne ward über ihr Ey so laut; und es war noch dazu ein Windy.

(Antiquarischer Briefe 39 : Sämtliche Schriften X.p.351

(1886 - 1924 edit.))

... Nonetheless I note their mockery. The hen made itself so audible as it sat on its egg; and for all that, it was a wind-egg.

63. Matthias Claudius (ps. Asmus) (A.D. 1740 - 1815)

Braga steigt herab durchs Laub der Eiche, zu schwängern die Seele des vaterländischen Dichters, daß sie zu seiner Zeit ans Licht bringe eine reife kräftige Frucht; wer aber leichtfertig ist und mit'n Ausländern buhlt, der legt Windeier und wird oft'n Spiel der Franzosen.

(Werke I.pp.76 - 77 (1924 edit.))

Braga climbs up through the foliage of the oak in an effort to fertilise the soul of the patriotic poet so that in its time it may bring to light a mature and healthy fruit; but the person who recklessly woos foreigners, lays wind-eggs and is frequently mocked by the French.

64. Johann Schummel (A.D. 1748 - 1813)

... Die ganze Reputation Ihres Buches beruht darauf: Denn wenn es mit Ihren Geldprojecten ebenfalls auf ein Windey hinausläuft, so -

Das Uebrige drückte Senft durch ein mitleidiges Achselzucken aus.

(Spitzbart p.44 (1779 edit.))

... The whole reputation of their book depends on it; for if that, together with their monetary projects, also amounts to a wind-egg, then -

The rest Senft expressed with a compassionate shrug of the shoulders.

65. Johann Paul Richter (ps. Jean Paul) (A.D. 1763 - 1825)

... so lang noch ein Bogen von mir 3 Leser hat, so hat seine windeierhafte Poetik 3 weniger.

(Jean Pauls Briefwechsel mit seiner Frau und Christian Otto  
p.70 (1902 edit.))

... so long as a page of mine has 3 readers, his poetry - which is as empty as a wind-egg - has 3 less.

66. Johann Goethe (A.D. 1749 - 1832)

... Die Talente der Dichterinnen und des bildenden Künstlers müssen wir wohl gelten lassen. Daß sie aber unter einander gerade ihre Fehler und Mängel hegen und pflegen, kann ich nicht gut heißen. Verargen darf ich es jedoch um so weniger, als das deutsche Publicum, ein ägyptischer Brut Ofen, über solchen windeyern am liebsten brütet.

(Werke IV.23.p.153 (1887 - 1920 edit))

.. The talent of the poetess and of the pictorial artist we must undoubtedly acknowledge. But that they mutually cultivate each other's faults and failings, I cannot call a good thing. However, may I blame them all the less for that since the German public, an Egyptian hatching oven, hatches such wind-eggs by preference.

67. Thomas Beddoes (A.D. 1803 - 1849)

Here is a Dr Raupach who lays a tragedy or two in the year - mostly wind-eggs...

(Letters 23 : Complete Works I.p.53)

68. Karl Immermann (A.D. 1796 - 1840)

Die feine aura seminalis, welche im echten Gelehrten erst die Kraft hervorbringt, lebendige Früchte der Intelligenz zu zeugen, fehlte jedoch oder wurde von dem plumpen Bestandtheil seines Wesens überwuchert; es kam daher nur zu Windeiern und Mißgeburten...

(Memorabilien : Werke XVIII.pp.197-198 ([1883] edit.))

The fine seminal vapour, which in true scholars first creates the ability to produce living intellectual fruits, failed, however, or rather was overwhelmed by the heavy element in its substance; as a result, it gave rise merely to wind-eggs and monstrosities...

69. Johann Scherr (A.D. 1817 - 1886)

... aus dem kleinen Windei der Petrus-In-Rom-Fabel ...

(König Jan der Gerechte 1 : Novellenbuch VI.p.143)

... from the trifling wind-egg of the Peter-in-Rome-fable ...

70. Ebenezer Brewer (A.D. 1810 - 1897)

A wind-egg. An egg without a shell, or with a soft shell, or an unfertilised one; from the old superstition that the hen that lays it was impregnated, like the 'Thracian mares', by the wind.

(Brewer's Dictionary of Phrase and Fable p.1158 (1970 edit.))

71. Karl Wander (A.D. 1803 - 1879)

Windeier

1. Das wird (soll) ihm keine Windeier legen.

Windeier sind unfruchtbare Eier, welche die Hühner u.s.w. bisweilen ohne vorhergegangene Befruchtung legen, und die, da sie die Erwartung, die man von ihnen hegt, täuschen, gleichsam Wind enthalten. Sprenger van Eijk (III.18) erklärt die obige Redensart dahin : 'Es wird ihm kein kleines Glück, keinen unbedeutenden Vortheil bringen.'

2. Dat sünt Windeier.

Daraus kommt nichts.

3. Er wird es mit Windeiern bezahlen.
4. Windeier ausbrüten.
5. Windeier, nichts als Windeier legen.

(Deutsches Sprichwörter-Lexikon col.264 (1964 edit.))

Wind-eggs.

1. That should lay no wind-eggs for him.

Wind-eggs are infertile eggs which hens etc sometimes lay without having been previously fertilised, and which, since they deceive the expectation that one has of them, as it were contain wind. Sprenger van Eijk (III.18) explains the above expression as follows: 'That will bring him no small success, no insignificant advantage.'

2. Those are wind-eggs.

From them nothing comes.

3. He should pay that off with wind-eggs.
4. To hatch wind-eggs.
5. To lay wind-eggs, nothing but wind-eggs.

72. Friedrich Jahn (A.D. 1778 - 1852)

Leider waren nur gewöhnlich die Schriften 'über die Erziehung für den Staat' beliebt; aber die Schriften 'über die Erziehung der Staaten' wurden verboten. So duldete Sybaris keine Hähne, weil sie aus dem Schlummer krähen, wohl aber Hennen, weil diese nur kakeln, und am meisten, wenn sie Windeier legen...

(Werke I.p.183 (1884-87 edit.))

Unfortunately the writings 'on education for the state' were generally cherished; but the writings 'on the education of the

states' were forbidden. Thus Sybaris would not endure cocks, since they crow during sleep, but would endure hens, since they merely cackle, and mostly when they lay wind-eggs...

73. Alfred Newton (A.D. 1829 - 1907)

Abnormal eggs, occasionally of the most perplexing shape, are of common occurrence in domesticated birds where, especially in Fowls, the artificial overproduction of eggs tends to overstrain and to exhaust the oviduct. Want of calcareous food may explain the soft-shelled or 'wind' eggs...

(A Dictionary of Birds p.198 (1896 edit.))

APPENDIX III: Passages concerning the wind-sired tiger.

The following is a chronological list of all passages cited by number in chapter V:

1. Oppian (early 3rd century A.D.)

... τίγριες οἷα θοοί, κραιπνοῦ Ζεφύροιο γενέθλη ...

(Cynegetica I.323)

... Just as swift tigers, the offspring of rushing Zephyrus...

2. Oppian (early 3rd century A.D.)

ᾠκυτέρη τελέθει δε θοῶν πανυπείροχα θηρῶν·

αὐτῷ γάρ τε θέειν ἰκέλη Ζεφύρω γενετήρι·

οὔτι γε μὴν γενετήρι· τίς ἂν τάδε πιστώσαιτο,

θήρες ὅτι δηθεῖεν ὑπ' ἥερι νυμφευτήρι;

Ἐπλετο γὰρ κείνη κενεὴ φάτις, ὥς τόδε φύλον

θήλυ πρόπαν τελέθει, καὶ ἀδέμνιον ἄρσενός ἐστι·

(Cynegetica III.353-358)



... <the tigress> , swifter than Zephyrus, her mate ...

4. Symphosius (? 4th - 5th century A.D.)

A fluvio dicor, fluvius vel dicitur ex me;  
Iunctaque sum vento, quo sum velocior ipso;  
Et mihi dat ventus natos nec quaero maritum.

(Aenigmata 38 : Tigris)

I am named after a river, or a river is named after me; I  
have mated with the wind, than which I am swifter; the wind  
gives me offspring, and I do not seek a mate.

5. Corippus (6th century A.D.)

... similis tunc illa marito  
Et levior Zephyro ...

(Iohannidos VI.717)

... <the tigress> , similar to and swifter than Zephyrus,  
her mate ...

6. Περὶ Ζών (11th century paraphrase of the Περὶ Ζών  
of Timotheus of Gaza (5th century))

... ἡ τίγρις, ἥτις συλλαμβάνουσα τίκτει ἐξ ἀνέμου·  
... ταχυτάτη οὔσα ὥς ἐξ ἀνέμου γεννωμένη·

(Περὶ Ζών 9)

... the tigress which bears after having conceived by the wind ...  
she is exceedingly swift since she has been begotten by the wind.

(Translation by F.S. Bodenheimer and A. Rabinowitz)

## 7. Dionysius (Byzantine paraphrase)

οἱ γυῖπες δὲ μίγνυνται μὲν ἐπειμβάντες ἀλλήλοις, μάτην δὲ,  
καὶ οὐκ ἂν ποτε συνουσιάζοντες οὕτω παιδοποιήσαιεν, ἀλλ' ἥνίκα  
ὅν σχοῖεν πρὸς τὸν τῶν φύων τόκον ἐπιτηδείως, κατὰ τὰ θηρία τὰς  
τίγρεις τὴν αἰδᾶ πρὸς τὸν ζέφυρον ἀποστρέψαντες ὑπὸ τῇ πνοῇ  
γαμοῦνται...

(De Avibus I.5)

Vultures mount one another in intercourse, but to no purpose,  
for whenever they couple thus they do not produce offspring.  
However, when they are ready to lay eggs, they follow the example  
of wild animals, or more specifically tigers, and turn their  
sexual organ towards the west wind which impregnates them...

(Cf App.IV, no.29)

APPENDIX IV: Passages concerning the procreation of vultures.

The following is a chronological list of all passages cited by number in chapter VI.

1. Herodorus (late 5th century/early 4th century B.C.)

(= Aristotle, Historia Animalium 563 a 5ff)

Ὁ δὲ γὺψ νεοττεύει μὲν ἐπὶ πέτραις ἀπροσβάτοις διὸ σπάνιον  
 ἰδεῖν νεοττιᾶν γυπὸς καὶ νεοττούς. καὶ διὰ τοῦτο καὶ Ἡρόδωρος  
 ὁ Βρύσσωνος τοῦ σοφιστοῦ πατήρ φησιν εἶναι τοὺς γύπας ἀπ' ἐτέρας  
 γῆς ἀδῆλου ἡμῖν, τοῦτο τε λέγων τὸ σημεῖον ὅτι οὐδεὶς ἑώρακε  
 γυπὸς νεοττιᾶν, καὶ ὅτι πολλοὶ ἐξαίφνης φαίνονται ἀκολουθοῦντες  
 τοῖς στρατεύμασιν. τὸ δ' ἐστὶ χαλεπὸν μὲν ἰδεῖν, ὥπται δ' ὅμως.

(F.Gr. Hist. 31 fr. 22a (Jacoby))

The vulture builds <its nest> on inaccessible rocky cliffs; hence one seldom sees either its nest or its young. And hence Herodorus, father of Bryson the Sophist, says that vultures come from some other country unknown to us, citing as evidence that no one has ever seen a vulture's nest, and that vultures suddenly appear in large numbers in the wake of armies. It is certainly difficult to get a sight of the nest, but still it has been seen.

(Translation by A.L. Peck)

2. Aristotle (384 - 322 B.C.)

For the text of Historia Animalium 563 a 5ff, see no.1 above.

## 3. Aristotle (384 - 322 B.C.)

Γυπὸς δὲ λέγεται ὑπὸ τινων ὥς οὐδεὶς ἑώρακεν οὔτε νεοττὸν οὔτε νεοττιάν· ἀλλὰ διὰ τοῦτο ἔφη Ἡρόδοτος ὁ Βρύωνος τοῦ σοφιστοῦ πατὴρ ἀπὸ τινος αὐτὸν ἐτέρας εἶναι μετεώρου γῆς, τεκμήριον τοῦτο λέγων καὶ τὸ φαίνεσθαι ταχὺ πολλούς, ὅθεν δέ, μηδενὶ εἶναι δῆλον. τούτου δ' αἴτιον ὅτι τίκτει ἐν πέτραις ἀπροσβάτοις·

(Historia Animalium 615 a 9ff)

Some people say that no one has seen either the nest or the young of the vulture. On this account Herodorus, the father of the sophist Bryson, stated that the vulture comes from some other celestial land, the evidence being the fact that they tend to appear suddenly and in large numbers, and no one knows from where. The reason for this is that the vulture nests on inaccessible rocky cliffs.

## 4. [Aristotle]

... ἐκ δὲ ἀλιαιέτων φήνη γίνεται, ἐκ δὲ τούτων περικνοὶ καὶ γῦπες· οὔτοι δ' οὐκέτι διορίζουσι περὶ τοὺς γῦπας, ἀλλὰ γεννᾷσι τοὺς μεγάλους γῦπας· οὔτοι δ' εἰσὶν ἄγονοι. σημεῖον δὲ τοῦτο, διότι νεοττιὰν οὐδεὶς ἑώρακε γυπὸς μεγάλου.

(Mirabiles Auscultationes 835 a 2ff)

... From sea-eagles are born the osprey and from these hawks and vultures; these do not stop as vultures, but produce large vultures; these have no young. This is proved by the fact that no one has ever seen a nest of large vultures.

(Translation by W.S. Hett)

5. Antigonus ( 240 B.C.)

Γυπὸς δὲ λέγεται ὑπὸ τινῶν ὅτι οὐδεὶς ἑώρακε νεοττὸν οὐδὲ νεοττεῖαν· διὸ καὶ Ἡρόδοτος τὸν Βρύσητος τοῦ σοφιστοῦ πατέρα ἀπὸ τινος αὐτοῦς ἑτέρας φάναι γῆς εἶναι μετεώρου. τίκτειν δ' οὖν ἕνια πρὸς ἀβάτοις πέτραις.

(Historiae Mirabiles 42)

Some people say that no one has seen either the nest or the young of the vulture. On this account Herodotos, the father of Bryson the sophist, states that they come from some other celestial land. Some vultures nest on inaccessible rocky cliffs.

6. Chaeremon of Alexandria (1st century A.D.)

(= Porphyrius, De Cultu Simulacrorum fr.10 (Bidez), and Eusebius, Praeparatio Evangelica III.12)

ἡ δὲ τῆς Εἰλειθυίας πόλις τὸ τρίτον φῶς θεραπεύει. τὸ δὲ ξόανον τετύπεται εἰς γῦπα πετομένην, ἧς τὸ πτέρωμα ἐκ σπουδαίων συνέστηκε λίθων. σημαίνει δὲ τὸ μὲν γυποειδὲς αὐτῆς τὴν γεννητικὴν πνευμάτων σελήνην. ἐκ γὰρ τοῦ πνεύματος οἴονται συλλαμβάνειν τὴν γῦπα, θηλείας πάσας ἀποφαινόμεναι.

(fr. 6 dubium (Schwyzer))

In the city of Eileithyia the third aspect of the moon is worshipped : the statue of the goddess is shaped in the form of a flying vulture whose wings are created out of high-quality stones. The vulture shape signifies that the moon is creator of the winds; for they consider all vultures to be female and believe that they conceive from the wind.

7. Chaeremon of Alexandria (1st century A.D.)

(= Horapollo, Hieroglyphica I.11)

μητέρα δὲ γράφοντες ... ἢ ἐνιαυτὸν ἢ οὐρανίαν ... γῦπα  
ζωγραφοῦσι· μητέρα μὲν, ἐπειδὴ ἄρρεν ἐν τούτῳ τῷ γένει τῶν  
ζῴων οὐχ ὑπάρχει. ἡ δὲ γένεσις αὐτῶν γίνεται τρόπῳ τοιῷδε·  
ὅταν ὀργώσῃ πρὸς σύλληψιν ἡ γύψ, τὴν φύσιν ἑαυτῆς ἀνοίξασα  
πρὸς βορέαν ἀνεμον ὑπὸ τούτου ὀχεύεται ἐπὶ ἡμέρας πέντε, ἐν  
αἷς οὔτε βρωτοῦ οὔτε ποτοῦ μεταλαμβάνει ποθοῦσα παιδοποιεῖν .  
ἔστι δὲ καὶ ἄλλα γένη ὀρνέων ἃ ὑπὸ ἀνέμου συλλαμβάνει, ὧν τὰ  
ῥᾶ πρὸς βρῶσιν αὐτὸ μόνον, οὐκέτι δὲ πρὸς ζωγονίαν ἐστὶ  
χρήσιμα, γυπῶν δὲ ὑψηλέμιον ποιουμένων τὴν ὀχείαν ἢ τῶν ῥῶν γένεσις  
ζωογονεῖται ...

ἐνιαυτὸν δὲ <γράφοντες γῦπα ζωγραφοῦσι> διὰ τὸ ἐν τούτῳ τῷ  
ζῴῳ τριακισίας ἐξήκοντα πέντε ἡμέρας τοῦ ἔτους διαιρεῖσθαι,  
ἐν αἷς ὁ ἐνιαύσιος ἐκτελεῖται χρόνος· ἑκατὸν γὰρ εἴκοσιν ἡμέρας  
ἔγκυος μένει, καὶ τὰς ἴσας τοὺς νεοσσοὺς ἐκτρέφει, ταῖς δὲ  
λεπούσαις ἑκατὸν εἴκοσι τὴν ἑαυτῆς ἐπιμέλειαν ποιεῖται, μήτε  
κυαφοροῦσα μήτε τρέφουσα, παρασκευάζουσα δὲ ἑαυτὴν εἰς ἑτέραν  
σύλληψιν, τὰς δὲ λοιπὰς πέντε τοῦ ἔτους, ὡς ἤδη προεῖπον, εἰς  
τὴν τοῦ ἀνέμον ὀχείαν καταναλίσκει ...

οὐρανίαν δὲ <γράφοντες γῦπα ζωοποιῶσιν> ... ἐπεὶ τούτων ἡ  
γένεσις ἐκεῖθεν ἐστίν.

(fr. 14 dubium (Schwyzer))

When they mean a mother... or the year, or the heavens... they draw a vulture. A mother, since there is not male in this species of animal. And they are born in this way : when the vulture hungers after conception, she opens her sexual organ to the North wind and is covered by him for five days. During this period she takes neither food nor drink, yearning for child-bearing. <There are other types of birds which conceive by the wind,> the eggs of which serve only for food and are not fit for hatching. But when (the) vultures are impregnated by the wind, their eggs are fertile...

And <when they mean> the year, <they draw a vulture> because in this animal's life there are divided the 365 days of the year during which the time of a year is fulfilled. For it gestates for 120 days, and feeds its young for the same number. And during the remaining 120, it takes care of itself, not in pregnancy nor in eating, but in preparing itself for another conception. And the remaining five days of the year, as I have already said, it consumes in intercourse with the wind...

And <when they mean> the heavens, <they draw a vulture> ...since their genesis is from Heaven.

(Adapted from the translation by George Boas)

## 8. Chaeremon of Alexandria (1st century A.D.)

(= Tzetzes, *Historiarum Variarum Chiliades* XII.729 - 742)

γυῖπας τινες δὲ ἄσκειπτοι λέγουσι ζῆα τίκτειν,  
 ἔχειν καὶ γάλα καὶ μαστοὺς καὶ ἕτερα τοιαῦτα.  
 ἐγὼ δ' ὥς εὖρον ἄρρενας ἅπαντας εἶναι τίγρεις  
 οὕτω καὶ θῆλυ τὸ γυῖων ἐφεῦρον σύμπαν γένος.  
 πέντε δ' ἡμέραις πρὸς πυγὴν πετόμενοι ἀνέμοις,  
 κυρίως συλλαμβάνουσι γονὴν ὑπηνεμίαν.  
 ἐν ἑκατὸν καὶ εἴκοσιν ἡμέραις δὲ γεννῶσι  
 τὰ ὑπηνέμια φά, ἐν δὲ τοιαύταις ἄλλαις  
 ἐκ τῶν ὥων ἐκλέπουσιν καὶ νεοσσοὺς ποιοῦσιν.  
 ἐν ἑκατὸν ἡμέραις δὲ καὶ εἴκοσιν ἑτέραις  
 μέχοι καὶ πτήσεως αὐτῶν ἐκτρέφουσιν ἐκείνους·  
 γονὴν γυῖων ὑπηνεμον ἔχεις τὴν θηλυγόνων.  
 φανεῖς ὀνείροις δὲ ὁ γυῖς ἐνιαυτὸν σημαίνει,  
 οἰά σοι προκατέλεξα σαφῶς ἐξ Αἰγυπτίων.

(fr. 15 dubium (Schwyzer))

Some people, without investigation, say that vultures bear their young live, and that they have milk and breasts and other such things. Just as I found that all tigers were male, so too have I found that the whole race of vultures is female. They fly for five days with the winds against their rump and conceive a seed from the wind. In 120 days they produce wind-eggs, in as many more days they hatch out the young from the eggs, and in a further 120 days they rear them until they can fly. This is the way in which vultures - which produce only females - procreate by means of the wind. If a vulture appears in a dream, it signifies a year;



this and other such things, as I have already indicated, clearly derive from the Egyptians.

9. Pliny (A.D. 23/24 - 79)

Vulturum praevalent nigri. Nidos nemo attigit; ideo et fuere qui putarent illos ex adverso orbe advolare, falso : nidificant in excelsissimis rupibus.

(Naturalis Historia X.7)

Of vultures the black are the strongest. No one has ever reached their nests, and consequently there have actually been persons who have thought that they fly here from the opposite side of the globe. This is a mistake : they make their nests on extremely lofty crags.

(Translation by H. Rackham)

10. Plutarch (A.D. c.46 - c.125)

Διὰ τί γυψὶ χραῖνται μάλιστα πρὸς τοὺς οἰωνισμοὺς;

Πότερον ὅτι καὶ Ῥωμύλῳ δώδεκα γυψες ἐράνησαν ἐπὶ τῇ κτίσει τῆς Ῥώμης; ἢ ὅτι τῶν ὀρνέθων ἥμιστα συνεχῆς καὶ συνήθης οὗτος; οὐδὲ γὰρ νεοττιᾷ γυψὸς ἐντυχεῖν ῥαδίως ἔστιν, ἀλλὰ πόρρωθεν ποθεν ἐξαπίνης καταίρουσι· διὸ καὶ σημειώδης ἡ ὄψις αὐτῶν ἔστιν...

εἰ δ', ὥς Αἰγύπτιοι μυθολογοῦσι, θῆλυ πᾶν τὸ γένος ἐστὶ καὶ κυΐσκονται δεχόμενοι καταπνέοντα τὸν ἀπτηλιώτην ὥσπερ τὰ δένδρα τὸν ζέφυρον, καὶ πανταπασιν ἀπλανῆ τὰ σημεῖα καὶ βέβαια γίγνεσθαι πιθανόν ἐστιν ἀπ' αὐτῶν. ἐν δὲ τοῖς ἄλλοις αἱ περὶ τὰς ὀχέας σοβήσεις ἔτι δ' ἄρπαγαὶ καὶ φυγαὶ καὶ διώξεις πολὺ τὸ θορυβῶδες καὶ ἀκατάστατον ἔχουσι.

(Quaestiones Romanae 93 (= Moralia 286 A - C))

Why do they make most use of vultures in augury? Is it because twelve vultures appeared to Romulus at the time of the founding of Rome? Or is it because this is the least frequent and familiar of birds? For it is not easy to find a vulture's nest, but these birds suddenly swoop down from afar; wherefore the sight of them is portentous...

But if, as the Egyptians fable, the whole species is female, and they conceive by receiving the breath of the East Wind, even as the trees do by receiving the West Wind, then it is credible that the signs from them are altogether unwavering and certain. But in the case of the other birds, their excitements in the mating season, as well as their abductions, retreats, and pursuits, have much that is disturbing and unsteady.

(Translation by F.C. Babbitt)

11. Plutarch (A.D. c.46 - c.125)

... τάλλα μὲν ἐν ὀφθαλμοῖς, ὡς ἔπος εἰπεῖν, ἀναστρέφεται καὶ παρέχει διὰ παντὸς αἰσθῆσιν ἑαυτῶν· ὁ δὲ γῦψ σπάνιον ἐστὶ θεῶμα καὶ νεοσσοῖς γυπὸς οὐ ῥαδίως ἴσμεν ἐντετυχηκότες, ἀλλὰ καὶ παρέσχεν ἐνίοις ἄτοπον ὑπόνοιαν, ἔξωθεν αὐτοὺς ἀφ' ἐτέρας τινὸς γῆς καταίρειν ἐνταῦθα, τὸ σπάνιον καὶ μὴ συνεχές, οἷον οἱ μάντις ἀξιοῦσιν εἶναι τὸ μὴ κατὰ φύσιν μηδ' ἀφ' αὐτοῦ, πομπῇ δὲ θεῖα φαινόμενον.

(Romulus 9.7)

... other birds are, so to speak, always in our eyes, and let themselves be seen continually; but the vulture is a rare sight, and it is not easy to come upon a vulture's young, nay, some men have been led into a strange suspicion that the birds come from some other and foreign land to visit us here, so rare and intermittent is their appearance, which soothsayers think should be true of what does not present itself naturally, nor spontaneously, but by a divine sending.

(Translation by Bernadotte Perrin)

12. Tertullian (A.D. c.160 - c.220)

Dehinc in illo maerore <Sophia> ex semetipsa sola, nulla opera coniugii, concipit et procreat feminam. Miraris hoc? Et gallina sortita est de suo parere; sed et vultures feminas tantum aiunt et tamen sine masculino matres.

(Adversus Valentinianos 10.1)

Subsequently, whilst suffering from that grief, <Sophia> conceived all on her own, without any help from a husband, and gave birth to a female child. Do you marvel at this? The hen, too, is ordained to procreate from its own body; and vultures are said to exist in the female sex only, yet to become mothers without the help of a male.

(cf Appendix II, no.33)

13. Aelian (A.D. c.170 - 235)

γῦπα δε ἄρρενα οὐ φασὶ γίνεσθαι ποτε, ἀλλὰ θηλείας ἀπάσας·  
ὅπερ ἐπιστάμενα τὰ ζῷα καὶ ἐρημίαν τέκνων δεδιότα ἐς  
ἐπιγονὴν τοιαῦτα δρᾷ. ἀντίπαροι τῷ νότῳ

πέτονται· εἰ δὲ μὴ εἴη νότος, τῷ εὐρῷ κεχήνασι, καὶ τὸ πνεῦμα  
ἐσρέον πληροῖ αὐτάς, καὶ κῦουσι τριῶν ἐτῶν. λέγουσι δὲ νεοττιᾶν  
μὴ ὑποπλέκειν γῦπα.

(De Natura Animalium II.46)

It is said that no male vulture is ever born : all vultures are female. And the birds, knowing this and fearing to be left childless, take measures to produce them as follows : they fly against the south wind; <but if> the wind is not from the south, they open their beaks to the <south> east wind, and the inrush of air impregnates them, and their period of gestation lasts for three years. But the vulture is said never to make a nest.

(Adapted from the translation by A.F. Scholfield)

14. Origen (A.D. c.185 - c.254)

ἐτι δὲ πρὸς Ἑλληνας λεκτέον ἀπειθοῦντας τῇ ἐκ παρθένου γενέσει τοῦ Ἰησοῦ, ὅτι ὁ δημιουργὸς ἐν τῇ τῶν ποικίλων ζώων γενέσει ἔδειξεν, ὅτι ἦν αὐτῷ βουληθέντι δυνατόν ποιῆσαι, ὅπερ ἐφ' ἐνὸς ζώου, καὶ ἐπ' ἄλλων, καὶ ἐπ' αὐτῶν τῶν ἀνθρώπων. εὐρίσκεται δὲ τινὰ τῶν ζώων θήλεα, μὴ ἔχοντα ἄρρενος κοινωνίαν, ὡς οἱ περὶ ζώων ἀναγράψαντες λέγουσι περὶ γυπῶν· καὶ τοῦτο τὸ ζῶον χωρὶς μίξεως αὐζει τὴν διαδοχὴν τῶν γενῶν. τί οὖν παράδοξον, εἰ βουληθεὶς ὁ θεὸς θεῖόν τινα διδάσκαλον πέμψαι τῷ γένει τῶν ἀνθρώπων, πεποίηκεν ἀντὶ σπερματικοῦ λόγου, τοῦ ἐκ μίξεως τῶν ἀρρένων ταῖς γυναιξὶ, ἄλλω τρόπῳ γενέσθαι τὸν λόγον τοῦ τεχνησομένου;

(Contra Celsum I.37)

To Greeks, however, who disbelieve in the virgin birth of Jesus I have to say that the Creator showed in the birth of various animals that what He did in the case of one animal, He could do, if He wished, also with others and even with men themselves. Among the animals there are certain females that have no intercourse with the male, as writers on animals say of vultures; this creature preserves the continuation of the species without any copulation. Why, therefore, is it incredible that if God wished to send some divine teacher to mankind He should have made the organism of him that was to be born come into being in a different way instead of using a generative principle derived from the sexual intercourse of men and women?

(Translation by Henry Chadwick)

15. Porphyrius (A.D. c.232 - 303)

For the text of De Cultu Simulacrorum fr.10 (Bidez), see no.6 above.

16. Eusebius (A.D. c.265 - 340)

For the text of Praeparatio Evangelica III.12, see no.6 above.

17. Horapollo (4th century A.D.)

For the text of Hieroglyphica I.11, see no.7 above.

18. Basil (A.D. a.330 - 379)

πολλὰ τῶν ὀρνίθων γένη οὐδὲν πρὸς τὴν κύησιν δεῖται τῆς τῶν  
ἄρρέων ἐπιπλοκῆς· ἀλλ' ἐν μὲν τοῖς ἄλλοις ἀγανά ἐστι τὰ ὑπηνέμια,

τοὺς δὲ γύπας φασὶν ἀσυνδυάστως τίκτειν ὥς τὰ πολλὰ, καὶ ταῦτα μακροβιωτάτους ὄντας· οἷς γε μέχρις ἑκατὸν ἐτῶν, ὥς τὰ πολλὰ, παρατείνεται ἡ ζωὴ. τοῦτό μοι ἔχε παρασησηναιωμένον ἐκ τῆς περὶ τοὺς ὄρνιθας ἱστορίας, ἔν' ἐπειδὴν ποτε ἔδης γελῶντάς τινας τὸ μυστήριον ἡμῶν, ὥς ἀδυνάτου ὄντος καὶ ἔξω τῆς φύσεως, παρθένον τεκεῖν, τῆς παρθενίας αὐτῆς φυλαττομένης ἀχράντου, ἐνθυμηθῆς ὅτι ὁ εὐδοκήσας ἐν τῇ μυρίᾳ τοῦ κηρύγματος αἶσαι τοὺς πιστεύοντας, μυρίας ἐκ τῆς φύσεως ἀφορμὰς πρὸς τὴν πίστιν τῶν παραδόξων προλαβὼν κατεβάλετο.

(Hexaemeron 8.6)

Many birds have no need of union with males to produce eggs; but whereas in the case of other birds, such eggs are infertile, vultures - so they say - reproduce for the most part without coupling, and this even until a very advanced age; for they mostly live until they are one hundred years old. I exhort you to note this point in the history of birds; and if ever you see people laughing at the mystery of our faith, on the grounds that it is impossible and contrary to nature for a virgin to give birth and yet for her virginity to remain undefiled, bear in mind that He who agreed to save the faithful by the foolishness of proclamation, has given us beforehand in nature a thousand reasons for believing in the marvellous.

19. Ambrose (A.D. c.339 - 397)

Diximus de viduitate avium, eamque ab illis primum exortam esse virtutem : nunc de integritate dicamus, quae in pluribus quidem avibus ita esse asseveratur, ut possit etiam in vulturibus

deprehendi. Negantur enim vultures indulgere concubitu, et coniugali quodam usu nuptialisque copulae sorte misceri, atque ita sine ullo masculorum concipere semine, et sine coniunctione generare, natosque ex his in multam aetatem longevitate procedere; ut usque ad centum annos vitae eorum series producat, nec facile eos angusti aevi finis excipiat.

Quid aiunt, qui solent nostra ridere mysteria, cum audiunt quod virgo generavit, et impossibilem innuptae, cuius pudorem nulla viri consuetudo temerasset, existimant partum? Impossibile putatur in Dei Matre, quod in vulturibus possibile non negatur? Avis sine masculo parit, et nullus refellit : et quia desponsata viro Maria virgo peperit, pudori eius faciunt quaestionem. Nonne advertimus quod Dominus ex ipsa natura plurima exempla ante praemisit, quibus susceptae incarnationis decorem probaret, et astrueret veritatem?

(Hexaemeron V.20)

We have spoken about the widowhood of birds, and suggested that that virtue first arose from them; now let us speak about chastity, which is said to exist in many birds, even as it can be perceived in vultures. For vultures - so they say - do not indulge in coition, refraining from that particular conjugal practice and the fate of nuptial coupling, and thus they conceive without any male seed and produce offspring without intercourse, offspring which live until a considerable age because of their longevity; consequently - so it is said - they produce a series of offspring until they are one hundred years of age, and do not give up their far from brief lives easily.

What do those who are accustomed to laugh at the mysteries of our faith say when they hear that a virgin has given birth? Do they think it impossible for an unmarried woman who has had no contact with a man and whose modesty remains unviolated, to have a child? Is that which is not denied to be possible in the case of vultures, thought to be impossible in the Mother of God? A bird bears without a mate and no one refutes it, yet because the Virgin Mary bore whilst still betrothed, they question her chastity. Surely we see that the Lord has provided beforehand many examples from nature itself to prove the honour of the birth in question and to convince us of its truth?

20. Eustathius (5th century A.D.)

Ὁ δὲ γῦψ ὑπηνέμιον τὴν γονὴν κέκτηται, καὶ οὐ γινώσκει συνουσίαν ἄρρενος, καὶ ἑκατὸν τὰ ἔτη βιοῖ. Αὐλίζεται δὲ ἐπὶ τῶν ὑψηλῶν, καὶ μετεωρῶν, καὶ οὐδεὶς οἶδε ποῦ ποιεῖ τὴν κατοίκησιν.

(Commentarius in Hexaemeron (PG 18, 732C))

The vulture conceives by the wind, has no physical contact with a male, and lives for a hundred years. It lives in high and lofty places, and no one knows where it makes its nest.

21. Isidore (A.D. c.570 - 636)

... Harum <i.e. vulturium> quasdam dicunt concubitu non misceri, et sine copula concipere et generare; natosque earum paene usque ad centum annos procedere.

(Etymologiae XII.7.12)



... They say that certain of these <vultures> do not engage in intercourse, and that without coition they conceive and produce offspring; and that their offspring live until they are almost one hundred years old.

22. Georgios Pisides (fl. A.D.610 - 641)

Τίς ἀσπώρα τοὺς γύπας ἐξάγει τόκῳ  
 Φυλῆς γὰρ αὐτοῖς οὐχ ὑπούσης ἄρρενος;  
 Οἱ τὴν καθ' ἡμᾶς πυρφοροῦσαν παρθένον  
 Δεικνύντες αὐτὴν, ὥς ἐφικτὸν ὀρνέω·  
 Ἔδει γὰρ οἶμαι τοῦ τοσοῦτου θαύματος  
 Ἐχειν ἀμυδράς ἐμφάσεις καὶ τὴν φύσιν·  
 Ὡς μήτε δόξῃ καινοτομεῖσθαι τόκῳ,  
 Μῆτε πρὸς ἄνθρωπον ἱστορεῖν τὰ τοῦ τόκου·  
 Οὐ γὰρ μένουσιν, ὥς ἐκείνη, παρθένοι,  
 Ὅταν τὸ τεχθὲν εἰς διέξοδον δράμῃ,  
 ῥῆξῃ τὰ κλειῖθρα, καὶ παρέλθῃ τὰς θύρας  
 Εἰ δ' αὖγε καὶ τίκτουςιν ὀρνίθων γένη,  
 Ἐγκυμονοῦντα τῇ φορᾷ τοῦ πνεύματος·  
 Πῶς οὐχὶ μᾶλλον ἢ τεκοῦσα Παρθένος  
 Τὸ πιστὸν ἔξει τῆς γονῆς τῆς ἀσπώρας,  
 Ἐκ ζωοποιοῦ Πνεύματος πληρουμένη;  
 Οὕτω τι συμπεφυκε καὶ τοῖς ὀρνέοις  
 Αἰνιγμα πιστὸν πρὸς τὸ τίκτειν ἀσπώρας.

(Hexaemeron 1136 - 1153)

Who brings forth vultures, conceived without a seed, due to there being no tribe of males amongst them? So ask those who point out the similarity between the virgin who brought light to the world, and the bird. In my mind, it was necessary for pale reflections of this great marvel to exist in nature itself, so that nature would not seem to undergo an innovation because of the birth nor yet would it seem to reveal too much concerning the mysteries of that birth; for vultures do not remain virgins, as she does, when the offspring has made its way to the exit, has broken the bolts, and has passed through the doors. But if there are types of birds which produce offspring after conceiving from the breath of the wind, why does the Virgin who has given birth not receive greater credibility for having produced a child conceived without a seed since she was impregnated by the life-giving Spirit? Thus nature has endowed birds with a certain ability so as to give us faith in the enigma of birth without a seed.

23. Theophylactus Simocattes (fl. A.D. 610 - 640)

Ἀντιοθένης. Πολλὰ γένη τῶν ὀρνίθων, Πολύκρατες, οὐ δεῖται πῆς τῶν ἀρρένων συμπλοκῆς πρὸς τὴν κύησιν· ἀλλ' ἐν μὲν τοῖς ἄλλοις τὰ ὑπὲρ νύμφης καθέστηκεν ἄγονα, τοὺς δὲ γύπας ἀσυνδυάστως τίκτειν παρακελεύονται φύσεως νόμοι· γύπα τοίνυν οὐκ ἐστὶ θεάσασθαι ἄρρενα, ἀλλ' ἅπαν τὸ γένος αὐτοῖς ἢ τοῦ θήλεος ἀπηνέγκατο φύσις· ὅπερ ἐπιστάμενοι γύπες, τὴν ἐρημίαν δεδιότες τῶν τέκνων εἰς ἐπιγονὴν ἅπαν τὸ γένος στρατεύεται, οἷα Λημνιάδες γυναῖκες ἡρώων ἀναγόμενον στόλιν θεάμεναι. εἴτα δρῶσί τι σόφισμα ποικίλον

οἱ γύπες· ἀντίπαροι τῷ νότῳ πέτονται . εἰ δὲ μὴ νότος εἴη,  
 τῷ συγγενεῖ εὖρω ἀπλοῦσι τὰς πτέρυγας· εἷτα κεχήνασι καὶ τοῦ  
 πνεύματος ἐμφοροῦνται [εἰσρέοντος], καὶ τίκτουσι ζῶα, οὐκ ὧς  
 ὑπηνέμια . διὸ πλείστου χρόνου δεῖται ἡ φύσις πρὸς ζῴου  
 τελεσιουργίαν.

(Quaestiones Naturales 8)

Antisthenes. Many birds, Polycrates, have no need of union with males to produce eggs; but whereas in the case of other birds, such eggs are usually infertile, vultures are bidden by the laws of nature to reproduce without coupling. Indeed it is not possible to catch sight of a male vulture, for the entire breed of vultures is of the female sex. Vultures know this, and fearing to be left childless, the whole race devises schemes to produce offspring, just as the women of Lemnos did when they saw a fleet of heroes putting out to sea. And so vultures carry out a range of cunning devices : they fly against the south wind; but if the wind is not from the south, they spread their wings to the neighbouring southeast wind; then they open their beaks and take their fill of the wind, and produce living offspring, not wind-eggs. For that reason, nature requires a considerable amount of time to bring their offspring to completion.

24. Rabanus Maurus (A.D. 776 or 784 - 856)

... Harum <vulturium> quasdam dicunt concubitu non misceri, et sine copula concipere et generare, natosque earum paene usque ad centum annos procedere.

(De Universo 8, 6)

... They say that certain of these <vultures> do not engage in intercourse, and that without coition they conceive and produce offspring, and that their offspring live until they are almost one hundred years old.

25. Symeon Metaphrastes (fl. c.A.D.960)

καὶ οἱ γελῶντες τὸ μυστήριον ἡμῶν, ὡς ἀδυνάτου ὄντος καὶ ἔξω  
τῆς φύσεως παρθένον τεκεῖν, τῆς παρθενίας αὐτῇ φυλαττομένης  
ἀχράντου· ἐνθυμήθητε, ὅτι ὁ ἐν τούτῳ εὐδοκήσας θεὸς, μυρίας  
ἐκ τῆς φύσεως ἀφορμὰς πρὸς τὴν πίστιν τῶν παραδόξων προλαβὼν  
κατεβάλετο. τοὺς τε γὰρ γῦπας ἀσυνδυάστως τίκτειν ἐποίησε,  
καὶ ταῦτα μακροβιωτάτους ὄντας, οἷς γε μέχρις ἑκατὸν ἐτῶν  
ὡς τὰ πολλὰ ἡ ζωὴ παρατείνεται \* καὶ ἐν πᾶσιν ἡμῖν τῶν οἰκείων  
θαυμάτων ἐναργῆ τὰ ὑπομνήματα καταλέλοιπεν.

(Sermo 22,1)

And those of you who laugh at the mystery of our faith, on the grounds that it is impossible and contrary to nature for a virgin to give birth and yet for her virginity to remain undefiled, bear in mind that the God who acquiesced in this has given us beforehand in nature a thousand reasons for believing in the marvellous. For, thanks to Him, vultures reproduce without coupling, and this even until a very advanced age, for they mostly live until they are one hundred years old. And thus in all things He has left behind for us clear reminders of his miracles.

26. Geoponica (10th century A.D.)

... γυπας δὲ μὴ συγγίνεσθαι, ἀλλὰ ἀντιπάρους τῷ νότῳ  
πετομένους ἐγκυμονεῖν, καὶ διὰ τριῶν ἐτῶν τίκτειν.

(Geoponica XIV.26)

... And vultures do not couple with one another; rather, they  
fly against the south wind and become pregnant, giving birth  
every three years.

## 27. Joannes Tzetzes (12th century A.D.)

For the text of Historiarum Variorum Chiliades XII.729 - 742,  
see no.8 above.

## 28. Michael Glycas (12th century A.D.)

τὸ δὲ γε πλεον τῶν ἄλλων παραδοξότερον, τοὺς γυπᾶς φασιν  
ἀσυνδυάστως τίκτειν, καὶ ταῦτα μακροβιωτάτους ὄντας, καὶ  
μέχρις ἑκατὸν ἐτῶν τὴν ζωὴν αὐτῶν παρεκτείνεσθαι. διὰ τί  
δὲ τοῦτο, καὶ τίνος ἔνεκεν; ἵνα γὰρ μὴ τινες ἐπιγελῶσι τῷ  
μυστηρίῳ ἡμῶν, ὡς ἀδύνατον παρθένον τεκεῖν καὶ αὐθις μεῖναι  
παρθένον, μυρίας ἐκ τῆς φύσεως ἀφορμᾶς πρὸς τὴν πίστιν τῶν  
παραδόξων προλαβὼν κατεβάλετο. καὶ οὕτω μὲν περὶ τούτων ὁ  
μέγας Βασίλειος· οἱ δὲ γε τὰς φύσεις τῶν ζώων διασκεψάμενοι  
τριετὴ χρόνον τοὺς γυπᾶς ἐγκυμονεῖν τερατεύονται. καὶ πῶς  
ἄκουε. οὐκ ἔστιν ἄρρενα γυπα θεάσασθαι· ἀσυνδυάστως γὰρ αὐτοὺς  
τίκτειν νόμοι φύσεως παρακαλεῦνται, ὅθεν καὶ πᾶν τὸ γένος  
αὐτῶν ἢ τοῦ θήλεος φύσις ἠνέγκατο. ὅπερ ἐπιστάμενοι γυπες καὶ  
τὴν ἐρημίαν δεδιότες τῶν τέκνων, εἰς ἐπιγονὴν ἅπαν τὸ γένος  
στρατεύεται, καὶ δρῶσί τι σόφισμα ἄριστον. τῷ νότῳ καὶ γὰρ  
ἀντίπαροι πέτανται. εἰ δὲ μὴ νότος εἴη, τῷ συγγενεῖ εὐρῷ

ἀπλοῦσι τὰς πτέρυγας, εἷτα κεχήναι καὶ τοῦ πνεύματος ἐμφοροῦνται  
 εἰσρέοντος, καὶ τίκτουσι ζῶα, μὴ μέντοι γε ὡς ὑπηνέμια. διὸ  
 πλείστου χρόνου δεῖται ἡ φύσις πρὸς ζῴον πλαστουργεῖν τὸ  
 λεπτότατον. ἐπειδὴν τοίνυν αἰοῦεις καὶ σὺ συναφείας ἄνευ  
 ἐγκυμονῆσαι τὴν Πάναγνον, πρότερον αὐτῇ Πνεύματος ἁγίου  
 ἐπισκιάσαντος καὶ τοῦ Κυρίου κατὰ τὸν προφήτην ἀπὸ θαιμᾶν  
 ἤξαντος, μὴδ' ὅλως ἀπίσται τῷ πράγματι, καὶ μέγα τῷ ὄντι δοκεῖ  
 καὶ παράδοξον· ἐπὶ γὰρ τούτῳ καὶ ἡ παρὰ φύσιν τῶν γυπῶν  
 κυοφορία θαυμασίως οὕτω τῷ Θεῷ προητοιμάσται.

(Annales Pt I (PG 158, 100D - 101B))

What is even more marvellous than these other things is that vultures  
 - so they say - reproduce without coupling, and this even until  
 a very advanced age, for they live until they are one hundred years  
 old. Why is this so, and for what purpose? So that people would  
 not laugh at the mystery of our faith, on the grounds that it is  
 impossible for a virgin to give birth and yet to remain a virgin,  
 <God> has given us beforehand in nature a thousand reasons for  
 believing in the marvellous. This is what is recorded about these  
 matters by the great Basil. Natural historians also report  
 the marvel that vultures gestate for a three-year period. Listen  
 and I shall tell you how this happens. It is not possible to  
 catch sight of a male vulture; for vultures are bidden by the  
 laws of nature to reproduce without coupling, and for this reason  
 the entire breed of vultures is of the female sex. Vultures  
 know this, and fearing to be left childless, the whole race  
 devises schemes to produce offspring, putting into effect an  
 excellent and cunning device. For they fly against the south

wind; but if the wind is not from the south, they spread their wings to the neighbouring southeast wind, then open their beaks and take their fill of the wind that rushes in, and produce living offspring, not wind-eggs. For that reason, nature requires a considerable amount of time to bring this most delicate of offspring to completion. And so when you hear that the all-holy Virgin became pregnant without coition, after the Holy Spirit had cast His shadow upon her and the Lord God - according to the prophet - had come from Thaeman, do not completely distrust the deed, even if it does in fact seem great and marvellous, for on this account the reproduction of vultures - so contrary to nature - was provided beforehand in this marvellous fashion by God.

29. Dionysius (Byzantine paraphrase)

οἱ γυῖπες δὲ μίγνυνται μὲν ἐπεμβάντες ἀλλήλοις, μάτην δὲ,  
καὶ οὐκ ἂν ποτε συνουσιάζοντες οὕτω παιδοποιήσαιεν, ἀλλ' ἥνικα  
ἂν σχοῖεν πρὸς τὸν τῶν ἁῶν τόκον ἐπιτηδείως, κατὰ τὰ θηρία τὰς  
τίγρεις τὴν αἰδῶ πρὸς τὸν ζέφυρον ἀποστρέψαντες ὑπὸ τῇ πνοῇ  
γαμοῦνται...

(De Avibus I.5)

Vultures mount one another in intercourse, but to no purpose, for whenever they couple thus they do not produce offspring. However, when they are ready to lay eggs, they follow the example of wild animals, or more specifically tigers, and turn their sexual organ towards the west wind which impregnates them...

(Cf App.III, no.7)

30. Roger Bacon (A.D. c.1214 - c.1292)

Et excitari potest mens humana ad partum Virginis per hoc quod quaedam animalia in virginitate permanentia concipiunt et pariunt, ut vultures et apes, sicut dicit Ambrosius in Hexaameron.

(Opus Maius 7.1)

And the human mind can be influenced to accept the Virgin birth by the fact that certain animals, whilst remaining in a state of virginity, conceive and bear offspring, as, for example, vultures and bees, as Ambrose says in his Hexaameron.

(Cf Appendix I, no.33)

31. Brunetto Latini (A.D. 1220 - 1295)

Dell'avoltoio.

... E concepono senza congiungimento di maschio e di femina, e fanno li figliuoli che vivono più di cento anni...

(I Libri Naturali del Tesoro V.35)

The vulture.

... And they conceive without the union of male and female, and bear offspring which live more than one hundred years...

32. Manuel Philes (A.D. c.1275 - 1340)

Περὶ γυψός.

... θῆλυς δὲ πᾶς γυψ, καὶ σπορᾶς ἄνευ κύει.

Χαίτων γὰρ ἀντίπαρος ὕψου πρὸς νότον,

Συλλαμβάνει τὸ πνεῦμα, καὶ τρίτου χρόνου,

Στρουθοὺς πτερωτοὺς ἀπὸ μήτρας ἐξάγει...

(De Animalium Proprietate 3)



The vulture.

... Every vulture is female, and reproduces without the male seed.  
For opening its beak high against the south wind, it conceives  
from that wind, and after a period of three years, produces feathered  
offspring from its womb...

33. Manuel Philes (A.D. c.1295 - 1340)

"Ἐκφοδος περὶ γυπῶν.

Προγνωστικὴν ἔχουσι καὶ γύπες φύσιν  
οὓς μίξεως πλὴν καὶ σπορᾶς λόγος κύειν  
σπῶντας πνοῆς ὀλισθόν ἐν τοῖς ἐγκάτοις...

(In: Ideler, Physici et Medici Graeci Minores p.285)

Poem on vultures.

Vultures have the ability of foresight, and are said to reproduce  
without intercourse and the male seed by sucking in the intangible  
wind deep within their bodies...

34. Konrad von Megenberg (A.D.1309 - 1374)

Von dem geirn.

... Rabanus spricht, daz etleich geir perhaft sein ân unkäusch,  
alsô daz sich der er niht veraint noch vermischet mit der sien,  
und leken iriu kint hundert jar...

(Das Buch der Natur 72)

The vulture.

... Rabanus tells us that any vulture whatsoever can become pregnant  
without being unchaste which means that the male does not associate

with and does not breed with the female, and their offspring live a hundred years...

(Translation by Denis Mackinder-Savage (unpublished))

35. Werner of St.Blaise (? 15th century A.D.)

Negantur vultures indulgere concubitu et coniugali quodam usu nuptialisque copulae sortemisceri, atque ita sine ullo masculorum concipi semine et sine coniunctione generare, natosque ex his in multam aetatem longae vitae procedere, ut usque ad centum annos vitae eorum series producat, nec facile eos angusti aevi finis excipiat. Quid aiunt qui solent nostra ridere mysteria, cum audiunt quod virgo generavit, et impossibilem innuptae, cuius pudorem nulla viri consuetudo temerasset, existimant partum? Impossibile putatur in Dei matre, quod in vulturibus possibile non negatur. Alius sine masculo parit, et nullus refellit, et quia desponsata viro Maria peperit, pudoris eius faciunt quaestionem. Nonne advertimus quod Dominus ex ipsa natura plurima exempla ante praemisit, quibus susceptae incarnationis decorem probaret, et astrueret veritatem?

(Deflorationes Patrum 2, 15)

Vultures - so they say - do not indulge in coition, refraining from that particular conjugal practice and the fate of nuptial coupling, and thus they are conceived without any male seed and produce offspring without intercourse, offspring which live until a considerable age; consequently - so it is said - they produce a series of offspring until they are one hundred years of age, and do not give up their far from brief lives easily. What do those who are accustomed to

laugh at the mysteries of our faith say when they hear that a virgin has given birth? Do they think it impossible for an unmarried woman who has had no contact with a man and whose modesty remains unviolated, to have a child? That which is not denied to be possible in the case of vultures, is thought to be impossible in the mother of God. Another bears without a mate and no one refutes it, yet because Mary bore whilst still betrothed, they question her chastity. Surely we see that the Lord has provided beforehand many examples from nature itself to prove the honour of the birth in question and to convince us of its truth?

36. Ludovicus Rhodiginus (A.D. 1450 - 1520)

In auguriis certe avis praestantissima vultur habebatur, quod Hercules comprobavit, necnon Romanae urbis primordia manifestum faciunt, forte quia rarissime vulturius conspicitur, et inde oblatus aliquid semper creditur portendere. Aut quia, sic uti fabulantur Aegyptii, et in Hexaemero Ambrosius videtur approbasse, vulturii omnes feminae sunt, ac ut zephyro arbores, sic illae euro gravidae fiunt : aut borea, ut prodit Horus.

(Lectionum Antiquarum Commentarii VIII.18)

In augury, indeed, the vulture was considered a most outstanding bird, because Hercules approved of it, because the beginnings of the city of Rome give it prominence, and perhaps because the vulture is seen extremely rarely and for that reason is revered and is always thought to portend something. Or because - as is related by the Egyptians, and apparently supported by Ambrosius in his Hexaemeron - all vultures are female, and just as trees are

fertilised by the westerly breeze, so, too, vultures are impregnated by the southeast wind; or by the northerly wind, as Horus relates.

37. Joannes Ravisius Textor (A.D. ? - 1524)

Vultur.

... Aiunt hanc avem concipere sine masculorum semine, et sine coniunctione generare, natosque ex iis in multam aetatem procedere, ad annum usque centesimum...

(Epitheta p.934 (1592 edit.))

The Vulture.

... They say that this bird conceives without the seed of the male, and reproduces without intercourse, and that its offspring live until a considerable age, in fact until their hundredth year...

38. Arsenius (A.D. 1465 - 1535)

ἀποβλέψης πάλιν τοὺς γύπας, πῶς ἀσυνδυάστως τίκτουνσι, καὶ καταπτύσεις τῶν καταγελῶντων τὸ τῆς ἐνσάρχου οἰκονομίας μέγα μυστήριον, ἀδύνατον καὶ ἔξω τῆς φύσεως εἶναι ληρούντων παρθένον τεκεῖν τῆς παρθενίας αὐτῇ φυλαττομένης ἀχράντου, ἣν Χριστιανοῖς ὑμνητέον εἶναι, ἐπαινετέον τε, καὶ δοξαστέον, μετὰ τὸν ἐξ αὐτῆς σαρκωθέντα Θεὸν ἡμῶν νενόμισται.

(Preface (1533) to Manuel Philes' De Animalium Proprietate)

May you look anew at vultures and the way in which they reproduce without coupling, and despise those who laugh at the great mystery of the incarnation on the grounds that it is impossible and contrary

to nature for a virgin to give birth and yet for her virginity to remain undefiled, she whom it is acknowledged that Christians must celebrate and praise and glorify since our God was made flesh from her.

39. Konrad Gesner (A.D. 1516 - 1565)

Vultures dicuntur sine concubitu concipere et generare, Ambrosius. Inter vultures mas non est. Gignuntur autem hunc in modum : Cum amore concipiendi femina exarserit, vulvam ad Boream ventum ... aperiens, ab eo velut comprimitur per dies quinque quibus nec cibum nec potum omnino capit, fetus procreationi intenta. Sunt porro et alia vulturum... genera quae ex vento concipiunt quidem, sed quorum ova ad esum duntaxat ipsorum non item ad fetum suscipiendum ac formandum sunt accommodata. At eorum vulturum quorum non est subventaneus duntaxat et inefficax coitus, ova ad gignendam tollendamque sobolem sunt in primis idonea, Horus. Auctor est in Hexaemero Magnus Basilius, subventanea ova in ceteris irrita esse ac vana, nec ex illis fovendo quicquam excuti. At vultures subventanea fere citra coitum progignere fertilitate insignia, Caelius. Πέντε δ' ἡμέραις πρὸς πυγὴν πετόμενοι ἀνέμοις, ... κυρίως συλλαμβάνουσι γονὴν ὑπηνεμίων. Io. Tzetzes 12.439. Vulturem non nasci marem aiunt, sed feminas omnes generari. Quam rem non ignorantes hae bestiae, pullorumque solitudinem ac inopiam timentes, ad gignendos pullos talia machinantur. Adversae Austro volant : vel si Auster non spirat, ad Eurum ventum oris hiatu se pandunt. Spiritus venti influens, ipsas implet, Aelianus interprete Gillio. Graece legitur, Ἀντίπαραροι τῷ νότῳ πετόμενοι, κεχήνασιν :

hoc est, adversus Austrum volantes, hiant. Ego utero potius quam ore hiante et aperto, ventum eas concipere dixerim, ut Orus etiam sentit. In Geoponicis haec tanquam Aristotelis verba, legimus, τοὺς γῦπας μὴ συγγίνεσθαι, ἀλλ' ἀντιπράρους τῷ νότῳ πετομένους ἐγκυμονεῖν, καὶ διὰ τριῶν ἐτῶν τέκτειν. Tertio a conceptu anno pariunt : nec nidum struunt, ut fertur... Vultures triennio gerunt uterum. Nullus enim est mas inter eos : sed feminae ore aperto... extensisque alis, Zephyrum, aut eius loco Eurum hauriunt ac inde concipiunt materiam quandam, quae ob sui tenuitatem plurimo tempore eget ad animalis perfectionem. Animal enim, non ovum pariunt, Simocatus [sic] . Aiunt eos saepe sine coitu parere ex vento et calore ac radiis solis, Varinus in Οἰωνός. Vultures quidam temere dicunt animalia parere, et lac et mamillas habere, et cetera talia. Ego vero ut tigrides omnes mares esse invenio, (apud authores:) sic et vulturum genus omne feminineum, Io. Tzetzes. Annum significantes Aegyptii vulturem pingunt. Quoniam animal hoc trecentos illos ac sexaginta quinque dies quibus completur annus ita distribuit, et centum quidem ac viginti diebus praegnans... maneat, totidem pullos enutriet : reliquis vero centum ac viginti sui curam gerat, neque uterum ferens, neque alendis addictum liberis sed seipsum duntaxat ad aliam parans conceptionem. Quinque autem illos qui supersunt anni dies in venti, ut iam dictum est, compressionem et coitum insumit, Orus. Sed varians nonnihil Tzetzes Chiliade [sic] 12. cap. 439. Ova (inquit) subventanea procreant centum et viginti diebus : et totidem aliis excudunt ac pullos producant : denique aliis totidem usque ad volandi facultatem eos educant. Per quinque vero dies ex vento concipiunt.

(Historia Animalium III.p.784 (1585 edit.))

Vultures are said to conceive and bear offspring without intercourse (so Ambrose). Amongst vultures there are no males. Moreover they are born in the following way : when the female is burning with a desire for conception, she opens her sexual organ to the North wind and is covered by him, as it were, for five days. During this period she takes neither food nor drink intent on creating offspring. There are other types of vultures that conceive by the wind, but although their eggs are suitable for eating, they are not fit for the conception and formation of offspring. However, in the case of those vultures whose coupling with the wind is efficacious, their eggs are particularly suitable for the production and rearing of offspring (so Horus). In his Hexaemeron Basil the Great records that, in other birds, wind-eggs are empty and fruitless, and that nothing hatches from them. However, the wind-eggs which vultures produce, generally without intercourse, are noted for their fertility (so <Ludovicus> Caelius <Rhodiginus>). They fly for five days with the winds against their rump, and conceive a seed from the wind (so Ioannes Tzetzes 12.439). They say that no male vulture is born, but that all vultures are female. And these creatures, knowing this and fearing the loneliness of being without offspring, take measure to produce them as follows : they fly against the south wind; but if the wind is not from the south, they spread their wings and fly with open beaks to the southeast wind. The inrush of air impregnates them (so Aelian, interpreted by Gillius). In Greek it reads 'Αντίπρᾶτοι τῷ νότῳ πετόμενοι, κελήναισι : that is, flying against the south wind, they open their beaks. I should prefer to say that they take in

the wind via their gaping wombs rather than through their wide open beaks, and Orus feels the same way. In the Geoponica we read the following words derived from Aristotle : Vultures do not couple with one another; rather, they fly against the south wind and become pregnant, giving birth every three years. In the third year after conception they give birth; nor do they build a nest, so it is said... Vultures gestate for three years. There are no males amongst them; but the females, with their beaks open and their wings extended, imbibe the west wind or, instead, the southeast wind, and conceive from that a certain substance which, on account of its fineness, requires a considerable amount of time to reach the state of being a complete living creature. For they produce living offspring, not eggs (so Simocattes). They say that they often reproduce without intercourse by means of the wind and the heat of the sun's rays (so Varinus in his De Vulture). Certain people rashly say that vultures produce living offspring, and that they have milk and breasts, and other such things. Just as I find that all tigers are male, so too (according to various authors) is the whole race of vultures female (so Ioannes Tzetzes). To indicate the year, the Egyptians paint a vulture. The reason is that this animal divides up those 365 days which form a year in such a way that it gestates for 120 days, feeds its young for the same number, and during the remaining 120 days, takes care of itself, not in pregnancy, nor in feeding its young, but in preparing itself for another conception. The remaining 5 days of the year, as I have already said, it consumes in intercourse with the wind (so Horus). Tzetzes, Chiliades 12, ch.439, differs from this in



certain respects. In 120 days (he says) they produce wind-eggs; in as many more days they hatch out the young; and finally, in as many days again, they rear them until they can fly. During the remaining 5 days they conceive from the wind.

40. C. Ponce de Leon (? 16th century A.D.)

... ceterum illa est vulturis proprietas et sacris et prophanis scriptoribus frequentissima, quod ex vento absque maris concubitu vultures feminae concipere existementur : cuius ex Graecis Basilius, ex Latinis Ambrosius in commentariis Hexaemeri meminerunt. Hinc Valentiniani (auctore Irenaeo, et Tertulliano) imaginarios quosdam Sophiae concubitus argumentabantur : sacri vero auctores conceptionis Deiparae virginis puritatem coniiciunt. Basilius dicto loco : et illo antiquior Origenes contra Celsum : Praeterea (ait) dicendum ad Graecos non credentes Iesum natum de Virgine, mundi opificem in animantium genitura tam varia, satis declarasse, potuisse si libuisset, in uno quoque animali, quod in aliis fecerit, atque etiam in homine facere. Reperiuntur autem inter animantes quaedam feminae quae maris congressum prorsus nesciunt, sicut produnt de vulturibus ii qui scripserunt de naturis animalium, nihilominus hoc animal perpetuat successionem sui generis. Quid igitur mirum si volens Deus divinum quendam magistrum generi hominum mittere, fecit ut vice seminationis quae fit ex congressu maris et feminae, alia quadam ratione consuleretur futuro partui? Hactenus ille. Sed et Cyrillus Alexandrinus in Iambis nondum vulgatis (quos nos ab eodem illo naturae miraculo Guilielmo Sirleto habuimus) περὶ ζῴων ἰδιότητος καὶ φύσεως ad Sergium in eandem sententiam scripsit:

Τίς ἀσπώρῳ τοὺς γῦπας ἐξάγει τόκῳ,  
 Θήλυος παρ' αὐτοῖς οὐχ ὑπούσης ἄρρενος,  
 Οἱ τὴν καθ' ἡμᾶς πυρροροῦσαν παρθένον  
 Δεικνύντες αὐτὴν, ὥς ἐφικτὸν ὀρνέοις;  
 "Ἐδει γὰρ οἶμαι τοῦ τοσοῦτου θαύματος  
 "Ἐχειν ἀμυδρὰς ἐμφάσεις.

Quae nos verbum verbo omnino reddentes, servata tamen metri lege,  
 sic vertimus :

Quis vultures educit absque semine  
 Partu, marito, non subacta femina,  
 Perlucidam nostram exhibentes Virginem  
 Ipsam, ut volucris licet? nam oportuit  
 Miraculi obscuras habere imagines  
 (Ut credo) tanti.

(Commentary on Epiphanius, Physiologus, p.28[24] (1587 edit.))

... but that characteristic of the vulture most frequently recorded  
 by both Christian and pagan writers is that female vultures are  
 thought to conceive by the wind, without intercourse with a male.  
 Amongst Greek authors this is mentioned by Basil, and amongst  
 Latin authors by Ambrose, in their commentaries on the Hexaemeron.  
 From this, the Valentinians (according to Irenaeus and Tertullian)  
 attempted to prove the validity of Sophia's imaginary acts of  
 coition; and Christian authors argue the purity of the Virgin birth.  
 This is true of Basil in the above mentioned work; and his predecessor  
 Origen in the Contra Celsum states : Besides, to Greeks who disbelieve  
 in the Virgin birth of Jesus, I have to say that the Creator  
 sufficiently showed in the birth of various animals that what He  
 did in the case of others, He could do, if He wished, also with one

animal, and even with man. Amongst the animals there are certain females that have no intercourse with the male, as writers on animals say of vultures; nonetheless this creature preserves the continuation of the species. Why therefore, is it incredible that if God wished to send some divine teacher to mankind, he should have used some other method to produce the future child instead of a generative principle derived from the sexual intercourse of man and woman? Thus states Origen. The same sentiment was expressed by Cyril of Alexandria in his iambics entitled On the Character and Nature of Animals which he dedicated to Sergius and are as yet unpublished (but which we have, by that same miracle of nature, from Guilielmus Sirleto) :

Who brings forth vultures, conceived without a seed, since there are females but no males amongst them? ask those who point out the similarity between the virgin who brought light to the world, and birds. In my mind, it was necessary to have pale reflections of this great marvel.

We have translated these lines, rendering them word for word, but at the same time preserving their metre, as follows:

[Here the author gives a Latin version of the same lines.]

41. Ulissee Aldrovandi (A.D. 1522 - ?1605)

... Praeterea in vulturum specie femineum sexum tantummodo reperiri plurimi asserunt : prodigiosum quendam procreandi ritum, et qui a feminas solis nulla maris opera peragatur, commenti. Hoc tamen Aelianus, velut ex aliena sententia, adstruit, cum inquit : Vulturem non nasci marem aiunt, sed feminas omnes generari, quam rem non ignorantes hae bestiae pullorumque solitudinem ac inopiam timentes, ad gignendos pullos

talia machinantur. Adversae Austro volant, vel si Auster non spiret, ad Eurum ventum oris hiatu se pandunt. Spiritus venti influens ipsas implet. Idem, at paulo aliter Orus : Inter vultures, inquit, mas non est, gignuntur aves hunc in modum : Cum amore concipiendi femina exarserit, vulvam ad Boream ventum aperiens, ab eo velut comprimitur per dies quinque, quibus nec cibum, nec potum omnino capit, fetus procreationi intenta. Hinc Pictorius.

Vulturis et miram naturam dicere possum,  
 Dum genus hoc marem non peperisse patet. Et Tzetzes:  
 Vultures quidam inconsiderate dicunt animantia parere,  
 Habereque lac, et mammas, et cetera talia:  
 Ego autem, ut inveni mares esse omnes tigrides,  
 Sic et feminineum vulturum inveni omne genus,  
 Quinque autem diebus natibus volantes contra ventos  
 His concipiunt prolem subventaneam.

Tantum nonnumquam valet in animis hominum praeoccupata opinio, ut etiam Magnus ille Basilius, sive ita ex animo sentit, sive aliorum placita in usum suum traducit, subventanea ova in ceteris irrita esse author sit, nec ex illis fovendo quidquam excuti, at in vulturibus citra coitu fecunditate esse insignia. Paulo cautius D. Ambrosius, non simpliciter asseverat, sed Vultures dicuntur, inquit, sine concubitu concipere et generare. Verum ut in hoc plerisque inter se convenit, quod absque coitu e vento concipiant feminae : ita quam diu uterum gerant, ac quid tandem pariant, mire authores variant : Sic Orus; Animal hoc trecentos illos ac sexaginta quinque dies, quibus completur annus, ita distribuit, ut centum quidem et viginti diebus praegnans maneat, totidem pullos enutriat,

reliquis vero centum ac viginti sui curam gerat, neque uterum ferens, neque alendis addictum liberis, sed seipsum duntaxat ad aliam parans conceptionem. Quinque autem illos qui supersunt anni dies in venti, ut iam dictum est, compressionem, et coitum insumit. Quapropter Aegyptii annum, ut idem testatur, significaturi, vulturem depingunt. Ab hoc in temporis distributione, ac educationis diuturnitate nonnihil dissentit Tzetzes, ita inquires:

Quinque autem diebus natibus volantes contra ventos,  
 His concipiunt prolem subventaneam,  
 In centum autem et viginti diebus procreant  
 Subventanea ova, in totidem vero aliis  
 Ex ovis extrudunt, et pullos generant,  
 In centum autem et viginti diebus aliis,  
 usque ad alarum perfectionem ipsorum educant illos.

Ita de eorum partu; alioquin Oro conformis est, qui suam sententiam his verbis explicat : Sunt porro et alia vulturum genera, quae ex vento [non] concipiunt, quorum ova ad esum duntaxat, non item ad fetum suscipiendum ac formandum sunt accommodata. At eorum vulturum, quorum non est subventaneus duntaxat, et inefficax coitus, ova ad tollendam, gignendumque sobolem sunt in primis idonea. Huic opinioni suffragatur non solum Plinius, sed et Aristoteles, veritas ipsa, quantum quidem ad ovorum procreationem attinet. Plinius quidem diversis locis Umbricium etiam aruspitem clarissimum testem allegans, ova excludere vultures asserit. Idem ipsemet Aristoteles his disertis verbis, quae post citabimus, testatur. Ab horum sententia longe discedunt Simocatus [sic], Philes. Et Aristoteles ipse (si diis placet) sui scilicet oblitus, nisi potius huius similis quispiam

nobis fucum facit, in Geoponicis, quae eius nomine circumferuntur, ita scribens : Vultures tertio a conceptu anno pariunt, nec nidum struunt, ut fertur, neque ova pariunt, sed statim pullos, eosque mox a nativitate volucres. Huic quisquis est, magis quam veritati consentanea dicit Simocatus, ubi, Vultures, inquit, triennio uterum gerunt, nullus enim est mas inter illos, sed femina ore aperto, extensisque alis Zephyrum aut eius loco Eurum hauriunt, ac inde concipiunt materiam quandam, quae ob sui tenuitatem plurimo tempore eget ad animalis perfectionem, animal enim, non ovum pariunt. Ab horum parte stat Philes ita scribens:

Θῆλυς δὲ πᾶς γῦψ καὶ φθορᾶς ἄνευ κύει,  
 Χαίτων γὰρ ἀντίπρωτος ὑψοῦ πρὸς νότον,  
 Συλλαμβάνει τὸ πνεῦμα, καὶ τρίτου χρόνου  
 Στρουθοῦς πτερωτοῦς ἀπὸ μήτρας ἐξάγει.  
 Οἱ ζῶσιν εὐθὺς ἐξ ὀνύχων ἀρπάγων, id est,  
 Femina vero omnis vultur, et absque coitu gignit,  
 Hians enim conversus in sublime ad Notum  
 Concipit spiritum, et tertio anno  
 Pullos volucres e matrice excludit;  
 Qui vivunt e vestigio ope unguium rapacium.

Hi quidem omnes vultures feminas tantum esse, et sine copula, ut Isidori verbis utar, concipere et generare unanimiter asserunt... At in reliqua procreationis fabula texenda mire variant, cum hic oviparum, alius viviparum facit; hic intra centum et viginti dies; ille non citius triennio parere affirmet. Nimirum ut simplex et una est veritas, ita mendacium multiplex, et ex uno, ut inquit philosophus, absurdo multa sequuntur. Verum de hac opinione satis superque dictum sit. Nunc alteram partem audiamus, quae cum superiore

pugnat. Primum nidificare vulturem, idque in excelsissimis rupibus ante ex Aristotele et Plinio patuit. Sed et Niphus in Italia se vulturis nidum vidisse scribit. Albertus Magnus philosophus haud vulgaris, et D. Thomae praeceptor, non solum nidos eos extruere, sed et venerem exercere aperte docet, ubi ait : In montibus, quae sunt inter civitatem Vangionum, quae nunc Vuormatia vocatur, et Treviros, singulis annis nidificant vultures... Quod autem fertur quosdam vultures non coire, falsum est : nam illic quoque saepe permisceri videntur. Sed ut eo loco permisceri visos esse tanto viro lubens credo, tamen quam bene ex hoc colligat nullos non coire, non video : Fieri enim potest, ut sterile quoddam sit vulturum genus, ut paulo post Aristoteli et Plinio placere demonstrabimus, et quod absque veneris illecebris vitam agat. Ut vero quid sentiam hac in re dicam, plerosque coire certus sum, et fabulosa reputo, quae de conceptu ex vento feruntur : non tamen omnes fecundos necessario statuendos existimo. Etenim et marem et feminam in vulturum etiam genere reperiri, et feminam a mari iniri naturae lex dictat.

(Ornithologia III, pp.244 - 245 (1645-46 edit.))

... Besides, a good many writers declare that in the breed of vultures only the female sex is found; they note a certain miraculous ritual of procreation, and how it is carried out by females alone, without the help of a male. Aelian, apparently following another's point of view, reinforces this when he says:

It is said that no male vulture is born, but that all are female. And these creatures, knowing this and fearing the loneliness of being without offspring, take measures to produce them as follows :

they fly against the south wind; but if the wind is not from the south, they spread their wings and fly with open beaks to the southeast wind. The inrush of air impregnates them. Much the same statement is made by Horus : Amongst vultures, he says, there are no males. Offspring are born in the following way : when the female is burning with a desire for conception, she opens her sexual organ to the North wind and is covered by him, as it were, for five days. During this period she takes neither food nor drink, intent on creating offspring. Hence Pictorius:

I can also tell of the marvellous nature of the vulture, since it appears that this species has never produced a male.

And Tzetzes:

Some people, without investigation, say that vultures bear their young live, and that they have milk and breasts and other such things. But just as I found that all tigers were male, so too have I found that the whole race of vultures is female. They fly for five days with the winds against their rump and conceive offspring from the wind.

Established opinion is occasionally so strong in the minds of men that even Basil the Great, whether expressing his own viewpoint, or adopting the views of others for his own use, records that wind-eggs in other birds are fruitless, and that nothing hatches out from them, but that in vultures, eggs produced without coition are noted for their fertility. Ambrose makes a rather more cautious, although by no means naive, statement: Vultures, he states, are said to conceive and reproduce without intercourse. But just as many authors are in agreement on this point, namely, that the females



conceive from the wind without coition, so there is marvellous variation as to the length of gestation and the product finally created. Thus Horus records : This creature divides up those 365 days which form a year in such a way that it gestates for 120 days, feeds its young for the same number, and during the remaining 120 days, takes care of itself, not in pregnancy, nor in feeding its young, but in preparing itself for another conception. The remaining 5 days of the year, as I have already said, it consumes in coition with the wind. It is for this reason, as the same author attests, that the Egyptians paint a vulture to signify the year. On the distribution of time and the period devoted to the rearing of offspring, Tzetzes disagrees in some respects, saying:

They fly for five days with the winds against their rump and conceive offspring from the wind. In 120 days they produce wind-eggs, in as many more days they hatch out the young from the eggs, and in a further 120 days, they rear them until they can fly.

This was what Tzetzes wrote concerning the offspring of vultures; in other respects he conforms with Horus, who explains his viewpoint with these words: There are other types of vultures that [do not] conceive by the wind, but although their eggs are suitable for eating, they are not fit for the conception and formation of offspring. However, in the case of those vultures whose coupling with the wind is efficacious, their eggs are particularly suitable for the production and rearing of offspring. This opinion is supported not only by Pliny, but also by Aristotle, the truth itself, in so far as pertains to the procreation of eggs. Indeed, in a number

of places Pliny asserts, citing Umbricius, the well-known soothsayer, as his witness, that vultures lay eggs. The same thing is attested by Aristotle himself in those well-written words which we shall cite below. Simocattes and Philes depart considerably from the viewpoint of these two. And even Aristotle (the gods being willing) evidently forgot himself - unless some ape is deceiving us in this matter - when he wrote in the Geoponica, which are circulated under his name, as follows: Vultures reproduce in the third year after conception, do not build a nest, as is reported, and do not produce eggs, but right away give birth to live offspring which are possessed of speed soon after birth. Simocattes agrees with this author, whoever it is, rather than with the truth when he says: Vultures gestate for three years. There are no males amongst them; but the females, with their beaks open and their wings extended, imbibe the west wind or, instead, the southeast wind, and conceive from that a certain substance which, on account of its fineness, requires a considerable amount of time to reach the state of being a complete living creature. For they produce living offspring, not eggs. On the side of these authors stands Philes who writes:

Every vulture is female, and reproduces without corruption, for opening its beak high against the south wind, it conceives from that wind, and after a period of three years, produces feathered offspring from its womb. From the beginning, these live by means of their rapacious talons. That is:

[Here the author gives a Latin version of the same lines.]

These authors unanimously agree that all vultures are female, and - to use the words of Isidore - that they conceive and produce offspring without coition... But they differ marvellously in weaving the rest of the story of their procreation, for one makes the vulture oviparous, another, viviparous; and this author declares that they give birth within 120 days, whilst that one asserts that it is no sooner than three years. There can be no doubt that, just as truth is one and simple, so falsehood is many-faceted, and from one absurdity, as the philosopher says, come many. But enough, and more, has been said about this matter. Now let us hear the other side which is at odds with the above. Firstly, it was evident above, from Aristotle and Pliny, that the vulture builds a nest, and does so on the highest of rocky cliffs. Niphus, too, writes that he has seen a vulture's nest in Italy. Albertus Magnus, the outstanding philosopher, and teacher of Thomas, instructs that they not only build nests, but also make love openly, when he says: In the mountains, between the state of the Vangiones, now called Vuormatia, and the Treviri, vultures construct nests each and every year... Moreover, the rumour that certain vultures do not couple, is without substance; for there, too, they are frequently seen having intercourse. But although I willingly believe that they have been seen having intercourse in that place by this great man, I nevertheless do not see how he concludes from this that none of them abstain from coition. For it can happen that a certain type of vulture is sterile (this, as we shall shortly prove, was the view of Aristotle and Pliny), and that it lives its life without the delights of love. To give my opinion on this matter, I am certain that most vultures

couple, and I consider reports about conception by the wind to be fabulous. I do not, however, believe that all vultures are necessarily to be considered fertile. For the law of nature dictates that both a male and a female are found even in the race of vultures, and that the female is impregnated by the male.

42. Ulisse Aldrovandi (A.D. 1522 - ?1605)

Plurima per vultures in mysticis suis notis denotabant Aegyptii sapientes, eaque non abiecta, sed summa quaeque et divina : cuiusmodi fuerunt annus, mater, sive naturae vocabulum...

Vultur, ut apud Aegyptios habetur, trecentos eos et sexaginta quinque dies, quibus annum conficitur spatium, ordine mirifico partitur. Nam cum annum in tribus tantum spatiis meterentur, vere quippe aestate et hieme, ipsi singula tempora centum viginti diebus constare voluerunt, ac quinque insuper dies addiderunt, quos interea lares vocabant. Vultur vero ad eiusmodi partitionem anni apte accommodatur. Nam cum primum excitatus fuerit ad conceptum quem a vento fieri volunt, tum quinque continuos dies pertinacissimo ieiunio maceratus perdurat sine cibo et potu : mox centum et viginti dies pregnans manet, totidem diebus pullos educat; per reliquos centum viginti dies, ut quibusdam placet, immunis est, suarumque tantum rerum satagit, neque pregnationi operam dat, neque educationi. Quamvis [ut suo loco monuimus, quidam eum totum anni curriculum] generationis ac educationis officio tradant impendere : quibus subscribit Tzetzes...

Cum in genere vulturum marem nusquam inveniri arbitrati sint, sed omnes feminas, quod priori opinioni congruit, quae ex vento eas concipere existimat, itaque manifestum est cur Aegyptii sacerdotes per eam alitem, uropygio surrecto atque ad aquilonem verso, matrem

aut naturam intelligant : Mater siquidem femineum est animal.

Vultur enim, ut ex antiquorum Aegyptiorum sententia dictum est, appetente conceptus tempore, quod per quinque dies illos quos supra memoravimus, producit, sine mare, eo quo dictum fuit modo, impletur.

(Ornithologia III, p.263 (1645-46 edit.))

In their mystical script Egyptian scholars used vultures to denote a good many things, all of which were not lowly but lofty and divine : they included the year; a mother, or the word for the female sexual organ... According to the Egyptians, the vulture divides up in a marvellous fashion those 365 days which form the space of a year. For since they split the year into three parts only, namely, spring, summer and winter, they themselves considered that the individual sections comprised 120 days, and they added 5 days on top of that, which they called the 'lares'. The vulture is easily accommodated to such a partition of the year. For as soon as it hungers after conception, which - according to the Egyptians - occurs by means of the wind, then for five continuous days it lasts without food or drink, emaciated by its constant fasting; next, it gestates for 120 days, and feeds its young for the same number; during the remaining 120 days, as certain authors report, it is free, and devotes itself to nothing but its own concerns, spending time neither in pregnancy nor in the rearing of its offspring. However, as we advised in the appropriate place, some authors record that it devotes the whole cycle of the year to the task of reproducing and rearing. This view is supported by Tzetzes...

Since they thought that no male was to be found anywhere in the race of vultures, but that all were female - and this coincides with the

view expressed above, to the effect that vultures conceive by the wind - it is therefore clear why the Egyptian priests use that bird, with its rump lifted and turned to face the north wind, to signify a mother, or the female sexual organ; for a mother is an animal of the female sex. Indeed, it was the opinion of the ancient Egyptians, as has already been stated, that the vulture, at the time of conception, which lasts for those five days mentioned above, is impregnated without the assistance of a male, in the manner already described.

43. Physiologus (early 17th century A.D.)

Περὶ τοῦ γυπὸς

... κανεῖς δὲ γυψ ἀρσενικὸς δὲν εὐρίσκεται, ἀλλὰ εἶναι ὅλοι θηλυκοί. καὶ ἐπειδὴ ἀρσενικὸς δὲν εἶναι, μὲ τοιοῦτον τρόπον συλλαμβάνουσι οἱ θηλυκοί· στέκονται κατέναντι τοῦ νότου ἀνέμου καὶ χάσκουσι καὶ μετ' ἐκεῖνον τὸν ἀνεμον ἐγγαστρῶνουνται καὶ ἕως τρίτου χρόνου γεννοῦσι πουλῖα πάλιν θηλυκὰ καὶ ἐκεῖνα.

(In: Delatte, Anecdota Atheniensa vol.1, p.378)

The vulture.

No male vultures are found, but all are female. And since there are no males, the females conceive in the following fashion : they fly against the south wind with their beaks open, and they are impregnated by that wind, and after a period of three years they produce offspring which are likewise female.

44. Joannis E. Nieremberg (A.D. 1595 - 1658)

... Alio quoque puriori modo, virgineo scilicet, propagantur aliqua

animalia, sine nuptiis, sine coitu, sine mare, sine semine, absque virtute adventitia in corpus generantis et parientis transfusa aut communicata...

Similis fecunditatis ritus vulturibus tribuitur, de quibus Theophylactus Simocata [sic] haec scribit. Multa inter aves genera. Non opus habent masculorum copulatione ad conceptionem : sed alia quidem, quae ventosa sunt, non pariunt; vultures autem, ut sine marium coniunctione pariant, naturae ferunt leges. Vulturem itaque videre non est masculum, sed omnem sexum iis interclusit natura feminae : quod cum sciant vultures, orbitatem veriti, liberorum in conceptionem omne genus incumbit, quemadmodum Lemniades mulieres heroum videntes appellantem classem. Multiplices deinde nectunt vultures astutias : adversus Notum ventum volitant. Quod si Notus non sit, ad affinem ei Eurum expandunt alas, postea hiant, ac ita vento influente replentur, et pariunt, non ova ventosa, sed fetus vivos. Idcirco plurimo tempore natura opus habet ut animal perficiat : difficile namque et operosum nimis est naturae, animali dare essentiam, et ad animalis perfectionem perducere id quod est tenuissimum. Dicuntur enim vultures triennium ferre... Phoenicis regeneratio, avis virginis, ad spontaneam originem remittenda est. Sed ut hoc fabulosum, ita alia satis certa non sunt.

(Historia Naturae VI.7)

... In another purer, and evidently chaste fashion, some animals reproduce without nuptial bonds, without intercourse, without a male, without semen, and without the additional male force being transferred or communicated to the body of the one that is reproducing and giving birth...

A similar fertility ritual is attributed to vultures, concerning which Theophylactus Simocattes writes as follows: Many types of birds exist. They have no need of intercourse with males to conceive; but whereas other birds that have been impregnated by the wind do not give birth, the laws of nature are such that vultures reproduce without coition with males. Thus it is not possible to see a male vulture, for the nature of the female precludes that whole sex. Knowing this and fearing childlessness, the entire breed of vultures throws itself into the conception of offspring, in the same way as the women of Lemnos did when they saw a fleet of heroes arriving. They devise a number of cunning schemes : they fly against the south wind; but if the wind is not from the south, they spread their wings to the neighbouring southeast wind; then they open their beaks and are impregnated by the inrush of air, and produce not wind-eggs but living offspring. For that reason nature requires a considerable amount of time to bring the creature to completion : for it is a difficult and excessively laborious task for nature to give essence to a living creature and to bring to perfection that which is extremely delicate. Vultures are said to gestate for three years...

The rebirth of the phoenix, the virgin bird, is to be attributed to spontaneous generation. But just as this is fabulous, so, too, the other things mentioned are not entirely certain.



APPENDIX V: Passages concerning the role of the wind in the reproduction of sheep.

The following is a chronological list of all passages cited by number in chapter VI.

1. Aristotle (384 - 322 B.C.)

... καὶ βορείοις μὲν ὀχευόμενα ἀρρενοτοκεῖ μᾶλλον, νοτίοις δὲ θηλυτοκεῖ.

(Historia Animalium 574 a 1-2)

If copulation takes place while north winds are blowing, they tend to produce males; if south winds, females.

(Translation by A.L. Peck)

2. Aristotle (384 - 322 B.C.)

καὶ τὸ βορείοις ἀρρενοτοκεῖν μᾶλλον ἢ νοτίοις <διὰ ταῦτὸ συμβαίνει· ὑγρότερα γὰρ τὰ αἵματα νοτίοις,> ὥστε καὶ περιττωματικώτερα. τὸ δὲ πλεῖον περίττωμα δυσπεπτότερον· διὸ τοῖς μὲν ἄρρεσιν ὑγρότερον τὸ σπέρμα, ταῖς δὲ γυναῖξιν ἡ τῶν καταμηνίων ἔκκρισις... φασὶ δὲ καὶ οἱ νομεῖς διαφέρειν πρὸς θηλυγονίαν καὶ ἀρρενογονίαν οὐ μόνον ἔαν συμβαίῃ τὴν ὀχείαν γίνεσθαι βορείοις ἢ νοτίοις, ἀλλὰ καὶ ὀχευόμενα βλέπει πρὸς νότον ἢ βορέαν· οὕτω μικρὰν ἐνίοτε ῥοπὴν αἰτίαν γίνεσθαι τῆς ψυχρότητος καὶ θερμότητος, ταῦτα δὲ τῆς γενέσεως.

(De Generatione Animalium 766 b 34 - 37;

767 a 8 - 13)

Also, the fact that when the wind is in the north male offspring tend to be engendered rather than when it is in the south <is due to the same cause : animals' bodies are more fluid when the wind is in the south> so that they are more abundant in residue as well. And the more residue there is, the more difficulty they have in concocting it; hence the semen of the males and the menstrual discharge of the women is more fluid... also, shepherds say that it makes a difference so far as the generation of males and females is concerned not only whether copulation occurs when the wind is in the north or in the south, but also whether the animals face north or south while they are copulating : such a small thing thrown in on one side or the other (so they say) acts as the cause of heat and cold, and these in turn act as the cause of generation.

(Translation by A.L. Peck)

3. Columella (1st century A.D.)

Ac si res exigit ut plurimi mares progenerandi sint, Aristoteles vir callidissimus rerum naturae praecipit admissurae tempore observare siccis diebus halitus septentrionales, ut contra ventum gregem pascamus, et eum spectans admittatur pecus : at si feminae generandae sunt, austrinos flatus captare, ut eadem ratione matrices ineantur.

(De Re Rustica VII. 3. 12)

If circumstances require that more males than females should be produced, Aristotle, that shrewd researcher into natural phenomena,

advises that in the breeding season we should look out for breezes from the north on dry days, so as to pasture the flock facing this wind, and that the male should cover the female looking in that direction; if, on the other hand, female births are desired, we should seek for southern breezes, so that the ewes may be covered in the same manner.

(Translation by E.S. Forster and E. Heffner)

4. Pliny (A.D. 23/24 - 79)

Aquilonis flatu mares concipi dicunt, austri feminas...

(Naturalis Historia VIII. 72. 189)

They say that male lambs are got when a north wind is blowing and female when a south...

(Translation by H. Rackham)

5. Aelian (A.D. c.170 - 235)

τά γε μὴν πρόβατα κἀκεῖνο οἶδεν, ὅτι αὐτοῖς ὁ βορρᾶς καὶ ὁ νότος συμμάχονται πρὸς τὸ τίγκτειν ὄν μεῖον τῶν ἀναβαινόντων αὐτὰ κριῶν· οἶδε δὲ καὶ τοῦτο, ὅτι ἄρα ὁ μὲν βορρᾶς ἀρρενοποιὸς ἐστίν, ὁ δὲ νότος θηλυγόνος εἶναι πέφυκε· καὶ ἐὰν δέηται τοῦδε τοῦ ἐκγόνου ἢ τοῦδε ὀχευομένη ἢ οἷς, πρὸς τὸν ἀπέβλεψεν ἢ πρὸς τὸν... αἱ δὲ οἷς ἀπραγμόνως τοὺς ἀνέμους ἐς ὥδῃνα τὴν σφετέραν ὑπηρετίας ἐτοίμους καὶ ἀκλήτους ἔχουσι. σκοποὶ δὲ ἄρα τούτων εἰσι καὶ οἱ ποιμένες ἀγαθοί. ὅταν γοῦν ὁ νότος πνέῃ τότε τοὺς κριοὺς ἐπὶ τὰς οἷς ἄγουσιν, ἵνα ἡ γονὴ θηλυγόνος ᾗ αὐτοῖς μᾶλλον.

(De Natura Animalium VII.27)

Moreover sheep know this too, <namely> that the north wind and the south wind, no less than the rams which mount them, are their allies in promoting fertility. And this also they know, that whereas the north wind tends to produce males, the south wind produces females. And a sheep that is being covered faces in this direction or in that according as it wants a male or a female offspring... Sheep without any trouble have <the winds> ready and unsummoned to help them to pregnancy. And so shepherds also are good at looking out for them. At any rate when the south wind blows they put the rams to the sheep, in order that their offspring may preferably be female.

(Adapted from the translation by A.F. Scholfield)

6. Palladius (4th century A.D.)

Aristoteles adserit, si masculos plures creari velis, admissurae tempore siccos dies et halitum septentrionis eligendum et contra eum ventum greges esse pascendos; si feminas generari velis, Austri captandos flatus et in eum pascua dirigenda ac sic ineundas matres.

(Opus Agriculturae VIII.4)

Aristotle declares that, if you wish a greater number of males to be produced, in the breeding season you should select dry days on which the breeze is from the north, and pasture the flocks facing this wind; but if you desire female births, you should seek southern breezes, direct the grazing sheep to face these, and ensure that the ewes are covered thus.

7. Geoponica (10th century A.D.)

ἐὰν δὲ ἄρρενα πλείω τις βούληται τίκτεσθαι, καταντικρὺ τῶν  
ἀριτῶν ἀνέμων νεμομένης τῆς ἀγέλης, ἡμέρας εὐδαίμου, τοὺς  
κριοὺς ἐνακριέτω · ἐὰν δὲ θηλυκά, νότου ὀπισθεν πνέοντος.  
δοκεῖ δὲ καὶ ἐπὶ τούτων, καὶ ἐπὶ πάντων τῶν ζώων τὸ αὐτὸ  
ἀρμόζειν.

(Geoponica XVIII. 3.6)

Whoever wishes a greater number of males to be produced, should admit the rams on a calm day whilst the flock grazes facing the northerly winds; but whoever desires female births should admit the rams whilst the southerly wind is blowing from behind. This practice seems to be appropriate not only for sheep, but for all animals.

8. Albertus Magnus (A.D. c.1200 - 1280)

Contingit aliquando, quod si impraegnentur stantes contra impetum venti septentrionalis, generabunt mares : et si vertantur in coitu contra meridionalem ventum, generabunt feminas, propter evaporationem caloris spermatis per poros coeuntium, quos restringit Aquilonis frigiditas.

(De Animalibus VI. 2.109)

It sometimes happens that if they are impregnated as they stand facing the blast of the northerly wind, they will give birth to males, and if they are turned to face the southerly wind at time of coition, they will give birth to females, for when they are chilled by the cold northerly, the heat of the sperm evaporates through their pores as they couple.

9. Charles Estienne and Jean Liébault (16th century A.D.)

If the farmer desire to have many weather lambes, it will be good according to the counsell of Aristotle, to observe and spie out a dry time when the northerne winde bloweth : and then to cause the flocke to feede drawing directly upon the same winde, and in that very time, and after that sort to make the ewes take ranne : But and if he woulde have many ewe lambes, he must draw them to feede upon a southerne winde, and so let the rams cover them.

(Maison Rustique or The Countrie Farme I.25)

APPENDIX VI: Passages concerning the wind fertilisation of mythical and legendary women.

The following is a chronological list of all passages cited by number in chapter VIII:

1. Alcaeus (late 7th/early 6th century B.C.)

... δεινότατον θέων,

<τὸν> γέννατ' εὐπέδιλλος Ἴρις

χρυσοκόμαι Ζεφύρῳ μίγνισα

(fr. Z3 (Lobel and Page))

... the most powerful of gods,

born of the union of well-sandalled Iris

and golden-haired Zephyrus

2. Simonides (558/552 - 468 B.C.)

(= Schol. Apollonius Rhodius I.211-215)

Τὴν δὲ Ὀρείθυιαν Σιμωνίδης ἀπὸ Βριλησσοῦ φησὶν ἀρπαγεῖσθαι ἐπὶ τὴν Σαρπηδονίαν πέτρῳ τῆς Θράκης ἐνεγθῆναι ... ἡ δὲ Ὀρείθυια Ἐρεχθέως θυγάτηρ, ἣν ἐξ Ἀττικῆς ἀρπάσας ὁ Βορέας ἤγαγεν εἰς Θράκην κάμειτσε συνελθὼν ἔτεκε Ζήτην καὶ Κάλαιν, ὡς Σιμωνίδης ἐν τῇ Ναυμαχίᾳ.

(fr. 3 (Bergk))

Simonides states that Oreithyia was carried off from Brilessos and conveyed to the rock of Sarpedon in Thrace ... Oreithyia, the daughter of Erechtheus, whom Boreas carried off from Attica and took to Thrace, there united with him and gave birth to Zetes and Calais, as Simonides reports in the Naumachia.

3. Pherecydes (early 5th century B.C.)

(= Schol. Apollonius Rhodius I.211-215)

... περὶ δὲ τῆς Θρακίας Σαρπηδονίας πέτρας, ὅτι πρὸς τῷ Αἷμῳ  
ὄρει ἐστὶ, Φερεκύδης φησὶ, περὶ τῆς ἄρπαγῆς ἱστορῶν τῆς  
Ὀρειθυίας.

(Fr. Gr. Hist. 3 fr. 145 (Jacoby))

... On the matter of the rock of Sarpedon in Thrace, Pherecydes,  
speaking of the rape of Oreithyia, says that the rock is near  
Mount Haemus.

4. Aeschylus (525/4 - 456/5 BC)

<BOP.> '... καὶ καμίνου σχῶσι μάλιστα σέλας.  
εἰ γὰρ τιν' ἐστιοῦχον ὄψομαι μόνον,  
μίαν παρείρας πλεκτάνην χειμάρροσιν  
στέγην πυρώσω καὶ κατανθρακίσσομαι.  
νῦν δ' οὐ κέκραγά πω τὸ γενναῖον μέλος.'

(fr. 492(b) (Mette))

<BOREAS> '... and they have checked the oven's greatest flame.

For if I see only one person guarding the hearth, I shall  
form a single stormy whirlwind, set fire to the house and  
burn it to cinders. Not yet have I screeched my true song.'

4. (a) Pindar (518 - 436/2 B.C.)

... ταχέες

ἀμφοι Παγγαίου θεμέθλοις ναιετάοντες ἔβαν'

καὶ γὰρ ἐκὼν θυμῷ γελανεῖ θάσσον ἔν -

τυνευ βασιλεὺς ἀνέμων

Ζάταν Κάλαιν τεπατὴρ Βορέας, ἄνδρας πτεροῖσιν



νῶτα πεφρίκοντας ἄμω παρυφίοις.

(Pythia IV. 179 - 183)

... and swift came two who dwelt

Beneath the strong

Foundations of Pangaeon's height;

For gladly with a joyful heart their father

Boreas, sovereign of the winds, commanded

Zetes and Calais to the task, those heroes

Whose backs on either side bear fluttering wings

Of purple.

(Translation by Geoffrey S. Conway)

5. Acusilaus (5th century B.C.)

(= Schol. Homer, Odyssey XIV.533)

Ἐρεχθεὺς ὁ τῶν Ἀθηναίων βασιλεὺς ἴσχει θυγατέρα τοῦνομα Ὀρείθυιαν  
κάλλει διαπρεπεστάτην. κοσμήσας δὲ ταύτην ποτὲ πέμπει κλητὸν  
θύσουσιν εἰς τὴν ἀκρόπολιν τῇ Πολιάδι Ἀθηναί. ταύτης δὲ ὁ Βορέας  
ἄνεμος ἐρασθεὶς λαθὼν τοὺς βλέποντας, καὶ φυλάσσοντας τὴν κόρην  
ἤρπασεν. καὶ διακομίσας εἰς Θράκην ποιεῖται γυναῖκα. γίνονται δὲ  
αὐτῷ παῖδες ἕξ αὐτῆς Ζήτης καὶ Κάλαϊς, οἳ καὶ δι' ἀρετὴν μετὰ τῶν  
ἡμιθέων εἰς Κόλχους ἐπὶ τὸ νόμος ἔπλευσαν ἐν τῇ Ἀργοῖ. ἡ δὲ  
ἱστορία παρὰ Ἀκουσίλαω.

(Fr. Gr. Hist. 2 fr. 30 (Jacoby))

Erechtheus king of the Athenians had a daughter named Oreithyia who  
was most conspicuous for her beauty. One day he attired her and sent  
her with a sacred basket to sacrifice on the acropolis to Athena Polias.  
Filled with love for her, the North-wind Boreas carried off the maiden  
without being seen by those who were watching and guarding her. And  
having conveyed her to Thrace, he made her his wife. To him by her

were born sons, Zetes and Calais, who by reason of their valour sailed on the Argo with the demigods to Colchis in search of the fleece.

6. Sophocles (c.496 - 406 B.C.)

παρὰ δὲ Κυανεᾶν πελάγει διδύμας ἄλδς  
 αἰταὶ Βοσπόριαι ἡδ' ὁ Θρηγῶν - υ -  
 Σαλμυδησσός, ἔν' ἀγχίπολις Ἄρης  
 διασσοῖσι Φινεΐδαις  
 εἶδεν ἀρατὸν ἔλκος  
 τυφλωθὲν ἐξ ἀγρίας δάμαρτος,  
 ὀλαὸν ὀλαστόροισιν ὀμμάτων κύκλοις,  
 ἀραχθέντων ὑφ' αἱματηραῖς  
 χεῖρεσσι καὶ κερκίδων ἀνμαῖσιν.

κατὰ δὲ τακόμενοι μέλεοι μελέαν πάσαν  
 κλαῖον, ματρὸς ἔχοντες ἀνύμφευτον γονάν·  
 ἃ δὲ σπέρμα μὲν ἀρχαιογόνων  
 ἄντασ' Ἐρεχθεΐδαν,  
 τηλεπόροις δ' ἐν ἄντροις  
 τράφη θυέλλαισιν ἐν πατράϊς  
 Βορεᾶς ἄμιππος ὀρθόποδος ὑπὲρ πάγου,  
 θεῶν παῖς...

(Antigone 968 - 986)

By the waters of the Dark Rocks, the waters of the two-fold sea lie the cliffs of the Bosphorus and Thracian Salmydessus, where Ares, neighbour to the city, saw the accursed blinding wound inflicted on the two sons of Phineus by his angry wife, bringing blindness to the avenging orbs of their eyes, smitten by bloody hands and a pointed rod.

Pining away in misery they lamented their wretched suffering, having been born of an unhappily married mother; she derived her lineage from the ancient Erechtheid race, and in far distant caves was nourished on the wild winds of her father, she, the daughter of Boreas, swift as horses over the steep rocky cliff, a child of the gods...

## 7. Herodotus (5th century B.C.)

Λέγεται δὲ λόγος ὡς Ἀθηναῖοι τὸν Βορέην ἐκ θεοπροπίου ἐπεκαλέσαντο, ἐλθόντος αὖτις ἄλλου χρηστηρίου τὸν γαμβρὸν ἐπίκουρον καλέσασθαι. Βορέης δὲ κατὰ τὸν Ἑλλήνων λόγον ἔχει γυναῖκα Ἀττικὴν, Ὀρειθυίην τὴν Ἐρεχθέος. κατὰ δὲ τὸ κῆδος τοῦτο οἱ Ἀθηναῖοι, ὡς φάτις ὀρμηται, συμβαλλόμενοι αἰεὶ τὸν Βορέην γαμβρὸν εἶναι, ναυλοχέοντες τῆς Εὐβοίης ἐν Χαλκίδι ὡς ἔμαθον αὐξόμενον τὸν χειμῶνα ἢ καὶ πρὸ τούτου, ἐθύοντό τε καὶ ἐπεκαλέοντο τὸν τε Βορέην καὶ τὴν Ὀρειθυίην τιμωρῆσαι αἰεὶ καὶ διαφθεῖραι τῶν βαρβάρων τὰς νέας, ὡς καὶ πρότερον περὶ Ἀθῶν. εἰ μὲν νυν διὰ ταῦτα τοῖσι βαρβάροισι ὀρμέουσι Βορέης ἐπέπεσε, οὐκ ἔχω εἰπεῖν· οἱ δ' ὦν Ἀθηναῖοι αἰεὶ λέγουσι βοηθήσαντα τὸν Βορέην πρότερον καὶ τότε ἐκεῖνα κατεργάσασθαι, καὶ ἱερὸν ἀπελθόντες Βορέῳ ἰδρύσαντο παρὰ ποταμὸν Ἰλισσόν.

(History VII.189)

It is said that the Athenians had called upon Boreas to aid the Greeks, on account of a fresh oracle which had reached them, commanding them to 'seek help from their son-in-law'. For Boreas, according to the tradition of the Greeks, took to wife a woman of Attica, viz., Oreithyia, the daughter to Erechtheus. So the Athenians, as the tale goes, considering that this marriage made Boreas their son-in-law, and perceiving, while they lay with their ships at Chalcis of Euboea, that the wind was rising, or, it may be, even before it freshened, offered sacrifice both to Boreas and likewise to Oreithyia, entreating them to come to their aid and to destroy the ships of the barbarians, as they did once before off Mount Athos. Whether it was owing to this that Boreas fell with violence on the barbarians at their anchorage I cannot say; but the

Athenians declare that they had received aid from Boreas before, and that it was he who now caused all these disasters. They therefore, on their return home, built a temple to this god on the banks of the Ilissus.

8. Choerilus of Samos (late 5th century B.C.)

(= Schol. Apollonius Rhodius I.211-215)

Χοιρίλος δὲ ἄρπασθῆναι φησιν αὐτὴν ἄνθη ἀμέργουσιν ὑπὸ τὰς τοῦ Κηφισοῦ πηγᾶς.

(fr. 5 (Dübner))

Choerilus says that she <i.e. Oreithyia> was carried off as she was picking flowers at the source of the river Kephissos.

9. Plato (c.429 - 347 B.C.)

ΦΑΙΔΡΟΣ. Εἰπέ μοι, ὦ Σώκρατες, οὐκ ἐνθένδε μέντοι ποθὲν ἀπὸ τοῦ Ἰλισσοῦ λέγεται ὁ Βορέας τὴν Ὠρείθυιαν ἄρπασαι;

ΣΩΚΡΑΤΗΣ. Λέγεται γάρ.

ΦΑΙΔΡΟΣ. Ἄρ' οὖν ἐνθένδε; χαρίεντα γοῦν καὶ καθαρὰ καὶ διαφανῆ τὰ ὑδάτια φαίνεται, καὶ ἐπιτήδεια κόραις παίζειν παρ' αὐτά.

ΣΩΚΡΑΤΗΣ. Οὐκ, ἀλλὰ κάτωθεν ὅσον δύο ἢ τρία στάδια, ἢ πρὸς τὸ τῆς Ἀγρας διαβαίνομεν· καὶ πού τις ἐστὶ βωμὸς αὐτόθι Βορέου.

ΦΑΙΔΡΟΣ. Οὐ πάνυ νενόηκα· ἀλλ' εἰπέ πρὸς Διός, ὦ Σώκρατες· σὺ τοῦτο τὸ μυθολόγημα πείθει ἀληθὲς εἶναι;

ΣΩΚΡΑΤΗΣ. Ἄλλ' εἰ ἀπιστοίην, ὥσπερ οἱ σαφοί, οὐκ ἂν ἄτοπος εἶην· εἴτα σοφισζόμενος φαίην ἂν αὐτὴν πνεῦμα Βορέου κατὰ τῶν πλησίον πετρῶν σὺν φαρμακείᾳ παίζουσιν ᾄσαι, καὶ οὕτω δὴ τελευτήσασαν λεχθῆναι ὑπὸ τοῦ Βορέου ἀναρπαστὸν γεγονέναι. ἐγὼ δέ, ὦ Φαῖδρε, ἄλλως μὲν τὰ τοιαῦτα χαρίεντα ἡγοῦμαι, λίαν δὲ δεινοῦ καὶ ἐπιπόνου

καὶ οὐ πάνυ εὐτυχοῦς ἀνδρός, κατ' ἄλλο μὲν οὐδέν, ὅτι δ' αὐτῷ ἀνάγκη μετὰ τοῦτο τὸ τῶν Ἰπποκενταύρων εἶδος ἐπανορθοῦσθαι, καὶ αὖθις τὸ τῆς Χιμαίρας, καὶ ἐπιρρεῖ δὲ ὄχλος τοιούτων Γοργόνων καὶ Πηγάσων καὶ ἄλλων ἀμηχάνων πλήθη τε καὶ ἀτοπίαι τερατολόγων τινῶν φύσεων· αἷς εἴ τις ἀπιστῶν προσβιβᾷ κατὰ τὸ εἶδος ἑκαστων ἅτε ἀγροῖνῃ τινι σοφίᾳ χρώμενος, πολλῆς αὐτῷ σχολῆς δεήσει. ἐμοὶ δὲ πρὸς αὐτὰ οὐδαμῶς ἐστι σχολή· τὸ δὲ αἷτιον, ὦ φίλε, τούτου τόδε· οὐ δύναμαί πω κατὰ τὸ Δελφικὸν γράμμα γινῶναι ἑμαυτόν· γελοῖον δὴ μοι φαίνεται, τοῦτο ἔτι ἀγνοοῦντα τὰ ἀλλότρια σκοπεῖν. ὅθεν δὴ χαίρειν ἐάσας ταῦτα, πειθόμενος δὲ τῷ νομιζομένῳ περὶ αὐτῶν, ὃ νυνδὴ ἔλεγον, σκοπῶ οὐ ταῦτα ἀλλὰ ἑμαυτόν, εἴτε τι θηρίον τυγχάνῃ Τυχῶνος πολυπλοκώτερον καὶ μᾶλλον ἐπιτεθυμένον, εἴτε ἡμερώτερόν τε καὶ ἀπλούστερον ζῷον, θείας τινὸς καὶ ἀτύφου μοίρας φύσει μετέχον.

(Phaedrus 229B - 230A)

PHAEDRUS. Tell me, Socrates, is it not from some place along here by the Ilissus that Boreas is said to have carried off Oreithyia?

SOCRATES. Yes, that is the story.

PHAEDRUS. Well, is it from here? The streamlet looks very pretty and pure and clear and fit for girls to play by.

SOCRATES. No, the place is about two or three furlongs farther down, where you cross over to the precinct of Agra; and there is an altar of Boreas somewhere thereabouts.

PHAEDRUS. I have never noticed it. But, for Heaven's sake, Socrates, tell me; do you believe this tale is true?

SOCRATES. If I disbelieved, as the wise men do, I should not be extraordinary; then I might give a rational explanation, that a blast of Boreas, the north wind, pushed her off the neighbouring rocks as she was playing with Pharmacea, and that when she had died

in this manner she was said to have been carried off by Boreas. But I, Phaedrus, think such explanations are very pretty in general, but are the inventions of a very clever and laborious and not altogether enviable man, for no other reason than because after this he must explain the forms of the Centaurs, and then that of the Chimaera, and there presses in upon him a whole crowd of such creatures, Gorgons and Pegasi, and multitudes of strange, inconceivable, portentous natures. If anyone disbelieves in these, and with a rustic sort of wisdom, undertakes to explain each in accordance with probability, he will need a great deal of leisure. But I have no leisure for them at all; and the reason, my friend, is this : I am not yet able, as the Delphic inscription has it, to know myself; so it seems to me ridiculous, when I do not yet know that, to investigate irrelevant things. And so I dismiss these matters and accepting the customary belief about them, as I was saying just now, I investigate not these things, but myself, to know whether I am a monster more complicated and more furious than Typhon or a gentler and simpler creature, to whom a divine and quiet lot is given by nature.

(Translation by Harold N. Fowler)

10. Crantor (c.335 - c.275 B.C.)

λέγεται δὲ καὶ Ἀνταγόρα τοῦ ποιητοῦ ὡς Κράντορος εἰς Ἑρωτα πεποιημένα φέρεσθαι ταυτί·

ἐν δολῇ μοι θυμός, ἐπεὶ γένος ἀμφίσβητον,  
ἢ σε θεῶν τὸν πρῶτον ἀειγενέων, Ἑρως, εἶπω,  
τῶν ὅσους Ἑρεβός τε πάλαι βασιλεία τε παῖδας  
γείνατο Νῦξ πελάγεσσιν ὑπ' εὐρέος Ὠκεανοῦ·  
ἢ σέ γε Κύπριδις υἱὰ περίφρονος, ἢ σε Γαίης,

ἦ 'Ανέμων' τοῖος σὺ κακὰ φρονέων ἀλάλησαι  
 ἀνθρώποις ἦδ' ἐσθλά· τὸ καὶ σέο σῶμα δίφυλον.

(In: Diogenes Laertius IV.26-27)

And these lines on the subject of Eros by the poet Antagoras, and likewise by Crantor, are said to be in circulation :

My mind is in doubt, since your birth is disputed, whether  
 I am to call you, Eros, the first of the immortal gods,  
 the eldest of all the children whom Erebus and queenly  
 Night once brought to birth in the depths beneath wide  
 Ocean; or are you the child of wise Cypris, or of Earth,  
 or of the Winds? So many are the goods and ills you devise  
 for humanity in your wanderings; and so you have a body of  
 double form.

(Adapted from the translation by R.D. Hicks)

11. Hecataeus of Abdera (late 4th/early 3rd century B.C.)

... βασιλεύειν δὲ τῆς πόλεως ταύτης καὶ τοῦ τεμένους ἐπάρχειν τοὺς  
 ὀνομαζομένους Βορεάδας, ἀπογόνους ὄντας Βορέου, καὶ κατὰ γένος αἰεὶ  
 διαδέχεσθαι τὰς ἀρχάς.

(In: Diodorus Siculus II.47.7)

... And the kings of this city on the island of the Hyperboreans  
 and the supervisors of the sacred precinct are called Boreades,  
 since they are descendants of Boreas, and the succession to these  
 positions is always kept in their family.

(Translation by C.H. Oldfather)

## 12. Hecataeus of Abdera (late 4th/early 3rd century B.C.)

Ἀνθρώπων Ὑπερβορέων γένος καὶ τιμᾶς Ἀπόλλωνος  
 τας ἐκεῖθι ᾄδουσι μὲν ποιηταί, ὕμνοῦσι δὲ καὶ συγγραφεῖς, ἐν  
 δὲ τοῖς καὶ Ἑκαταῖος, οὐχ ὁ Μιλήσιος, ἀλλ' ὁ Ἀβδηρίτης. ὁ  
 δὲ λέγει πολλά τε καὶ σεμνὰ ἕτερα, οὗ μοι νῦν ἡ χρεῖα παρακαλεῖν  
 δοκεῖ αὐτά, καὶ οὖν καὶ ἐς ἄλλον ὑπερρήσομαι χρόνον ἕκαστα  
 εἰπεῖν, ἥνίκα ἐμοί τε ἥδιον καὶ τοῖς ἀκούουσι λῶν ἔσται· ὁ  
 δέ με μόνος ἦδε ἡ συγγραφή παρακαλεῖ ἔστι ταῦτα. ἱερεῖς εἰσι  
 τῷδε τῷ δαίμονι Βορέου καὶ Χιόνης, υἱεῖς, τρεῖς τὸν ἀριθμόν, ἀδελφοὶ  
 τὴν φύσιν, ἑξαπῆχεις τὸ μῆκος ...

(In: Aelian XI.1)

The race of the Hyperboreans and the honours there paid to Apollo are sung by poets and are celebrated by historians, among whom is Hecataeus, not of Miletus but of Abdera. The many other matters of importance which he narrates I think there is no need for me to bring in now, and in fact I shall postpone the full recital to some other occasion, when it will be pleasanter for me and more convenient for my hearers. The only facts which this narrative invites me to relate are as follows. This god has as priests the sons of Boreas and Chione, three in number, brothers by birth, and six cubits in height...

(Translation by A.F. Scholfield)



13. Heragoras (? early 3rd century B.C.)

(= Schol. Apollonius Rhodius I.211-215)

Ἡραγόρας δὲ ἐν τοῖς Μεγαρικοῖς τὸν τὴν Ὀρειθυίαν ἀρπάσαντα  
Βορέαν υἱὸν Στρυμόνος φησὶν, οὐχὶ δὲ τὸν ἄνεμον.

(Fr. Gr. Hist. 486 fr. 3 (Jacoby))

Heragoras states in the Megarica that Oreithyia was carried off by Boreas the son of the Strymon, and not the wind.

14. Philochorus (3rd century B.C.)

Ἐρεχθέως τούτου θυγατέρα βορέας υἱὸς Ἀστραίου θράξ ἤρπασεν  
Ὀρειθυίαν· ὁ δὲ μῦθος τὸν ἄνεμον <δηλοῖ>, ὡς Φιλόχορος ἐν  
δευτέρῳ φησὶν.

(Fr. Gr. Hist. 328 fr. 11 (Jacoby))

Oreithyia, the daughter of this same Erechtheus, was carried off by Thracian Boreas, the son of Astraeus. The myth refers to the wind, as Philochorus says in his second book.

15. Callimachus (c.305 - c.240 B.C.)

Πρῶταί τοι τάδ' ἔνεικαν ἀπὸ ξανθῶν Ἀριμασπῶν  
Οὔπις τε Λοξώ τε καὶ εὐαίων Ἑκαέργη,  
θυγατέρες Βορέας, καὶ ἄρσενες οἱ τότε ἄριστοι  
ἡιθέων·

(Hymn IV : To Delos, 291 - 294)

The first to bring these offerings from the fair-haired Arimaspi were Upis and Ioxo and happy Hecaerge, daughters of Boreas, and those who then were the best of the young men.

(Translation by A.W. Mair)

## 16. Apollonius Rhodius (3rd century B.C.)

Ζήτης αὖ Κάλαι'ς τε Βορήιοι υἱες ἴκοντο,  
 οὓς ποτ' Ἐρεχθίδος Βορέη τέκεν Ὀρείθυια  
 ἔσχατι' ἢ Θρήκης δυσχειμέρου· ἔνθ' ἄρα τήνγε  
 Θρήνιος Βορέης ἀνερείψαντο Κεκροπίηνδεν  
 Ἴλισσοῦ προπάροιθε χορᾷ ἐνὶ δινεύουσιν.  
 καὶ μιν ἄγων ἔκαθεν, Σαρπηδονίην ὄθι πέτρην  
 κλείουσιν, ποταμῷο παρὰ ῥόον Ἐργίνοιο,  
 λυγαίοις ἐδάμασσε περὶ νεφέεσσι καλύψας.  
 τῷ μὲν ἐπ' ἀστραγάλοισι ποδῶν ἐκάτερθεν ἐρεμνάς  
 σεῖον ἀειρομένῳ πτέρυγας, μέγα θάμβος ἰδέσθαι,  
 χρυσεῖαις φολίδεσσι διαυγέας· ἅμφι δὲ κώτοις  
 κρόατος ἔξ ὑπάτοιο καὶ αὐχένος ἔνθα καὶ ἔνθα  
 κυάνεαι δονέοντο μετὰ πνοιῇσιν ἔθειραι.

(Argonautica I.211 - 223)

Next came Zetes and Calais, sons of Boreas, whom once Oreithyia, daughter of Erechtheus, bore to Boreas on the verge of wintry Thrace; thither it was that Thracian Boreas snatched her away from Cecropia as she was whirling in the dance, hard by Ilissus' stream. And, carrying her far off, to the spot that men called the rock of Sarpedon, near the river Erginus, he wrapped her in dark clouds and forced her to his will. There they were making their dusky wings quiver upon their ankles on both sides as they rose, a great wonder to behold, wings that gleamed with golden scales : and round their backs from the top of the head and neck, hither and thither, their dark tresses were being shaken by the wind.

(Translation by R.D. Seaton)

## 17. Apollonius Rhodius (3rd century B.C.)

"Ενθα δ' ἐπάκτιον οἶκον Ἀγηνορίδης ἔχε Φινεύς,  
 ὃς περὶ δὴ πάντων ὀλωτάτα πῆματ' ἀνέτλη  
 εἵνεκα μαντοσύνης, τὴν οἱ πάρος ἐγγυάλιξεν  
 Λητοῖδης· οὐδ' ὅσον ὀπίζετο καὶ Διὸς αὐτοῦ  
 χρεῖων ἀτρεκέως ἱερὸν νόον ἀνθρώποισιν.  
 τῷ καὶ οἱ γῆρας μὲν ἐπὶ δηναῖδν ἱάλLEN,  
 ἐκ δ' ἔλετ' ὀφθαλμῶν γλυκερὸν φῶς· οὐδὲ γάνυσθαι  
 εἶα ἀπειρεσίοισιν ὀνειῖασιν, ὅσα οἱ αἰεὶ  
 θέσφατα πευθόμενοι περιναίεται οἶκαδ' ἄγειρον.  
 ἀλλὰ διὰ νεφέων ἄφνω πέλας αἴσσοσαι  
 Ἀρπυιαι στόματος χειρῶν τ' ἀπὸ γαμφηλῆσιν  
 συνεχέως ἥρπαζον. ἐλείπετο δ' ἄλλοτε φορβῆς  
 οὐδ' ὅσον, ἄλλοτε τυτθόν, ἵνα ζῶν ἀνάχοιτο.  
 καὶ δ' ἐπὶ μυδαλέην ὁδὸν χέον· οὐδέ τις ἔτλη  
 μὴ καὶ λευκανίηνδε φορεύμενος, ἀλλ' ἀποτῆλοῦ  
 ἐσπῆγς· τοῖόν οἱ ἀπέπνεε λείψανα δαιτός.  
 αὐτίκα δ' εἰσαΐων ἐνοπὴν καὶ δοῦπον ὁμίλον  
 τούσδ' αὐτοὺς παριόντας ἐπῆισεν, ὧν οἱ ἰόντων  
 θέσφατον ἐκ Διὸς ἦεν ἐῆς ἀπὸνασθαι ἐδωῆς ...

... αὐτὰρ ὁ τοῖσι μάλα μόλις ἐξ ὑπάτοιου  
 στήθεος ἀμπνεύσας μετεφώνεε μαντοσύνησιν·

'Κλύτε, Πανελλήνων προαφρέστατοι ...

...χραίσμετέ μοι, ῥύσασθε δυσάμμορον ἀνέρα λύμης,  
 μηδέ μ' ἀνηδείησιν ἀφρομήθητε λιπόντες  
 αὐτως. οὐ γὰρ μούνον ἐπ' ὀφθαλμοῖσιν Ἑρινὺς  
 λαῖξ ἐπέβη, καὶ γῆρας ἀμήρυτον ἐς τέλος ἔλκω·  
 πρὸς δ' ἔτι πικρότατον κρέμαται κακὸν ἄλλο κακοῖσιν  
 Ἀρπυιαι στόματός μοι ἀφαρπάζουσιν ἐδωδῆν

ἔπιποθεν ἀπρόστοιο καταΐσσουσai ὀλέθρου.  
 ἴσχω δ' οὔτινα μῆτιν ἐπίρροθον ...  
 ... τὰς μὲν θέσφατόν ἐστιν ἐρητῦσαι Βορέας  
 υἱέας. οὐδ' ὀθνεῖοι ἀλαλήσουσιν ἐόντες,  
 εἰ δὴ ἐγὼν ὁ πρίν ποτ' ἐπικλυτὸς ἀνδράσι Φινεύς  
 ὄλβῳ μαντοσύνη τε, πατὴρ δέ με γεῖναιτ' Ἀγῆνωρ  
 τῶν δὲ κασιγνήτην, ὅτ' ἐνὶ θρήικεσσιν ἀνασσον,  
 Κλειοπάτρην ἔδνοισιν ἐμὸν δόμον ἦγον ὀκιοιτίν.'  
 Ἰσκεν Ἀγηνορίδης· ἀδινὸν δ' ἔλε κῆδος ἕκαστον  
 ἡράων, πέρι δ' αὖτε δῶυ υἱας Βορέας ...  
 ... αἴψα δὲ κουρότεροι πεπονθήατο δαῖτα γέροντι,  
 λοῖσθιον Ἀρπυίῃσιν ἐλῶριον· ἐγγύθι δ' ἄμκω  
 στήσαν, ἵνα ξιφρέεσσιν ἐπεσσυμένους ἐλάσειαν.  
 καὶ δὴ τὰ πρῶτισθ' ὁ γέρων ἔψαυεν ἐδωδῆς·  
 αἱ δ' ἄραρ ἡύτ' ἀελλαι ἀδευκέες, ἥ στεροπαὶ ὥς,  
 ἀπρόφατοι νεφέων ἐξάλμεναι ἐσσεύοντο  
 κλαγγῇ μαιμῶσαι ἐδητύος· οἱ δ' ἐσιδόντες  
 ἦρωες μεσσηγὺς ἀνίλαχον· αἱ δ' ἄμ' αὐτῇ  
 πάντα καταβρόξασαι ὑπὲρ πόντοιο φέροντο  
 τῇλε παρέξ· ὁδμῇ δὲ δυσάσχετος αὖθι λέλειπτο.  
 τῶν δ' αὖ κατόπισθε δῶυ υἱες Βορέας  
 φάσαν· ἐπισχόμενοι πρόσσω θεόν. ἐν γὰρ ἔηκεν  
 Ζεὺς μένος ἀνάματόν σφιν· ἀτὰρ Διὸς οὐ κεν ἐπέσθην  
 νόσφιν, ἐπεὶ ζεφύροιο παραΐσσεσκον ἀέλλας  
 αἰέν, ὅτ' ἐς Φινῆα καὶ ἐκ Φινῆος ἴοιεν.  
 ὥς δ' ὅτ' ἐνὶ κνημοῖσι κύνες δεδαημένοι ἄγρης  
 ἢ αἴγας κεραοὺς ἢε πρόκας ἰχνεύοντες  
 θείωσιν, τυτθὸν δὲ τιταινόμενοι μετόπισθεν

ἄρκης ἐν γενύεσσι μάτην ἀράβησαν ὀδόντας·  
 ὥς Ζήτης Κάλαι'ς τε μάλα σχεδὸν αἰσσοῦντες  
 τῶν ἀνιροτάτησιν ἐπέχραον ἥλιθα χερσίν.  
 καὶ νῦν κε δὴ σφ' ἀέκητι θεῶν διεδηλήσαντο  
 πολλὸν ἐκὰς νήσοισιν ἐπὶ Πλωτῆσι κικλόντες,  
 εἰ μὴ ἄρ' ὠκέα Ἴρις ἴδεν, κατὰ δ' αἰθέρος ὕλτο  
 οὐρανόθεν καὶ τοῖα παραιφαμένη κατέρυκεν·  
 'Οὐ θέμις ὦ υἱεῖς Βορέω, ξιφέεσσιν ἐλάσσαι  
 Ἀρπυίας, μέγαλοιο Διὸς κύνας· ὄρκια δ' αὐτῇ  
 δώσω ἐγὼν, ὥς οὔ οἱ ἔτι χροίμψουσιν ἰοῦσαι.'

(*Argonautica* II. 178-196, 207-209, 218-225,  
 234-241, 263-290)

There Phineus, son of Agenor, had his home by the sea, Phineus, who above all men endured most bitter woes because of the gift of prophecy which Leto's son had granted him aforetime. And he revered not a whit even Zeus himself, for he foretold unerringly to men his sacred will. Wherefore Zeus sent upon him a lingering old age, and took from his eyes the pleasant light, and suffered him not to have joy of the dainties untold that the dwellers around ever brought to his house, when they came to enquire the will of heaven. But on a sudden, swooping through the clouds, the Harpies with their crooked beaks incessantly snatched the food away from his mouth and hands. And at times not a morsel of food was left, at others but a little, in order that he might live and be tormented. And they poured forth over all a loathsome stench; and no one dared not merely to carry food to his mouth but even to stand at a distance; so foully reeked the remnants of the meal. But straightway when he heard the voice and the tramp of the band he

knew that they were the men passing by, at whose coming Zeus' oracle had declared to him that he should have joy of his food... And he at last drew laboured breath from the depths of his chest and spoke among them with prophetic utterance:

'Listen, bravest of all the Hellenes... help me, save an ill-fated man from misery, and depart not uncaring and leaving me thus as you see. For not only has the Fury set her foot on my eyes and I drag on to the end a weary old age; but besides my other woes a woe hangs over me - the bitterest of all. The Harpies, swooping down from some obscene den of destruction, even snatch the food from my mouth. And I have no device to aid me... These pests, the oracle declares, the sons of Boreas shall restrain. And no strangers are they that shall ward them off, if indeed I am Phineas who was once renowned among men for wealth and the gift of prophecy, and if I am the son of my father Agenor; and, when I ruled among the Thracians, by my bridal gifts I brought home their sister Cleopatra to be my wife.' So spoke Agenor's son; and deep sorrow seized each of the heroes, and especially the two sons of Boreas... And quickly the younger heroes prepared a feast for the aged man, a last prey for the Harpies; and both stood near him to smite with the sword those pests when they swooped down. Scarcely had the aged man touched the food when they forthwith, like bitter blasts or flashes of lightning, suddenly darted from the clouds, and swooped down with a yell, fiercely craving for food; and the heroes beheld them and shouted in the midst of their onrush; but they at the cry devoured everything and sped away over the sea afar; and an intolerable stench remained. And behind them the two sons of Boreas raising their swords rushed in pursuit. For Zeus

imparted to them tireless strength; but without Zeus they could not have followed, for the Harpies used even to outstrip the blasts of the west wind when they came to Phineus and when they left him. And as when, upon the mountain-side, hounds, cunning in the chase, run in the track of horned goats or deer, and as they strain a little behind gnash their teeth upon the edge of their jaws in vain; so Zetes and Calais rushing very near just grazed the Harpies in vain with their finger-tips. And assuredly they would have torn them to pieces, despite heaven's will, when they had overtaken them far off at the Floating Islands, had not swift Iris seen them and leapt down from the sky from heaven above, and checked them with these words:

'It is not lawful, O sons of Boreas, to strike with your swords the Harpies, the hounds of mighty Zeus; but I myself will give you a pledge, that hereafter they shall not draw near to Phineas.'

(Translation by R.C. Seaton)

18. Apollodorus (2nd century B.C.)

Ἐντεῦθεν ἀναχθέντες καταντῶσιν εἰς τὴν τῆς Θρήνης Σαλμυδησσόν, ἔνθα ᾤκει Φινεὺς μάντις τὰς ὄψεις πεπληρωμένος. τοῦτον οἱ μὲν Ἀγήνορος εἶναι λέγουσιν, οἱ δὲ Ποσειδῶνος υἱόν· καὶ πηρωθῆναι φασιν αὐτὸν οἱ μὲν ὑπὸ θεῶν, ὅτι προέλεγε τοῖς ἀνθρώποις τὰ μέλλοντα, οἱ δὲ ὑπὸ Βορέου καὶ τῶν Ἀργοναυτῶν, ὅτι πεισθεὶς μητρὸς τοῦ ἰδίου ἐτύλῳσε παῖδας, τινες δὲ ὑπὸ Ποσειδῶνος, ὅτι τοῖς Φρίξου παισὶ τὸν ἐκ Κόλχων εἰς τὴν Ἑλλάδα πλοῦν ἐμήνυσεν. ἔπειμ' αὐτῷ καὶ τὰς ἀρπυίας οἱ θεοί· πτερωταὶ δὲ ἦσαν αὗται, καὶ ἐπειδὴ τῷ Φινεῖ παρετίθετο τράπεζα, ἐξ οὐρανοῦ καθιπτάμεναι τὰ μὲν πλείονα ἀνὴρπαζον, ὀλίγα δὲ ὅσα ὁσμῆς ἀνάπλεα κατέλειπον, ὥστε μὴ

δύνασθαι προσενέγκασθαι. βουλομένοις δὲ τοῖς Ἀργοναύταις  
τὰ περὶ τοῦ πλοῦ μαθεῖν ὑποθήσεσθαι τὸν πλοῦν ἔφη, τῶν ἄρπυιῶν  
αὐτὸν ἔαν ἀπαλλάξωσιν. οἱ δὲ παρέθεσαν αὐτῷ τράπεζαν ἐδεσμάτων,  
ἄρπυιαι δὲ ἐξαίφνης σὺν βοῇ καταπιᾶσαι τὴν τροφὴν ἤρπασαν,  
θεασάμενοι δὲ οἱ Βορέου παῖδες Ζήτης καὶ Κάλαις, ὄντες πτερωτοί,  
σπασάμενοι τὰ ξίφη δι' αἴρος ἐδίωκον. ἦν δὲ ταῖς ἄρπυιαῖς χρεῶν  
τεθνάναι ὑπὸ τῶν Βορέου παίδων, τοῖς δὲ Βορέου παισὶ τότε  
τελευτήσκειν ὅταν διώκοντες μὴ καταλάβωσι. διωκομένων δὲ τῶν  
ἄρπυιῶν ἡ μὲν κατὰ Πελοπόννησον εἰς τὸν Τίγρην ποταμὸν ἐμπίπτει,  
ὃς νῦν ἀπ' ἐκείνης Ἀρπυς καλεῖται· ταύτην δὲ οἱ μὲν Νικοδόην  
οἱ δὲ Ἀελλόπουν καλοῦσιν. ἡ δὲ ἑτέρα καλουμένη Ὠκυπέτη, ὥς δὲ  
ἔνιοι Ὠκυθόη (Ἡσίοδος δὲ λέγει αὐτὴν Ὠκυπόδην), αὕτη κατὰ τὴν  
Προποντίδα φεύγουσα μέχρις Ἐχινάδων ἦλθε νήσων, αἱ νῦν ἀπ' ἐκείνης  
Στραφάδες καλοῦνται· ἐστράφη γὰρ ὥς ἦλθεν ἐπὶ ταύτας, καὶ γενομένη  
κατὰ τὴν ἡϊόνα ὑπὸ καμάτου πίπτει σὺν τῷ διώκοντι. Ἀπολλώνιος  
δὲ ἐν τοῖς Ἀργοναύταις ἕως Στραφάδων νήσων φησὶν αὐτὰς διωχθῆναι  
καὶ μηδὲν παθεῖν, δοῦσας ὄρκον τὸν Φινέα μηκέτι ἀδικῆσαι.

(Bibliotheca I.9.21)

Thence they put to sea and came to land at Salmydessus in Thrace,  
where dwelt Phineus, a seer who had lost the sight of both eyes.  
Some say he was a son of Agenor, but others that he was a son of  
Poseidon, and he is variously alleged to have been blinded by the  
gods for foretelling men the future; or by Boreas and the Argonauts  
because he blinded his own sons at the instigation of their stepmother;  
or by Poseidon, because he revealed to the children of Phrixus how  
they could sail from Colchis to Greece. The gods also sent the  
Harpies to him. These were winged female creatures, and when a



table was laid for Phineus, they flew down from the sky and snatched up most of the victuals, and what little they left stank so that nobody could touch it. When the Argonauts would have consulted him about the voyage, he said that he would advise them about it if they would rid him of the Harpies. So the Argonauts laid a table of viands beside him, and the Harpies with a shriek suddenly pounced down and snatched away the food. When Zetes and Calaïs, the sons of Boreas, saw that, they drew their swords and, being winged, pursued them through the air. Now it was fated that the Harpies should perish by the sons of Boreas, and that the sons of Boreas should die when they could not catch up a fugitive. So the Harpies were pursued and one of them fell into the river Tigres in the Peloponnese, the river that is now called Harpys after her; some call her Nicothoe, but others Aellopus. But the other, named Ocypode or, according to others, Ocythoe (but Hesiod calls her Ocypode) fled by the Propontis till she came to the Echinadian Islands which are now called Strophades after her; for when she came to them she turned (estraphe) and being at the shore fell for very weariness with her pursuer. But Apollonius in the Argonautica says that the Harpies were pursued to the Strophades Islands and suffered no harm, having sworn an oath that they would wrong Phineus no more.

(Translation by J.G. Frazer)

19. Apollodorus (2nd century B.C.)

ῥαίθυιαν δὲ παίζουσιν ἐπὶ Ἰλισσοῦ ποταμοῦ ἀρπάσας Βορέας  
 συνήλθεν· ἡ δὲ γενναῖα θυγατέρα μὲν Κλεοπάτραν καὶ Χιόνην, υἱοὺς  
 δὲ Ζήτην καὶ Κάλαϊν πτερωτοὺς, οἱ πλέοντες σὺν Ἰάσονι καὶ τὰς

ἀρπυίας διώκοντες ἀπέθανον, ὡς δὲ Ἀκουσίλαος λέγει, περὶ τήνων  
 ὑφ' Ἡρακλέους ἀπώλοντο. Κλεοπάτραν δὲ ἔγημε Φινεύς, ᾧ γίνονται  
 παῖδες <έξ> αὐτῆς Πλήξιππος καὶ Πανδίων. ἔχων δὲ τούτους ἐκ  
 Κλεοπάτρας παῖδας Ἰδαίαν ἐγάμει τὴν Δαρδάνου. κἀκείνη τῶν προγόνων  
 πρὸς Φινέα φθορὰν καταψεύδεται, καὶ πιστεύσας Φινεὺς ἀμφοτέρους  
 τυρλοῖ. παραπλέοντες δὲ οἱ Ἀργοναῦται σὺν Βορέᾳ κολάζονται αὐτόν.

(Bibliotheca III.15. 2-3)

While Oreithyia was playing by the Ilissus river, Boreas carried her off and had intercourse with her; and she bore daughters, Cleopatra and Chione, and winged sons Zetes and Calais. These sons sailed with Jason and met their end in chasing the Harpies; but according to Acusilaus, they were killed by Hercules in Tenos. Cleopatra was married to Phineus, who had by her two sons, Plexippus and Pandion. When he had these sons by Cleopatra, he married Idaea, daughter of Dardanus. She falsely accused her stepsons to Phineus of corrupting her virtue, and Phineus, believing her, blinded them both. But when the Argonauts sailed past, they punished him with the help of Boreas.

(Adapted from the translation by J.G. Frazer)

20. Diodorus Siculus (1st century B.C.)

For the text of Diodorus II.47.7 see no.11 above.

21. Diodorus Siculus (1st century B.C.)

... Οὐ μὴν ἀλλὰ τότε λήξαντος τοῦ χειμῶνος ἀποβῆναι μὲν τοὺς ἀριστεῖς τῆς θρόνης εἰς τὴν ὑπὸ Φινέως βασιλευομένην χώραν, περιπεσεῖν δὲ δυσὶ νεανίσκοις ἐπὶ τιμωρίᾳ διαρυγμένοις καὶ μάστιγι πληγὰς συνεχεῖς λαμβάνουσι· τούτους δ' ὑπάρχειν Φινέως υἱοὺς καὶ

Κλεοπάτρας, ἣν φασιν ἐξ Ὁρειθυίας τῆς Ἐρεχθέως γεννηθῆναι καὶ Βορέου, διὰ δὲ μητρὸς τὸλμαν καὶ διαβολᾶς ψευδεῖς τυγχάνοντας ὑπὸ τοῦ πατρὸς ἀδίκως τῆς προειρημένης τιμωρίας. τὸν γὰρ Φινέα γεγαμηκότα Ἰδαίαν τὴν Δαρδάνου τοῦ Σκυθῶν βασιλέως θυγατέρα, καὶ διὰ τὸν πρὸς αὐτὴν ἔρωτα πάντα χαρίζομενον, πιστεῦσαι διότι τῇ μητρὶ βίαν ἐφ' ὕβρει προσήγαγον οἱ πρόγονοι, βουλόμενοι τῇ μητρὶ χαρίσασθαι. τῶν δὲ περὶ τὸν Ἡρακλέα παραδόξως ἐπιφανέντων, φασὶ τοὺς μὲν ἐν ταῖς ἀνάγκαις ὄντας ἐπικαλέσασθαι καθάπερ θεοὺς τοὺς ἀριστεῖς, καὶ τὰς αἰτίας δηλώσαντας τῆς τοῦ πατρὸς παρανομίας δεῖσθαι τῶν ἀτυχημάτων αὐτοὺς ἐξελέσθαι.

Τὸν δὲ Φινέα πικρῶς ἀπαντήσαντα τοῖς ξένοις παραγγεῖλαι μὴδὲν τῶν καθ' ἑαυτὸν πολυπραγμονεῖν· μὴδὲνα γὰρ πατέρα λαβεῖν παρ' υἱῶν ἐκουσίως τιμωρίαν, εἰ μὴ τῷ μεγέθει τῶν ἀδικημάτων ὑπέρθοιντο τὴν φυσικὴν τῶν γονέων εἰς τέκνα φιλοστοργίαν. ἐνταῦθα συμπλέοντας τοῖς περὶ τὸν Ἡρακλέα τοὺς ἐπικαλουμένους μὲν Βορεάδας, ἀδελφοὺς δ' ὄντας Κλεοπάτρας, λέγεται διὰ τὴν συγγένειαν πρώτους ὀρμῆσαι πρὸς τὴν βοήθειαν, καὶ τοὺς μὲν περικειμένους τοῖς νεανίσκοις δεσμοὺς περιρρῆξαι, τοὺς δ' ἐναντιούμενους τῶν βαρβάρων ἀποκτεῖναι. ὀρμήσαντος δὲ τοῦ Φινέως πρὸς μάχην, καὶ τοῦ πλήθους τῶν ὁρμηῶν συνδραμόντος, φασὶ τὸν Ἡρακλέα πάντων ὄριστα διαγωνισάμενον αὐτόν τε τὸν Φινέα καὶ τῶν ἄλλων οὐκ ὀλίγους ἀνελεῖν, τὸ δὲ τελευταῖον κρατήσαντα τῶν βασιλείων τὴν μὲν Κλεοπάτραν ἐκ τῆς φυλακῆς προαγαγεῖν, τοῖς δὲ Φινείδαις ἀποκαταστήσαι τὴν πατρῴαν ἀρχήν· βουλομένων δ' αὐτῶν τὴν μητρὶν μετ' αἰκίας ἀποκτεῖναι, πείσαι τῆς μὲν τιμωρίας ταύτης ἀποστήναι, πρὸς δὲ τὸν πατέρα πέμψαντας εἰς τὴν Σκυθίαν ἐκεῖνον παρακαλέσαι τῶν εἰς αὐτοὺς ἀνομημάτων λαβεῖν κώλασιν. οὗ γεννηθέντος τὸν μὲν Σκύθην τῆς θυγατρὸς καταγνῶναι θάνατον, τοὺς δ' ἐκ τῆς Κλεοπάτρας υἱοὺς ἀπενέγκασθαι παρὰ τοῖς Ὀρξεῖ δόξαν ἐπιεικειᾶς.

οὐκ ἀγνοῶ δὲ διότι τινὲς τῶν μυθογράφων τυφλωθῆναι φασὶ τοὺς  
 Φινείδας ὑπὸ τοῦ πατρὸς, καὶ τὸν Φινέα τῆς ὁμοίας τυχεῖν συμφορᾶς ὑπὸ  
 Βορέου. ὁμοίως δὲ καὶ τὸν Ἡρακλέα τινὲς παραδεδῶκασιν πρὸς ὕδρην  
 ἐξελεθόντα κατὰ τὴν Ἀσίαν ὑπὸ τῶν Ἀργοναυτῶν ἐπὶ τῆς χώρας  
 ἀπολειφθῆναι. καθόλου δὲ τοὺς παλαιοὺς μύθους οὐχ ἀπλῆν οὐδὲ  
 συμπεφωνημένην ἱστορίαν ἔχειν συμβέβηκε· διόπερ οὐ χρὴ θαυμάζειν,  
 εἴαν τινα τῶν ἀρχαιολογουμένων μὴ συμκάνως ὅπασιν τοῖς ποιηταῖς καὶ  
 συγγραφεῦσιν συγρίνωμεν.

(Bibliotheca Historica IV.43.3-44.6)

... At that time, however, the tale continues, when the storm had  
 abated, the chieftains landed in Thrace, the country which was ruled  
 over by Phineus. Here they came upon two youths who by way of  
 punishment had been shut within a burial vault where they were being  
 subjected to continual blows of the whip; these were sons of Phineus  
 and Cleopatra - she who is said to have been born of Oreithyia,  
 the daughter of Erechtheus, and Boreas - and had been unjustly  
 subjected to such a punishment because of the unscrupulousness and  
 lying accusations of their step-mother. For Phineus had married  
 Idaea, the daughter of Dardanus the king of the Scythians, and  
 yielding to her every desire out of his love for her he had believed  
 her charge that his sons by an earlier marriage had insolently  
 offered violence to their step-mother out of a desire to please  
 their mother. And when Heracles and his friends unexpectedly  
 appeared, the youths who were suffering these tortures, they say,  
 made supplication to the chieftains as they would to gods, and setting  
 forth the causes of their father's unlawful conduct implored that  
 they be delivered from their unfortunate lot.

Phineus, however, the account continues, met the strangers with

bitter words and ordered them not to busy themselves with his affairs; for no father, he said, exacts punishment of his sons of his free will, unless they have overcome, by the magnitude of their crimes, the natural love which parents bear towards their children. Thereupon the young men known as Boreads who were sailing with Heracles and his company and were brothers of Cleopatra, because of their kinship with the young men, were the first - it is said - to rush to their aid, and they tore apart the chains which encircled them and slew such barbarians as offered resistance. And when Phineus hastened to join battle with them and the Thracian multitude ran together, Heracles, they say, who performed the mightiest deeds of them all, slew Phineus himself and no small number of the rest, and finally capturing the royal palace led Cleopatra out of the prison, and restored to the sons of Phineus their ancestral rule. But when the sons wished to put their step-mother to death under torture, Heracles persuaded them to renounce such a vengeance, and so the sons, sending her to her father in Scythia, urged that she be punished for her wicked treatment of them. And this was done; the Scythian condemned his daughter to death, and the sons of Cleopatra gained in this way among the Thracians a reputation for equitable dealing.

I am not unaware that certain writers of myths say that the sons of Phineus were blinded by their father and that Phineus suffered the like fate at the hands of Boreas. Likewise certain writers have passed down the account that Heracles, when he went ashore once in Asia to get water, was left behind in the country by the Argonauts. But, as a general thing, we find that the ancient myths

do not give us a simple and consistent story; consequently it should occasion no surprise if we find, when we put the ancient accounts together, that in some details they are not in agreement with those given by every poet and historian.

(Adapted from the translation by C.H. Oldfather)

22. Diodorus Siculus (1st century B.C.)

Ἐπεὶ δὲ περὶ τῆς Σαμοθράκης διήλθομεν, ἀκολουθῶν καὶ περὶ τῆς Νάξου διέξιμεν. αὕτη γὰρ ἡ νῆσος τὸ μὲν πρῶτον προσηγορεύετο Στρογγύλη, ᾤκησαν δ' αὐτὴν πρῶτοι Θράκες διὰ τινὰς τοιαύτας αἰτίας. μυθολογοῦνται Βορέου γενέσθαι παῖδες Βούτης καὶ Λυκούργος οὐχ ὁμομήτριοι· τὸν δὲ Βούτην ὄντα νεώτερον ἐπιβουλεύσαι τὰδελφῶ, καὶ καταφανῆ γενόμενον ἕτερον μὲν μηδὲν παθεῖν ὑπὸ τοῦ Λυκούργου, πρόσταγμα δὲ λαβεῖν ὅπως μετὰ τῶν συνεπιβουλευσάντων λαβὼν πλοῖα ζητῇ χώραν ἑτέραν εἰς κατοίκησιν. διόπερ τὸν Βούτην μετὰ τῶν συνεγκαλουμένων Θρακῶν ἐκπλεύσαντα καὶ διὰ τῶν Κυκλάδων νήσων κομιζόμενον κατασχεῖν τὴν Στρογγύλην νῆσον, καὶ ἐν ταύτῃ κατοικοῦντα λήζεσθαι πολλοὺς τῶν παραπλεόντων. σπανίζοντας δὲ γυναικῶν περιπλέοντας ἀρπάζειν ἀπὸ τῆς χώρας γυναῖκας...

(Bibliotheca Historica V. 50.1-3)

Since we have set forth the facts concerning Samothrace, we shall now, in accordance with our plan, discuss Naxos. This island was first called Strongyle and its first settlers were men from Thrace, the reasons for their coming being somewhat as follows. The myth relates that two sons, Butes and Lycurgus, were born to Boreas, but not by the same mother; and Butes who was the younger, formed a plot against his brother, and on being discovered he received

no punishment from Lycurgus beyond that he was ordered to gather ships and, together with his accomplices in the plot, to seek out another land in which to make his home. Consequently Butes, together with the Thracians who were implicated with him, set forth, and making his way through the islands of the Cyclades he seized the island of Strongyle, where he made his home and proceeded to plunder many of those who sailed past the island. And since they had no women they sailed here and there and seized them from the land...

(Adapted from the translation by C.H. Oldfather)

23. Propertius (mid to late 1st century B.C.)

... namque ferunt olim Pagasae navalibus Argon  
egressum longe Phasidos isse viam,  
et iam praeteritis labentem Athamantidos undis  
Mysorum scopulis applicuisse ratem.  
hic manus heroum, placidis ut constitit oris,  
mollia composita litora fronde tegit.  
at comes invicti iuvenis processerat ultra  
raram sepositi quaerere fontis aquam.  
hunc duo sectati fratres, Aquilonia proles,  
hunc super et Zetes, hunc super et Calais,  
oscula suspensis instabant carpere palmis,  
oscula et alterna ferre supina fuga.  
ille sub extrema pendens secluditur ola  
et volueres ramo summovet insidias.  
iam Pandioniae cessit genus Orithyiae:  
a dolor! ibat Hylas, ibat Hamadryasin.

(Elegies I.20. 17-32)

... For they say that of old Argos set sail from the dockyards of Pagasa and went forth on the long way to Phasis, and at last, the waves of Helle past, moored his bark on Mysia's rockbound coast. Here the band of heroes went forth upon the peaceful shore and carpeted the ground with a soft coverlet of leaves. But the comrade of the young unvanquished hero ranged afar to seek the scarce waters of some distant spring. Him the two brothers followed, Zetes and Calais, the North Wind's sons, and, bowing o'er him, both pressed on to embrace him with hovering hands and snatch a kiss and bear it from his upturned face, each as in turn they fled. But the boy, swept off his feet, hid clinging to one by his pinion's base, and with a branch warding off the other's wingèd wiles. At last the children of Orithyia, Pandion's daughter, retired discomfited, and Hylas, alas! went upon his way, went to be the wood-nymphs' prey.

(Adapted from the translation by H.E. Butler)

24. Ovid (43 B.C. - A.D. 17)

Hic dolor ante diem longaeque extrema senectae  
tempora Tartareas Pandiona misit ad umbras;  
sceptra loci rerumque capit moderamen Erechtheus,  
iustitia dubium validisne potentior armis.  
quattuor ille quidem iuvenes totidemquae crearat  
femineae sortis, sed erat par forma duarum;  
e quibus Aedides Cephalus te coniuge felix,  
Procri, fuit; Boreae Tereus Thracesque nocebant,  
dilectaque diu caruit deus Orithyia,  
dum rogat et precibus mavult quam viribus uti.



ast ubi blanditiis agitur nihil, horridus ira,  
 quae solita est illi nimiumque domestica vento,  
 'et merito! 'dixit' quid enim mea tela reliqui,  
 saevitiam et vires iramque animosque minaces,  
 admovique preces, quarum me dedecet usus?  
 apta mihi vis est : vi tristia nubila pello,  
 vi freta concutio nodosaque robora verto  
 induroque nives et terras grandine pulso;  
 idem ego cum fratres caelo sum nactus aperto  
 (nam mihi campus is est), tanto molimine luctor,  
 ut medius nostris concursibus insonet aether  
 exsiliantque cavis elisi nubibus ignes;  
 idem ego cum subii convexa foramina terrae  
 subposuique ferox imis mea terga cavernis,  
 sollicito manes totumque tremoribus orbem.  
 hac ope debueram thalamos petiisse, socerque  
 non orandus erat mihi sed faciendus Erechtheus.'  
 haec Boreas aut his non inferiora locutus  
 excussit pennas, quarum iactatibus omnis  
 adflata est tellus latumque perhorruit aequor,  
 pulvereamque trahens per summa cacumina pallam  
 verrit humum pavidamque metu caligine tectus  
 Orithyian amans fulvis amplectitur alis.  
 dum volat, arserunt agitati fortius ignes,  
 nec prius aeriicursus suppressit habenas,  
 quam Ciconum tenuit populos et moenia raptor.  
 illic et gelidi coniunx Actaea tyranni  
 et genetrix facta est partus enixa gemellos,  
 cetera qui matris, pennas genitoris haberent.

non tamen has una memorant cum corpore natas,  
 barbaque dum rutilis aberat subnixa capillis,  
 implumes Calaisque puer Zetesque fuerunt;  
 mox pariter pennae ritu coepere volucrum  
 cingere utrumque latus, pariter flavexere malae.  
 ergo ubi concessit tempus puerile inventae,  
 vellera cum Minyis nitido radiantia villo  
 per mare non notum prima periere carina.

(Metamorphoses VI.675-721)

When Pandion heard the story, his grief brought him down to the shades of Tartarus before his time, before he had completed the full span of a long life. Erechtheus succeeded to the kingship, and took over the government of the state, a man as upright as he was powerful in arms. He had four young sons, and as many daughters, and of his daughters there were two who rivalled each other in beauty. One of these, Procris, made Aeolus' grandson Cephalus happy by becoming his wife. Boreas fell in love with the other, who was called Orithyia, but he long wooed her in vain. He pleaded for her favour, preferring to use persuasion rather than force, but the memory of the Thracians, his countrymen, and of Tereus, their king, hampered his suit. When his endearments were of no avail, the wind bristled with rage, his normal temper which he all too commonly displays 'And rightly so,' he cried. 'Why did I abandon my own weapons, violent savagery, anger and threats, and make humble prayers, quite unsuited to my character? Violence is natural to me: by violence I drive away the grim clouds, by violence stir up the sea, bring gnarled oaks crashing down, freeze the snow, and lash the earth with hail. Yes, and when I come upon my brothers in the

open sky, the scene of our combats, I wrestle with them so stoutly that the intervening air rings with our clashes, and lightning darts from the hollow clouds; again, when I enter the hollow caverns beneath the earth, and fiercely thrust my back against its lowest vaults, my gusts make the whole world shake, and trouble even the ghosts. This is how I should have asked for the princess' hand in marriage, not begging but forcing Erechtheus to be my father-in-law.'

With these words and more in the same haughty strain, Boreas shook out the wings which, as he beats his way through the air, cause gusts of wind to blow over all the earth, and ruffle the surface of the sea. Trailing his dusty cloak over the mountain tops, the lover swept along the ground and, shrouded in darkness, engulfed the panic-stricken Orithyia in his dusky wings. As he flew, he fanned the flames of his passion, and it burned more strongly; nor did he check his onrush through the air, till he had borne his prize to the walls of the city where the Cicones dwell. There the Actaeon maiden became the icy despot's wife, and she was made a mother too, for she bore him twin sons, who resembled their mother in all respects, except that they had wings like their father. However, they were not born with these; while their golden hair hung over cheeks still smooth and beardless, young Calais and Zetes showed no trace of plumage: but then, as the yellow down covered their chins, feathers began to grow on either shoulder too, just as if they were birds.

So, when they had grown to manhood, they joined the Minyans in sailing over the unknown sea, in the first ship ever built, in search of the shining golden fleece.

(Translation by Mary M. Innes)

## 25. Ovid (43B.C. - A.C.17)

'Mater, ades, florum, ludis celebranda iocosis!

distuleram partes mense priore tuas.

incipis Aprili, transis in tempora Maii:

alter te frigiens, cum venit, alter habet.

cum tua sint cedantque tibi confinia mensum,

convenit in laudes ille vel ille tuas.

Circus in hunc exit clamataque palma theatris;

hoc quoque cum Circi munere carmen eat.

ipsa doce, quae sis. hominum sententia fallax:

optima tu proprii nominis auctor eris.'

sic ego, sic nostris respondit diva rogatis

(dum loquitur, vernes efflat ab ore rosas):

'Chloris eram, quae Flora vocor : corrupta Latino

nominis est nostri littera Graeca sono;

Chloris eram, nymphe campi felicis, ubi audis

rem fortunatis ante fuisse viris.

quae fuerit mihi forma, grave est narrare modestae,

sed generum matri repperit illa deum.

ver erat, errabam : Zephyrus conspexit, abibam.

insequitur, fugio : fortior ille fuit,

et dederat fratri Boreas ius omne rapinae

ausus Erechthea praemia ferre domo.

vim tamen emendat dando mihi nomina nuptae,

inque meo non est ulla querela toro.

vere fruor semper, semper nitidissimus annus,

arbor habet frondes, pabula semper humus.

est mihi fecundus dotalibus hortus in agris :

aura fovet, liquidae fonte rigatur aquae.  
 hunc meus implevit generoso flore maritus,  
 atque ait 'arbitrium tu, dea, floris habe.'  
 saepe ego digestos volui numerare colores  
 nec potui : numero copia maior erat...'

(Fasti V. 183 - 214)

'Come, Mother of Flowers, that we may honour you with merry games; last month I put off giving you your due. You begin in April and pass into the time of May; the one month claims you as it flies, the other as it comes. Since the borders of the months are yours and appertain to you, either of the two is a fitting time to sing your praises. The games of the circus and the victor's palm, acclaimed by the spectators, fall in this month; let my song run side by side with the shows in the circus. Tell me yourself who you are; the opinion of men is fallacious; you will be the best voucher of your own name.'

So I spoke, and the goddess answered my question thus, and while she spoke, her lips breathed vernal roses : I who am now called Flora was formerly Chloris : a Greek letter of my name is corrupted in the Latin speech. Chloris I was, a nymph of the happy fields where, as you have heard, dwelt fortunate men of old. Modesty shrinks from describing my figure; but it procured the hand of a god for my mother's daughter. 'Twas spring, and I was roaming; Zephyr caught sight of me; I retired; he pursued and I fled; but he was the stronger, and Boreas had given his brother full right of rape by daring to carry off the prize from the house of Erechtheus. However, he made amends for his violence by giving me the name of bride, and in my marriage-bed I have nought to complain of. I

enjoy perpetual spring; most buxom is the year ever; even the tree is clothed with leaves, the ground with pasture. In the fields that are my dower, I have a fruitful garden, fanned by the breeze and watered by a spring of running water. This garden my husband filled with noble flowers and said, Goddess, be queen of flowers.' Oft did I wish to count the colours in the beds, but could not; the number was past counting...'

(Adapted from the translation by J.G. Frazer)

26. Valerius Flaccus (mid to late 1st century A.D.)

Dixerat; et placidi tendebant carbasa venti.  
 postera non cassae Minyis Aurora retexit  
 noctis iter; nova cuncta vident Thyreaque iuxta  
 litora fatidici poenis horrentia Phinei,  
 dura deum summo quem vis urgebat in aevo.  
 quippe reque extorrem tantum nec lucis egentem  
 insuper Harpyiae Typhoides, ira Torantis,  
 depopulant ipsoque dapes praedantur ab ore.  
 talia prodigia et tales pro crimine poenas  
 perpetitur; spes una seni, quod pellere saevam  
 quondam fata luem dederant Aquilone creatis.  
 ergo ubi iam Minyas certamque accedere Phineus  
 sentit opem, primas baculo defertur ad undas  
 vestigatque ratem atque oculos attolit inanes.  
 tunc tenuem spirans animam 'salve o mihi longum  
 expectata manus nostrisque' ait 'agnita votis...  
 ...non ego nunc, magno quod cretus Agenore Phineus,  
 aut memorem, mea quod vates insedit Apollo  
 pectora; praesentis potius miserescite fati...

... Harpyiae semper mea pabula servant,  
 fallere quas nusquam misero locus : ilicet omnes  
 deveniunt niger intorto ceu turbine nimbus,  
 iamque alis procul et sonitu mihi nota Caleano;  
 diripiunt verruntque dapes foedataque turbant  
 pocula, saevit odor surgitque miserrima pugna,  
 parque mihi monstrosis fames ...  
 ...nempe adsunt, qui monstra fugent, Aquilonia proles  
 non externa mihi; nam rex ego divitis Hebr  
 iunctaque vestra meo quondam Cleopatra cubili.'  
 Nomen ad Actaeae Calais Zetesque sororis  
 prosiliunt...  
 ...instituere toros mediisque tapetibus ipsum  
 accipiunt circumque iacent : simul aequora servant,  
 astra simul, vescique iubent ac mittere curas :  
 cum subitus misero tremor et pallentia primae  
 ora senis fugere manus; nec prodita pestis  
 ante sed in mediis dapibus videre volucres.  
 fragrat acerbus odor patriique expirat Averni  
 halitus; unum omnes incessere planctibus, unum  
 infestare manus...  
 ...emicat hic subito seseque Aquilonia proles  
 cum clamore levat, genitor simul impulit alas.  
 hoste novo turbata lues lapsaeque rapinae  
 faucibus, et primum pavidae Phineia tecta  
 pervolitant, mox alta petunt; stant litore fixi  
 Haemonidae atque oculis palantia monstra secuntur.  
 sicut prorupti tonuit cum forte Vesevi  
 Hesperiae letalis apex, vixdum ignea montem

torsit hiemps iamque eoas cinis induit urbes :  
 turbine sic rapido populos atque aequora longe  
 transabeunt, nullaue datur considerare terra.  
 iamque et ad Ionii metas atque intima tendunt  
 saxa; vocat magni Strophades nunc incola ponti.  
 hic fessae letique metu propioris anhelae  
 dum trepidant humilique graves timidoque volatu  
 implorant clamore patrem Typhona nefando,  
 extulit adsurgens noctem pater imaue summis  
 miscuit, et mediis vox exaudita tenebris :  
 'iam satis huc pepulisse deas; cur tenditis ultra  
 in famulas saevire Iovis, quas, fulmina quamquam  
 aegidaue ille gerens, magnas sibi legit in iras?  
 nunc quoque Agenoreis idem decedere tectis  
 imperat; adgnoscent monitus iussaeque recedunt.  
 mox tamen et vobis similis fuga, cum premet arcus  
 letifer. Harpyiae numquam nova pabula quaerent,  
 donec erunt divum meritaе mortalibus irae.'  
 haesit uterque polo dubiisque elanguit alis;  
 mox abit et sociae victor petit agmina pubis.

(Argonautica IV. 422-437, 444-446, 450-456,  
 462-466, 487-495, 501-528)

His tale was done; and calm winds were making the canvas fill.  
 The morrow's dawn showed to the Minyae that the night's journey  
 had not been in vain; all that they see is new - the Thynian shores  
 nearby aghast at the fate of prophetic Phineus, oppressed at his  
 life's close by the gods' stern might. For not only is he a  
 stranger from his land, not only blind, but moreover the Harpies,



daughters of Typhoeus, ministers of the Thunderer's wrath, do ravage him, thieving his food from his very mouth. Such portents and such penalties does he suffer for his crimes; one hope alone the old man has : the Fates decreed of yore that the sons of Aquilo should dispel the cruel plague. So Phineus, aware that the Minyae and sure succour are drawing nigh, goes down with his staff's aid to the water's edge, and lifting up sightless eyes seeks out the ship. Then, drawing faint breath, he cries : 'All hail, O long-expected band, well known to my prayers! ... Not now would I tell you how Phineus is sprung from great Agenor, or how prophetic Apollo has his seat within my breast : pity rather my present fate... The Harpies ever watch my food; never, alas! can I elude them; straightway they all swoop down like the black cloud of a whirling hurricane, already by the sound of her wings I know Celaeno from afar; they ravage and sweep away my banquet, and befoul and upset the cups, there is a violent stench and a sorry battle arises, for the monsters are as famished as I... Surely Aquilo's sons are here to rout the monsters, nor are they alien to me; for I am king of rich Hebrus, and once was your Cleopatra joined to me in wedlock.'

At the name of their Attic sister Calais and Zetes spring forward... They set the couches, and welcome him to the midmost cushions, and themselves recline around; withal they watch the waters and withal the skies, and bid him dine and banish care : when suddenly the wretched old man trembled, and his fingers dropped from his paling lips; nor was there warning of the plague, but among the very dishes were seen the birds. A rank smell floats abroad, and a breath of their sire's Avernus is exhaled; one only do all attack with flapping wings, one alone does the band molest... Thereat on a sudden dart forth the sons of Aquilo, and rise with a shout into

the air, their sire impelling their wings the while. The new foe dismays the pests, and the plunder drops from their jaws, and first in fear they flutter about Phineus' palace, then seek the deep; the Haemonians stand transfixed upon the shore, and follow the roving monsters with their gaze. As when it happens that the peak of Vesevus bursts forth in thunder, bringing destruction to Hesperia, scarce yet has the fiery hurricane wrung the mountain, and already eastern cities are coated with the ash : in so fleet a whirlwind do they pass over peoples and seas afar, nor are they suffered to settle in any land. And by now are they drawing near the bounds of the Ionian sea and the rocks in its midst : today the dweller in that mighty sea calls them the Isles of Turning (the Strophades). Here while they hovered, weary and panting with fear of death's approach, and, weighed down in low and timorous flight, implored with ghastly shriek their father Typho, he rose and brought up the darkness with him, mingling high and low, while from the heart of the gloom a voice was heard : 'It is enough to have chased the goddesses so far; why do you strive farther in rage against the ministers of Jove, whom, though he wield the thunderbolt and the aegis, he has chosen to work his mighty wrath? Now also has that same Jove commanded them to depart from the dwellings of Agenor's son; they hearken to his prompting, and withdraw upon his word. Yet anon will you also in like manner flee, when the fatal bow shall bring doom upon you. Never shall the Harpies lack fresh sustenance, so long as mortals shall merit the anger of the gods.' The two stopped short in the air, and hovered awhile with doubtful wing; then they departed, and in triumph rejoined their comrades' ranks.

(Adapted from the translation by J.H. Mozley)

## 27. Statius (A.D. c.45 - 96)

... et raptae qui conscius Orithyiae  
celavit ripis Geticos Elisos amores.

(Thebais XII. 630 - 631)

... and the Ilissos which, privy to the rape of Orithyia, concealed the Thracian passions on its banks.

## 28. Silius Italicus (A.D. c.26 - c.101)

... Nec cedit studio Sidicinus sanguine miles,  
quem genuere Cales : non parvus conditor urbi,  
ut fama est, Calis, Boreae quem rapta per auras  
Orithyia vago Geticis nutrit in antris.

(Punica VIII. 511 - 514)

... Nor was there a lack of enthusiasm amongst the soldiers of Sidicinum, whose mother-city is Cales. As the story goes, this city had no mean founder : Calais, whom Orithyia - carried off by the North-wind Boreas - nurtured in Thracian caves.

## 29. Hyginus (? 2nd century A.D.)

Zetes et Calis Aquilonis venti et Orithyae Erichthei filiae filii.  
Hi capita pedesque pennatos habuisse feruntur, crinesque ceruleos,  
qui pervio aere usi sunt...

(Fabulae XIV)

Zetes and Calais were the sons of the North wind Aquilo and of Orithyia the daughter of Erechtheus. They are said to have had wings on their heads and feet, to have been endowed with hair of a sky-blue colour, and to have used the air as their thoroughfare...

## 30. Hyginus (? 2nd century A.D.)

Phineus Agenoris filius Thrax, ex Cleopatra habuit filios duos. Hi a patre novercae crimine excaecati sunt. Huic etiam Phineo Apollo augurium dicitur dedisse. Hic deorum consilia cum ennuciaret ab Iove est excaecatus : et apposuit ei Harpyas, quae Iovis canes esse dicuntur, quae escam ab ore eius auferrent. Huc cum Argonautae devenissent, et eum iter ut demonstraret, rogarent, dixit se demonstraturum, si eum poena liberarent. Tunc Zetes et Calais Aquilonis venti et Orithyiae filii, qui pennas in capite et in pedibus habuisse dicuntur, Harpyas fugaverunt in insulas Strophadas, et Phineum poena liberaverunt.

## (Fabulae XIX)

Phineus the Thracian son of Agenor had two sons by Cleopatra. These sons were blinded by their father as a result of an accusation made by their stepmother. This same Phineus is also said to have been given the gift of prophecy by Apollo. Because he divulged the plans of the gods he was blinded by Jupiter, who also assigned to him the Harpies - said to be the creatures of Zeus - that they might carry off the food from his very mouth. When the Argonauts arrived and asked him to show them the way, he answered that he would do that if they freed him of his punishment. Then Zetes and Calais the sons of the North wind Aquilo and of Orithyia, who are said to have had wings on their head and on their feet, pursued the Harpies to the Strophades Islands, and freed Phineus of his punishment.

## 31. Lucian (A.D. c.120 - 180)

Ὅμοια δὲ τούτοις καὶ περὶ τῆς Ἥρας ῥδουσιν, ἄνευ τῆς πρὸς  
τὸν ἄνδρα ὁμιλίας ὑπηνέμιον αὐτὴν παῖδα γεννῆσαι τὸν Ἡραϊστον,  
οὐ μάλ᾽ εὐτυχῇ τοῦτον, ἀλλὰ βάναισον καὶ χαλκία καὶ πυρίτην, ἐν  
καπνῷ τὸ πᾶν βιοῦντα καὶ σπινθήρων ἀνάπλεων οἷα δὴ καμινευτήν,

... καὶ οὐδὲ. ἔστιν οὖν τὸ πρὸς τὴν Ἥραν ῥδουσαν αὐτὴν παῖδα γεννῆσαι τὸν Ἡραϊστον.

Ἡραϊστον δὲ τὸν παῖδα τὴν Ἥραν ῥδουσαν αὐτὴν παῖδα γεννῆσαι τὸν Ἡραϊστον.

Ἡραϊστον δὲ τὸν παῖδα τὴν Ἥραν ῥδουσαν αὐτὴν παῖδα γεννῆσαι τὸν Ἡραϊστον.

Ἡραϊστον δὲ τὸν παῖδα τὴν Ἥραν ῥδουσαν αὐτὴν παῖδα γεννῆσαι τὸν Ἡραϊστον.  
Ἡραϊστον δὲ τὸν παῖδα τὴν Ἥραν ῥδουσαν αὐτὴν παῖδα γεννῆσαι τὸν Ἡραϊστον.  
Ἡραϊστον δὲ τὸν παῖδα τὴν Ἥραν ῥδουσαν αὐτὴν παῖδα γεννῆσαι τὸν Ἡραϊστον.  
Ἡραϊστον δὲ τὸν παῖδα τὴν Ἥραν ῥδουσαν αὐτὴν παῖδα γεννῆσαι τὸν Ἡραϊστον.  
Ἡραϊστον δὲ τὸν παῖδα τὴν Ἥραν ῥδουσαν αὐτὴν παῖδα γεννῆσαι τὸν Ἡραϊστον.

ἐς τὸν Ἰλιόν. ὁ δὲ Ἰλιός ἐστιν οὗτος, ἔνθα παίζουσιν Ἥραιθιναν  
ὑπὸ ἀνέμου Βορέου φασὶν ἄρπασθῆναι\* καὶ συνοικεῖν Ἥραιθυίᾳ Βορέαν  
καὶ ἄρπασθαι τὸν Ἰλιόν. ἔστιν οὖν τὸ πρὸς τὴν Ἥραν ῥδουσαν αὐτὴν παῖδα γεννῆσαι τὸν Ἡραϊστον.  
τὰς πολλὰς. ἐθέλουσι δὲ Ἀθηναῖοι καὶ ἄλλων θεῶν ἱερὸν εἶναι τὸν  
Ἰλιόν, καὶ Μουσῶν βωμὸς ἐπ' αὐτῷ ἐστιν Ἰλισιάδων\*...

(Description of Greece I.19.5)

... Such is the legend.

The rivers that flow through Athenian territory are the Ilissus and its tributary the Eridanus, whose name is the same as that of the Celtic river. This Ilissus is the river by which Oreithyia was playing when, according to the story, she was carried off by the North wind. With Oreithyia he lived in wedlock, and because of the tie between him and the Athenians he helped them by destroying most of the foreigners' warships. The Athenians hold that the Ilissus is sacred to other deities as well, and on its bank is an altar of the Ilisian Muses...

(Translation by W.H.S. Jones)

33. Pausanias (2nd century A.D.)

... τὸ δὲ ἀπὸ τούτου ἀγὼν μὲν ὁ ἐπὶ Πελῖᾳ πέπαιται, τὴν ὕδραν δὲ, τὸ ἐν τῷ ποταμῷ τῇ Ἀμυμῶνῃ θηρίον, Ἡρακλεῖ τοξεύοντι Ἀθηνᾶ παρέστηκεν ἅτε δὲ τοῦ Ἡρακλέους ὄντος οὐκ ἀγνώστου τοῦ τε αἰῶλου χάριν καὶ ἐπὶ τῷ σχηματι, τὸ ὄνομα οὐκ ἔστιν ἐπ' αὐτῷ γεγραμμένον. Φινεύς τε ὁ θοῶς ἔστι, καὶ οἱ παῖδες οἱ βορέου τὰς Ἀρπυίας ἀπ' αὐτοῦ διώκουσιν.

(Description of Greece V.17.11)

... At this point the funeral games of Pelias come to an end, and Heracles, with Athena standing beside him, is shooting at the hydra, the beast in the river Anyone. Heracles can be easily recognised by his exploit and his attitude, so his name is not inscribed

by him. There is also Phineus the Thracian, and the sons of Boreas are chasing the harpies away from him.

(Translation by W.H.S. Jones and H.A. Ormerod)

34. Pausanias (2nd century A.D.)

... Τέταρτα δε ἐπὶ τῇ λάρνακι ἐξ ἀριστερᾶς περιόντι Βορέας  
ἐστὶν ἡρπαιῶς Ὀρεΐθυιαν, οὐραὶ δὲ ὄφρων ἀντὶ ποδῶν εἰσιν  
αὐτῷ ...

(Description of Greece V.19.1)

... In the fourth space on the chest as you go round from the left is Boreas, who has carried off Oreithyia; instead of feet he has serpents' tails.

(Translation by W.H.S. Jones and H.A. Ormerod)

35. Philostratus (A.D. c.170 - 244/9)

... Ἐπιπλήξαι δὲ λέγεται περὶ Διονυσίων Ἀθηναίοις, ἃ ποιεῖται  
αἰσιν ἐν ᾧ τοῦ ἀνθεστηριῶνος ... 'παύσασθε,' εἶπεν, 'ἐξορχούμενοι  
τοὺς Σαλαμινίους καὶ πολλοὺς ἑτέροους κειμένους ἀγαθοὺς ἀνδρας...  
κροιωτοὶ δὲ ὑμῖν καὶ ἀλουργία καὶ κοκκοβαφία τοιαύτη πόθεν;  
... ὑμεῖς δὲ ἀβρότεροι τῶν ξέρξου γυναικῶν ἐφ' ἑαυτοὺς στέλλεσθε  
οἱ γέροντες οἱ νέοι τὸ ἐφηβικόν, οἱ πάλαι μὲν ὤμνυσαν  
ἐς Ἀγραύλου φοιτῶντες ὑπὲρ τῆς πατρίδος ἀποθανεῖσθαι καὶ ὅπλα  
θήσεσθαι, νῦν δὲ ἴσως ὁμοῦνται ὑπὲρ τῆς πατρίδος βασιλεύσειν καὶ  
θύρσον λήψεσθαι, κόρυν μὲν οὐδεμίαν φέρον, γυναικομίμῃ δὲ μορφάματι,  
κατὰ τὸν Εὐριπίδην, αἰσχρῶς διαπρέπον. ἀκούω δὲ ὑμᾶς καὶ ἀνέμους  
γίγνεσθαι, καὶ λῆδια ἀνασεῖν λέγεσθε ἐπιπλά μετεώρος αὐτὰ  
κολποῦντες. ἔδει δὲ ἄλλα τούτους γε αἰδεῖσθαι, ξυμμάχους ὄντας  
καὶ πνεύσαντας ὑπὲρ ὑμῶν μέγα, μὴδὲ τὸν Βορέαν κηδεστήν γε ὄντα

καὶ παρὰ πάντας τοὺς ἀνέμους ἄρσενα ποιεῖσθαι θῆλυν, οὐδὲ γὰρ τῆς  
 Ὀρειθυίας ἐραστῆς ἂν ποτε ὁ Βορέας ἐγένετο, εἰ κόμεινὴν ὀρχουμένην  
 εἶδε.'

(Life of Apollonius IV.21)

... And he is said to have rebuked the Athenians for their conduct of the festival of Dionysus, which they hold at the season of the month Anthesterion... he said 'Stop dancing away the reputations of the victors of Salamis as well as of many other good men departed this life... And what do you mean by your saffron robes and your purple and scarlet raiment? ... you are softer than the women of Xerxes' day, and you are dressing yourselves up to your own despite, old and young and tender youth alike, you who of old flocked to the temple of Agraulus in order to swear to die in battle on behalf of the fatherland. And now it seems that the same people are ready to swear to become bacchants and don the thyrsus on behalf of their country; and no one bears a helmet, but disguised as female harlequins, to use the phrase of Euripides, they shine in shame alone. Nay more, I hear that you turn yourselves into winds, and wave your skirts, and pretend that you are ships bellying their sails aloft. But surely you might at least have some respect for the winds that were your allies and once blew mightily to protect you, instead of turning Boreas who was your patron, and who of all the winds is the most masculine, into a woman; for Boreas would never have become the lover of Oreithyia, if he had seen her executing, like you, a skirt dance.

(Translation by F.C. Conybeare)



36. Aelian (A.D. c.170 - 235)

For the text of Aelian, De Natura Animalium XI.I, see no. 12 above.

37. Diogenes Laertius (? 3rd century A.D.)

For the text of Diogenes Laertius, Lives and Opinions of Eminent Philosophers IV. 26 - 27, see no.10 above.

38. Lactantius (A.D. c.240 - c.320)

... Flora, cum magnas opes ex arte meretricia quaesivisset, populum scripsit haeredem, certamque pecuniam reliquit, cuius ex annuo faenore suus natalis dies celebraretur editione ludorum, quos appellant Floralia. Quod quia senatui flagitiosum videbatur, ab ipso nomine argumentum sumi placuit, ut pudendae rei quadam dignitas adderetur. Deam finxerunt esse, quae floribus praesit, eamque oportere placare, ut fruges cum arboribus aut vitibus bene prospereque florescent. Eum colorem secutus in Fastis poeta, non ignobilem nympham fuisse narravit, quae sit Chloris vocitata, eamque Zephyro nuptam, quasi dotis loco id accepisse muneris a marito, ut haberet omnium florum potestatem. Honeste quidem ista dicuntur; sed inhoneste turpiterque creduntur.

(Dininae Institutiones I.20)

... Flora, having obtained great wealth by the practice of prostitution, made the people her heir, and left a fixed sum of money, from the annual proceeds of which her birthday might be celebrated by public games, which are called Floralia. And because this appeared disgraceful to the senate, in order that a kind of dignity might be given to a shameful matter, they resolved that an argument should be taken from the name itself.

They pretended that she was the goddess who presides over flowers, and that she must be appeased, that the crops together with the trees or vines, might produce a good and abundant blossom. The poet followed up this idea in his Fasti, and related that there was a nymph, by no means obscure, who was called Chloris, and that, on her marriage with Zephyrus, she received from her husband as a wedding gift the control over all flowers. These things are spoken with propriety, but to believe them is unbecoming and shameful.

(Adapted from the translation by William Fletcher)

39. Avienus (mid 4th century A.D.)

... Atticus hanc ultra limes iacet, Attica tellus  
 Belligeratorum genetrix memoranda virorum.  
 Fertilis haec herbis Ilissum subvehit amnem:  
 Ilissi Boreas stagno tulit Orithyiam.

(Descriptio Orbis Terrae 582 - 585)

... Beyond this boundary lies Athenian territory, Attica, the noteworthy mother of warrior men. This fertile country conveys the Ilissus river to its pastures : from the quiet water of the Ilissus Boreas carried off Orithyia.

40. Quintus Smyrnaeus (4th century A.D.)

... τοῖος Ἄρης παναοῖο δι' ἥερος ἀσχαλῶν κῆρ  
 ἔσσυτο σὺν τεύχεσσιν, ἐπεὶ μόνον αἰνὸν αἰουσε  
 παιδὸς ἐῆς· τῷ γάρ ῥα κατ' οὐρανὸν εὐρύν ἐόντι  
 Αἶραι μυθήσαντο θαλὶ Βορέαο θύγατρει

κούρης αἶνον ὄλεθρον· ὃ δ' ὥς κλύεν, ἶσος ἀέλλη  
 'Ιδαίων ὀρέων ἐπεβήσατο' ...

(Posthomerica I. 681 -686)

... So through the quivering air with heart aflame  
 Swooped Ares Armour-clad, soon as he heard  
 The dread doom of his daughter. For the Gales,  
 The North-wind's fleet-winged daughters, bore to him,  
 As through the wide halls of the sky he strode,  
 The tidings of the maiden's woeful end.  
 Soon as he heard it, like a tempest-blast  
 Down to the ridges of Ida leapt he ...

(Translation by Arthur S. Way)

41. Orpheus (? late 4th century A.D.)

... Δισσὸν δ' αὖ Βορέου καλὸν στάχυν εἰσενόησα,  
 οὓς τέκ' Ἐρεχθῆος θεῖον κλυτὴ Ὠρεΐθυια  
 Ἰλισσοῦ παρὰ χεῦμα θεοῦ φιλότῃτι μιγεῖσα'  
 οἱ δὲ καὶ ταρσοῖσιν ὑποαπίλοις πεπότηντο,  
 Ζήτης καὶ Κάλαις δέμας εἴκελοι ἀθανάτοισιν.

(Argonautica 218 - 222)

... Next I perceived the two beautiful offspring of Boreas, to  
 whom the renowned Oreithyia, daughter of divine Erechtheus,  
 gave birth, having united in love with the god beside the  
 river Ilissos, they who flew by means of wings placed beneath  
 their ears, Zetes and Calais, similar in form to the Immortals.

## 42. Orpheus (? late 4th century A.D.)

"Ἐνθα δ' ἀφορμηθέντες, ὑπ' εἰρεσίῃ δε καμώντες,  
 Βιθυνῶν μέγα ἄστυ βαθεῖη κέλασμεν ἀκτῇ  
 σπεύδοντες προχοαῖς ἥδ' ἐν νικαργέσιν ὕλαις,  
 ἔσπεροι αὐλιοθέντες ἐμφυλισσάμεθα δόρπον.  
 Ἐνθα ποτ' αἰνόγαμος Φινεὺς ὑπερήνορι θυμῷ  
 δοιοὺς ἐξαλάωσε γόνους, προβλήσῃ τε πέτραις  
 θηροῖν ἔλῳρ προὔθηκε γυναιῶν εἵνεκα φίλτρων·  
 τοὺς δὲ καὶ ἀσκηθεῖς καὶ ὀπωπότης αὖθις ἔτευξαν  
 παῖδε κλυτοῦ Βορέον· Φινεῖ δέ οἱ ὤπασαν ἄτην  
 ἀργαλέονιο κότου, φωτὸς δ' ἀπενόσφισαν αὐγὰς.  
 αὐτὰρ ἐπεὶ ζαμενῆς Βορέης στραφάδεσσιν ἀέλλαις  
 ἀρπάξας ἐκύλινδεν διὰ δρυμὰ πυκνὰ καὶ ὕλας  
 Βιστονίης, ἵνα κῆρ ὅλοην καὶ πότμον ἐπίσπῃ.

(Argonautica 667 - 679)

Having set out from there and become worn out with rowing, we put ashore - in a deep-set bay - at the great city of the Bithynians, and hastening to the mouth of the river in the snow-covered woods, we set up camp in the evening and prepared a meal. There, in former times, the fatally wedded Phineus with overbearing anger blinded his two sons, and exposed them on a rocky promontory as a prey to wild beasts, because of the charms of a woman. The two sons of famous Boreas saved them and returned their sight to them; on Phineus they inflicted punishment for his grievous anger, and deprived his eyes of light. Then mighty Boreas seized him and rolled him in whirlwinds through the dense woods and forests of Bistonia, that he might there incur a deadly fate and death.

## 43. Nonnus (5th century A.D.)

Αὐτὴ δὲ Χρεμέταο μετήιεν Ἑσπερον ὕδαρ  
 Ἥρη μητιόωσα, γέρων βαρὺς ὀππόθι κάμνει  
 οὐρανίῃ στραφάλιγγι Λίβυς κυρτούμενος Ἀτλας,  
 καὶ Ζεφύρου δυσέρωτος ἐδίζετο σύγγαμον Ἴριν,  
 Ζηνὸς ἐπειγομένοιο διάκτορον ὄφρα τελέσῃ  
 ἡρόθεν σκιδόντι ποδῆνεμον ἄγγελον Ὑπνῷ.  
 Τὴν δὲ καλεσσαμένη φιλίῳ μειλίζετο μῦθῳ·  
 'Ἴρις ἀξιφύτου Ζεφύρου χρυσόπτερε νύμφη,  
 εὖλοχε μήτερ Ἔρωτος, ἀελλήεντι πεδίλῳ  
 σπεῦδε μολεῖν ζαφρόντος ἐς Ἑσπέριον δόμον Ὑπνου'...

(Dionysiaca XXXI. 103 - 112)

Hera herself made her way brooding to the waters of Chremetes in the west, where that afflicted ancient, Libyan Atlas, wearily bends under the whirling heavens; and she sought out the wife of jealous Zephyrus, Iris, the messenger of impetuous Zeus, for she wished to send her - she who was as swift as the wind - down from heaven with a message for shadowy Sleep. She called Iris then, and coaxed her with friendly words:

'Iris, goldenwing bride of plantnourishing Zephyros, happy mother of Eros! Hasten with stormshod foot to the home of gloomy Sleep in the west...'

(Adapted from the translation by W.H.D. Rouse)

## 44. Nonnus (5th century A.D.)

... ὠκυπόδην δὲ  
 ἑάνθον ἄγων πρῶτιστος ὑπὸ ζυγὰ δῆσεν Ἐρχθεὺς  
 ἄρσενα, καὶ θήλειαν ἐπεσφήκωσε Ποδάρκην,  
 οὓς Βορέης ἔσπειρεν εὐπτερύγων ἐπὶ λέκτρων

Σιθονίην Ἄρπυϊαν ἀελλόπον εἰς γάμον ἔλκων,  
καὶ σφεας, Ὀρεΐθυϊαν δ' ἥρπασεν Ἀτθίδα νύμφην,  
ᾧπασεν ἔδνον ἔρωτος Ἐρεχθεὶ γαμβρὸς ἀήτης.

(Dionysiaca XXXVII. 154 - 161)

...First Erechtheus led up and yoked his swift-footed horse Xanthos,  
and fastened in his mare Podarke, both of them sired by Boreas  
in a winged union as he dragged a stormfooted Sithonian Harpy  
to him, and given by him as a gift of love to his father-in-law  
Erechtheus when he carried off Attic Oreithyia for his bride.

(cf Appendix I, no.22)

45. Nonnus (5th century A.D.)

'...θαρήξω δ' ἐς Ἄρηα καὶ Αἰόλον, ὄφρα νοήσω  
Εὖρον ἀνοντίζοντα καὶ αἰχμάζοντα Βορῆα,  
γαμβρὸν ἐμοῦ προμάχου, Μαραθωνίδος ἄρπαγα νύμφης,  
καὶ Νότον Αἰθιοπῆα προασπιστῆρα Λυαίου·  
καὶ Ζέφυρος πολὺ μᾶλλον ἀελλήεντι κυδοιμῷ  
ὀλκάδας ἀντιβίων δηλήσεται· ἡμετέρου γὰρ  
εὐνέτιν Ἴριν ἔχει Διὸς ἄγγελον. ὅλλα σιωπῇ  
ἔκτοθεν εὐθύρσοιο καὶ Ἰνδύφιο κυδοιμοῦ  
μιμνέτω ἡρεμέων θρασὺς Αἰόλος, ἡθάρδι δεσμῷ  
ἀσκὸν ἐπισφίγξας ἀνεμώδεα, μηδ' ἐνὶ πόντι  
ἄσθμασιν Ἰνδοφόνοισιν ἀριστευσασιν ἀήται·  
ἀλλὰ μόθον τελέσω νηαρθόρα θύρα τιταίνων.'

(Dionysiaca XXXIX. 111 - 122)

'...Aiolos too I will arm for warfare, that I may behold East Wind shooting arrows and North Wind hurling javelins - North Wind son-in-law of my champion and the spoiler of the Marathonian bride, and South Wind the Ethiopian defender of Lyaïos. And much more shall West Wind destroy the ships of my adversaries with stormy tumult, for he has as wife Iris the messenger of my father Zeus. No, better let bold Aiolos keep away from the battle of Indian and Thyrsus and remain in peace and quiet; let him tie up tight his windy bag by its usual cord, that the winds may not be heroes on the deep and slay the Indians with their blasts. I will finish the battle shaking a ship-destroying thyrsus.'

(Adapted from the translation by W.H.D. Rouse)

46. Nonnus (5th century A.D.)

'... εἰς ἐμὲ καὶ φίλος Ὕπνος ἀνάρσιος· εἴπατε, πέτραι,  
εἴπατέ μοι δυσέρωτι· τίς ἤρπασεν ἀσπὸν Ἀθήνης;  
εἰ Βορέης πνεύσειεν, ἐς Ὀρείθυϊαν ἰκάνω·  
ἀλλὰ μοι Ὀρείθυια χολώεται, ὅτι καὶ αὐτὴ  
αἶμα φέρει Μαραθῶνος, ὅθεν φίλος ἔπλετο Θησεύς.  
εἰ Ζέφυρος κλονέει, Ζεφυρηίδι δείξατε νύμφη  
Ἴριδι μητρὶ Πόθοιο βιαζομένην Ἀριάδην·  
εἰ Νότος, εἰ Θρασὺς Εὖρος, ἐς ἠριγένειαν ἰκάνω  
μεμφομένη ῥοθίων ἀνέμων δυσέρωτι τεκούσῃ...'

(Dionysiaca XLVII. 336 - 344)

'... To me, even kind Sleep is cruel. Tell me, rocks, tell the unhappy lover - who stole the man of Athens? If it should be Boreas blowing, I appeal to Oreithyia: but Oreithyia

hates me, because she also has the blood of Marathon, whence beloved Theseus came. If Zephyros torments me, tell Iris the bride of Zephyros and mother of Desire, to behold Ariadne maltreated. If it is Notos, if bold Euros, I appeal to Eos and reproach the mother of the blustering winds, lovelorn herself...'

(Translation by W.H.D. Rouse)

47. Ben Jonson (A.D. 1573? - 1637)

... Son of the wind - for so thy mother, gone  
 With lust, conceived thee; father thou hadst none;  
 When thou wert born and that thou look'st at best,  
 She durst not kiss, but flung thee from her breast...

(The Underwood 111 - 114)

48. John Milton (A.D. 1608 - 1674)

But come thou goddess fair and free,  
 In Heaven yclept Euphrosyne,  
 And by men, heart-easing Mirth,  
 Whom lovely Venus at a birth  
 With two sister Graces more  
 To ivy-crowned Bacchus bore;  
 Or whether (as some sager sing)  
 The frolic wind that breathes the spring,  
 Zephir with Aurora playing,  
 As he met her once a-Maying,  
 There on beds of violet blue,  
 And fresh blown roses washed in dew,



Filled her with thee a daughter fair,  
 So bucksome, blithe and debonair.

(L'Allegro 11 - 24)

49. Henry Longfellow (A.D. 1807 - 1882)

...Fair Nokomis bore a daughter.  
 And she called her name Wenonah.  
 As the first-born of her daughters.

And the daughter of Nokomis  
 Grew up like the prairie lilies,  
 Grew a tall and slender maiden,  
 With the beauty of the starlight.

And Nokomis warned her often,  
 Saying oft, and oft repeating,  
 'Oh, beware of Mudjekeewis,  
 Of the West-Wind, Mudjekeewis;  
 Listen not to what he tells you;  
 Lie not down upon the meadow,  
 Stoop not down among the lilies,  
 Lest the West-Wind come and harm you!'

But she heeded not the warning,  
 Heeded not those words of wisdom,  
 And the West-Wind came at evening,  
 Walking lightly o'er the prairie,  
 Whispering to the leaves and blossoms,  
 Bending low the flowers and grasses,  
 Found the beautiful Wenonah,  
 Lying there among the lilies,

Wooded her with his soft caresses,  
 Till she bore a son in sorrow,  
 Bore a son of love and sorrow.

Thus was born my Hiawatha,  
 Thus was born the child of wonder;  
 But the daughter of Nokomis,  
 Hiawatha's gentle mother,  
 In her anguish died deserted  
 By the West-Wind, false and faithless,  
 By the heartless Mudjekeewis.

(The Song of Hiawatha Part III)

50. ...One woman remained behind and her name was Aloename and she was the wife of Boegliaij. But her husband had also left. Aloename did nothing else but dance. If the wind was from the east, then she danced against the east wind. She fed herself only on bananas. She did this every day no matter from where the wind was blowing.

In this way she became pregnant and she gave birth to two sons, twins. The eldest she called Sematowaij and the youngest Sawaij. They were both large and wise and their mother taught them to make bows and arrows...

(Excerpted from a New Guinea tale recorded in :  
 Jacob Bijkerk, De geheime mannenbond op Nieuw-Guinea, Mededeelingen van Wege het Nederlansche Zendelingsgenootschap 75 (1931), pp116-140 (see espec. p.118); translation by Anneke Scobie (unpublished).)

51. The people of Caovaivai village were all women, and there were no men. So one day they said, 'We would like to bear children.' And they went to a mountain, and bent down, and thrust out their buttocks to the wind. Then they became pregnant and bore children. But the children they bore were only girls; moreover, they were all cripples, and, in addition, they were not strong...

(Excerpted from a Formosan tale recorded in : Ho Ting-jui, A Comparative Study of Myths and Legends of Formosan Aborigines, Taiwan, China, 1971, p.357)

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