# THE KITĀB MANĀFI' AL-ḤA YA WĀN IN THE ESCORIAL LIBRARY

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## The Manuscript

The Kitāb manāfi' al-ḥayawān (The Book on the Usefulness of Animals) in the Real Biblioteca of San Lorenzo del Escorial (Ar. 898)<sup>1</sup> is a well-known illustrated Arabic bestiary which has not received the scholarly attention it deserves.<sup>2</sup> In fact, it is a manuscript of great importance for the history of Islamic painting, for it is one of the few illustrated Mamluk codices which provide us with both the date of its compilation, 755/1354, and the name of the compiler, Ibn al-Durayhim al-Mawsilī.

, The manuscript has 154 folios, measuring 185 x 265 millimeters. The text is written in an elegant naskh, with 13 lines to the page. The written surface measures 125 x 185 millimeters. The text has 91 illustrations. The leather binding is much later; it has the impress of the Escorial Library, the graticule of St. Lawrence. It is possible that the book was damaged, along with so many others, in the great fire of 1671, losing its original binding together with the incipit, however, it is

more likely that it was already mutilated when it was rebound.

The folios are numbered in three different ways. The European numbering gives numbers to each page of the codex in its present state; and there are two systems of numbering in Arabic numerals: one, in the top right-hand corner, numbers each page; the other, at the bottom center, gives a number to each folio. Following the Arabic page-numbering there appears to be only one folio missing; according to the Arabic folio numbering, three folios appear to be missing. It is clear from the text that the missing folios occur at the beginning, as there are no gaps within the sequence of the text and, as already noted, it lacks the *incipit*, the text beginning in mid-sentence with the description of the usefulness of the cranium of Man. A comparison with the Latin version of al-Mawṣilī's text<sup>3</sup> allows us to establish that the passage on the usefulness of Man, with which the manuscript begins, must have been preceded by introductory material of a more general nature. Unfortunately, it is impossible to deduce from this exactly how many folios are missing. We may assume, however, that these folios contained a miniature representing Man, such pictures being found in comparable bestiaries.<sup>4</sup>

The manuscript is in good condition. The paper, now slightly yellow, is heavy and of good quality. The main text is written in black ink; the titles, often in cartouches, are written in white on a gold background decorated with small floral scrolls framed by a gold band which is, in turn, framed by a narrow blue strip. The names of the animals are in gold characters with black outlines. The end of each paragraph is marked by a typically Mamluk decoration: small eight-petalled flowers with a blue or red central button. In the margins of the folios there are often glosses, some

being words omitted from the text, others being invocations to Allāh.

The book ends with a concluding statement (folio 153r, Fig. 3), the second part of which is written in gold characters, and two facing colophons (folios 153v, 154r, Figs. 1, 2) (not unusual in the Mamluk period). Both the concluding statement and the colophons are important: they tell us the date and the name of the compiler of the manuscript. The two colophons, however, present a problem, to interpret whether al-Mawşilī was also the painter of the miniatures. The colophontexts are somewhat ambiguous; three suffix pronouns are used, and these may be interpreted in two different ways, both linguistically correct. The suffix pronouns in question are in the words and and in and in in it (folio 154r, line 11). Eustache de Lorey, and Richard Ettinghausen after him, both thought that al-Mawşilī was not only the author and the calligrapher but also the painter of the manuscript. Henri Massé, who first translated the two colophons, interpreted the suffix pronouns in it and in it are as a referring to al-Mawşilī (lines 2, 3), and that in as referring to the feminine noun hijrah of which Muḥammad, the Prophet, is "le Maître". Taking the text in its entirety, it seems much more likely

that the two first suffix pronouns refer to the text under discussion—which is mentioned in the upper frame of the first colophon, as if it were a title—and not to al-Mawṣilī, and that the third pronoun refers to نقوش and نقوش , the "work" and the "illustrations".

Folio 153r (Fig. 3):9

آخر كتاب منافع الحيوان والحمد للله ربّ العالمين وصلواته على سيد المرسلين محمد وعلى آله وصحبه وسلم تسليما كبيرا بلغ مقابلة بالأصل المنقول منه وتصحيحا من أوّله الى آخره لفى شهر شوّال المبارك سنة خمس وخمسين وسبعماية

"The end of *The Book on the Usefulness of Animals*. Praise be to Allāh, Lord of the Worlds, and prayers upon the greatest of Messengers, Muḥammad, and his family and companions, may a great peace be upon them. The collation with the original text from which it is derived, and correction from beginning to end, was finished in the blessed month of Shawwāl in the year 755" (October 1354).

Folios 153v-154r, the colophons (Figs. 1, 2) read:

تم الكتاب المبارك بحمد الله وعونه ما اعتنى بجمعه العبد الفقير الى الله تعالى على بن محمد بن عبد العزيز بن أبي الفتح بن الدريهم الموصلي عادله الله بلطفه وكان الفراغ من فنونه البديعة الغريبة ونقوشه البديعة الغريبة ونقوشه ومولده ربيع الأول من شهور سنة خمس وخمسين وسبعمية هجرية على صاحبها أفضل الصلاة والسلام وصلى الله على سيدنا محمد وعلى آله وصحبه وسلّم

"Terminated the blessed book, praise be to Allāh for His help. The book was compiled by the poor servant of Allāh the Highest, 'Alī ibn Muḥammad ibn 'Abd al-'Azīz ibn Abī al-Fatḥ ibn al-Durayhim al-Mawṣilī, may Allāh recompense him with His mercy. Its strange and splendid work, its skillful and extraordinary illustrations, were completed at the most fortunate and happy time: in the month of our noble Prophet's birth, Rabī 'al-Awwal in the year 755 of the Hijrah (March 1354), may the best prayer and peace be with their author. And the salutation and the blessing of Allāh be upon our Prophet Muḥammad and his family and companions."

The text of these two colophons clearly establishes that al-Mawṣilī was the compiler of the book. He was probably also the scribe, but almost certainly not the painter. References in Islamic illustrated manuscripts to their illustrators are very rare, 10 although the colophon of the well-known copy of the 634/1237 Maqāmāt of al-Ḥarīrī, in the Bibliothèque Nationale in Paris, clearly states

that al-Waşitī was both the compiler and the painter of the book.11

# The miniatures are on the following folios:

(For abbreviations of publications, see the list preceding the Notes)

1. Folio 2r: al-kabsh al-na'jah (The Ram, The Ewe), 119 x 61 mm publ.: Libro II, Pl. 1

2. Folio 4r: al-tays al-shāh (The Billy Goat, The Goat), 116 x 58 mm publ.: Libro II, Pl. 2

3. Folio 6v: al-thawr al-baqarah (The Bull, The Cow) 145 x 73 mm publ.: Libro I, Pl. 1
Libro II, Pl. 3

4. Folio 13v: *al-jāmūs* (The Buffalo) 140 x 108 mm publ.: Libro II, Pl. 4

5. Folio 14r: al-jamal (The Camel) 125 x 82 mm publ.: Libro I, Pl. 2
Libro II, Pl. 5 (Fig. 6, Pl. III E)

6. Folio 16r: al-fil (The Elephant) 127 x 82 mm
publ.: de Lorey, "Bestiaire" (1935), Fig. 2
Libro I, Pl. 4
Libro II, Pl. 6
Contadini (1986), Fig. 1 (Fig. 10, Pl. III A)

7. Folio 17v: al-khayl (The Horse) 132 x 95 mm publ.: Libro I, Pl. 3
Libro II, Pl. 7 (Fig. 4, Pl. III C)

8. Folio 20v: *al-ḥimār al-ahlī* (The Domestic Donkey) 147 x 105 mm publ.: Libro II, Pl. 8

9. Folio 23r: al-khanāzīr (The Pigs) 125 x 120 mm publ.: James AP (1977), Fig. 3
Libro I, Pl. 5
Libro II, Pl. 9

10. Folio 28v: al-ayyil (The Deer) 151 x 110 mm publ.: de Lorey, "Bestiaire" (1935), Fig. 9 Libro I, Pl. 6 Libro II, Pl. 10

11. Folio 31v: *al-arānib* (The Hares) 118 x 87 mm publ.: Haldane, *MP* (1978), p. 51 Libro I, Pl. 7 Libro II, Pl. 11 (Fig. 12)

12. Folio 34r: *al-arwā* (The Mountain Sheep) 120 x 102 mm publ.: Libro II, Pl. 12

13. Folio 35r: al-tuzāḥ (The Mountain Goat) 119 x 86 mm publ.: Libro I, Pl. 8
Libro II, Pl. 13

14. Folio 36r: *al-yaḥmūr* (The Fallow Deer) 142 x 90 mm publ.: Contadini (1986), Fig. 3

- 15. Folio 36v: al-ghazāl (The Gazelle) 145 x 67 mm publ.: Libro I, Pl. 9 Libro II, Pl. 16 al-baqar al-waḥshī (The Wild Ox) 132 x 99 mm 16. Folio 38r: publ.: Libro II, Pl. 14 al-himār al-waḥshī (The Onager) 137 x 96 mm 17. Folio 39r: publ.: Libro I, Pl. 10 Libro II, Pl. 15 (Fig. 5) al-asad (The Lion) 151 x 95 mm 18. Folio 40v: publ.: Libro II, Pl. 17 19. Folio 43r: *al-dhi'b* (The Wolf) 124 x 83 mm publ.: Libro I, Pl. 11 Libro II, Pl. 18 al-ḍab' (The Hyena) 118 x 93 mm 20. Folio 45v: publ.: Contadini (1986), Fig. 4 21. Folio 47v: *al-dubb* (The Bear) 120 x 84 mm publ.: Libro II, Pl. 19 22. Folio 49v: al-namir (The Leopard) 131 x 96 mm publ.: Libro II, Pl. 20 23. Folio 50v: al-kalb (The Dog) 159 x 95 mm publ.: Libro I, Pl. 12 Libro II, Pl. 21 al-tha'ālib (The Foxes) 131 x 64 mm 24. Folio 53v: publ.: Libro II, Pl. 22 al-sannūr (The Cat) 120 x 47 mm 25. Folio 55r: publ.: Libro II, Pl. 23 ibn 'arīs (The Weasel) 118 x 27 mm 26. Folio 56r: unpublished (Fig. 13) al-fahd (The Cheetah) 118 x 77 mm 27. Folio 57r: publ.: Libro II, Pl. 24 al-qird (The Monkey) 118 x 72 mm 28. Folio 57v: publ.: Libro I, Pl. 13 Libro II, Pl. 25
  - 30. Folio 61r: al-yarbū' (The Gerboa) 116 x 36 mm publ.: Libro I, Pl. 14
    31. Folio 61v: al-dabb (A Kind of Lizard) 123 x 42 mm publ.: Libro II, Pl. 26

unpublished (Fig. 14)

29. Folio 58r:

al-qunfudh (The Hedgehog) 116 x 49 mm

32. Folio 61v: al-saqanqūr (The Skink) 131 x 46 mm publ.: Libro II, Pl. 27 33. Folio 62v: al-nims (The Mongoose) 119 x 31 mm unpublished (Fig. 15) 34. Folio 63r: al-samandal (The Salamander) 119 x 35 mm unpublished (Fig. 16) al-karkadann (The Unicorn) 155 x 67 mm 35. Folio 63v: publ.: Libro II, Pl. 28 al-jurdhan wa al-fa'r (The Rat and The Mouse) 118 x 41 mm 36. Folio 64v: unpublished (Fig. 17) 37. Folio 66r: al-khuld (The Mole-Rat) 116 x 32 mm unpublished al-gastāriyūn (The Beaver) 137 x 58 mm 38. Folio 67v: unpublished al-dīk al-dajājah (The Cock, The Hen) 141 x 59 mm 39. Folio 68v: publ.: Libro I, Pl. 15 Libro II, Pl. 29 al-hajal (The Partridge) 115 x 51 mm 40. Folio 73r: unpublished 41. Folio 75r: al-durrāj (The Francolin) 115 x 36 mm unpublished 42. Folio 75v: al-tayhūj (The Grouse) 115 x 50 mm unpublished 43. Folio 76r: al-wazz wa al-batt (The Goose and The Duck) 115 x 56 mm publ.: Libro I, Pl. 16 Libro II, Pl. 30 al-tadruj (The Pheasant) 118 x 64 mm 44. Folio 79r: publ.: Libro I, Pl. 17 Libro II, Pl. 31 45. Folio 79v: al-qatā (The Quail) 118 x 44 mm publ.: Libro II, Pl. 32 46. Folio 80r: al-kurkī (The Heron) 129 x 100 mm publ.: de Lorey "Bestiaire" (1935), Fig. 7 Ettinghausen, AP (1962), illustration on title page Haldane, MP (1978), p. 51 Libro I, Pl. 18 Libro II, Pl. 33 (Fig. 7)

publ.: Libro II, Pl. 34

47. Folio 81r: al-hubārā (The Bustard) 115 x 46 mm

48. Folio 82r: al-tā'ūs (The Peacock) 116 x 67 mm publ.: de Lorey, "Bestiaire" (1935), Fig. 10 Libro I, Pl. 19

Libro II, Pl. 19

49. Folio 82v: al-laqlaq (The Stork) 119 x 72 mm

publ.: Libro I, Pl. 20 Libro II, Pl. 36

50. Folio 83v: al-na'amah (The Ostrich) 120 x 77 mm

publ.: Libro I, Pl. 21 Libro II, Pl. 37

51. Folio 84r: al-ḥamām (The Pigeons) 116 x 45 mm

unpublished

52. Folio 88r: al-ḥamām al-barrī (The Wild Pigeons) 165 x 42 mm

publ.: Libro II, Pl. 38

53. Folio 90r: al-summānī, al-qunbur, al-dālūn, al-muṭawwaq (The Quail, The Lark, The Crested Lark (?),

[A Pigeon] with a neck-ring) 163 × 38 mm

publ.: Libro II, Pl. 39

54. Folio 90v: al-'asāfīr, al-zarāzīr abū tamrah, al-safarmādī (The Sparrows, The Starlings, The Sunbird, ?)

54 × 49 mm

publ.: Libro II, Pl. 40

55. Folio 92v: al-salwā (A Kind of Quail) 123 x 38 mm

unpublished

56. Folio 93r: al-nasr (The Vulture) 151 x 83 mm

publ.: de Lorey, "Bestiaire" (1935), Fig. 8

de Lorey, "Peinture musulmane" (1938), Fig. 15

Libro I, Pl. 22 Libro II, Pl. 41

57. Folio 94r: al-'uqāb (The Eagle) 155 x 83 mm

publ.: Libro I, Pl. 23 Libro II, Pl. 42

58. Folio 95v: al-bāzī wa al-zurraq (The Goshawk and The Black- Winged Kite) 122 x 59 mm

publ.: Libro II, Pl. 45 (detail)

59. Folio 97r: al-bāshiq al-yūyū al-'afṣī al-bādhinjān (The Sparrow-Hawk, The Merlin,

A Small Bird of Prey,?) 137 x 60 mm

publ.: Libro I, Pl. 24 Libro II, Pl. 43

60. Folio 98r: *al-hida'ah* (The Kite) 120 x 67 mm

publ.: Libro II, Pl. 44 (detail)

61. Folio 99r: al-rakham (The Egyptian Vulture) 124 x 56 mm

publ.: Libro II, Pl. 47 (detail)

62. Folio 100r: *al-būm* (The Owl) 125 x 82 mm

publ.: Haldane, MP (1978), p. 51

Libro I, Pl. 25

Libro II, Pl. 48 (detail)

63. Folio 101v: al-ghurāb al-ghudāf al-'aq'aq (The Crow, The Raven, The Magpie) 148 x 56 mm publ.: Libro I, Pl. 26

Libro II, Pl. 49

64. Folio 104v: al-hudhud (The Hoopoe) 127 x 38 mm

publ.: Libro II, Pl. 50

65. Folio 106r: al-sanūniyyah (The Swallow) 133 x 33 mm

unpublished

66. Folio 108v: al-watwat (The Bat) 125 x 58 mm

publ.: Libro I, Pl. 27

67. Folio 111r: al-shaqurraq (The Blue Magpie) 151 x 41 mm

publ.: Libro II, Pl. 51

68. Folio 111v: yamāmah baḥriyyah wa tuʻraf bi ṭayr al-timsaḥ, (The Sea Pigeon, known as The Crocodile Bird)

120 x 40 mm

publ.: Libro II, Pl. 52

69. Folio 112r: al-suryānās (The Pelican) 120 x 72 mm

publ.: Libro I, Pl. 28 Libro II, Pl. 4

70. Folio 113r: al-jarād (The Locusts) 123 x 65 mm

publ.: Libro I, Pl. 29 Libro II, Pl. 53

71. Folio 114v: al-zanābīr (The Wasps) 122 x 35 mm

publ.: Libro II, Pl. 54

72. Folio 116r: al-dhubāb al-baqq al-ba'ūḍ wa al-dharārīḥ (The Flies, The Bugs, The Mosquitoes, The Spanish

Flies) 122 x 28 mm unpublished

73. Folio 118r: al-samak (The Fish) 160 x 90 mm

publ.: Libro I, Pl. 30 Libro II, Pl. 55

74. Folio 123v: al-raqq wa al-salāḥif (The Turtles and The Tortoises) 141 x 74 mm

publ.: Libro II, Pl. 56

75. Folio 126v: al-sarațăn (The Crabs) 129 x 58 mm

publ.: de Lorey, "Bestiaire" (1935), Fig. 1

Libro II, Pl. 57

76. Folio 128r: al-asdāf (The Shells) 127 x 66 mm

unpublished

77. Folio 131r: al-dafādi' (The Frogs) 146 x 82 mm

publ.: Libro I, Pl. 31

Libro II, Pl. 58 (detail)

78. Folio 133v: al-timsāḥ (The Crocodile) 166 x 76 mm

publ.: Libro I, Pl. 32

Libro II, Pl. 59 (detail)

- 79. Folio 134v: *al-dabbāb wa al-zaḥḥāf* (The Reptiles) 141 × 97 mm publ.: Libro I, Pl. 33
  Libro II, Pl. 60
- 80. Folio 140v: al-'aqārib (The Scorpions) 148 x 44 mm

publ.: Libro I, Pl. 34 Libro II, Pl. 61

- 81. Folio 141v: baqarat banī isrā il (The Ant) 127 x 42 mm unpublished
- 82. Folio 142r: al-'idāh wa al-wazagh (The Lizard and The Gecko) 134 x 40 mm publ.: Libro II, Pl. 62
- 83. Folio 143v: *al-ḥirbā*' (The Chameleon) 125 x 42 mm unpublished
- 84. Folio 144r: *al-kubaḥ* (A Chameleon-like Animal) 121 x 28 mm unpublished
- 85. Folio 144v: al-khanāfis wa al-ṣarāṣīr (The Dung-Beetles and The Cockroaches) 132 x 44 mm unpublished
- 86. Folio 146r: *al-naml* (The Ant) 122 x 37 mm unpublished
- 87. Folio 147v: al-kharāṭīn wa al-ʿalaq wa al-ʿanākib (The Earthworms and The Leeches and The Spiders)
  122 x 45 mm
  unpublished
- 88. Folio 149r: al-qaml al-qirdān al-ḥalam wa al-sūs (The Common Louse, The Ticks, The Acaruses, The Moth-Worms or Weevils) 125 x 41 mm unpublished
- 89. Folio 150r: *al-basfāyj* (The Millipedes) 127 x 74 mm publ.: Libro II, Pl. 63
- 90. Folio 150v: *al-ghurayr* (The Badger) 127 x 45 mm unpublished
- 91. Folio 151r: al-dūd (The Worms) 124 x 42 mm unpublished

#### The Author

Our main source of information about al-Mawṣilī is Ibn Ḥajar al-Asqalānī (b. 774/1372, d. 853/1449), who, in his Al-durar al-kāminah fī a'yān al-mi'at al-thāminah,¹² provides us with al-Mawṣilī's full name: 'Alī ibn Muḥammad ibn 'Abd al-'Azīz ibn Futūḥ ibn Ibrāhīm ibn Abī Bakr ibn al-Qāsim ibn Sa'īd ibn Muḥammad Hishām ibn 'Omar al-Tha'alabī al-Shāfi'ī al-Mawṣilī Tājj al-Dīn, known as Ibn al-Durayhim. He also gives us the date of his birth: Sha'bān 712/June 1312. Al-Mawṣilī was almost certainly born, as his name indicates, in Mosul. He received the typical education of a person of a high social class in the medieval Islamic world, studying Qur'anic

sciences, and Muslim law with al-Turkmānī and al-Isbahānī. He also studied al-Ḥāwī, the famous work by Abū Bakr Muḥammad ibn Zakarīyā al-Rāzī, a physician at the Samanid court.13 Al-Mawsili's father died when he was still a child, leaving him heir to a great fortune. When he came of age this enabled him to go to Damascus, where he began a very prosperous career as a merchant. Later, in 732-33/1331-32, he moved to Cairo and started in business there, travelling back and forth between the two cities. In Cairo he made the acquaintance of several emirs; he even met Sulțān al-Kämil Sha'bān.14 Sulțān Muzaffar Ḥājī,15 Sha'bān's successor, in 748/1347, sent him again to Damascus. At this point al-Mawsilī's life became rather difficult, at least partly because of warfare, mostly provoked by the Emirs of Damascus in Syria between 741/1340-41 and 753/ 1352, and intermittently during the next decade as well.<sup>16</sup> His house was confiscated, his books banned (most likely for political reasons), and finally he was expelled from Damascus, in Jumāda I or II (al-Asqalānī does not say which) 749/1348. He then moved to Aleppo. After another stay in Cairo, during which he was unable to draw from his funds deposited in the State treasury, he returned to Damascus where, working in the school of the Great Umayyad Mosque, he was reintegrated into society in that city and welcomed as a member of the Diwan of the Mosque. We know that he was again in Egypt in 760/1358, since, in that year, Sultān al-Nāṣir Ḥasan<sup>17</sup> sent him as ambassador to Abyssinia. In the course of this journey, Ibn al-Durayhim died at Qūṣ,18 in Ṣafar 762/December 1361.

Al-Asqalānī also characterizes al-Mawṣilī's personality: he was very good at riddles and puns, he could solve puzzles easily, he could perform mathematical calculations at great speed, and he was very good in formulating and solving anagrams. He had a sharp intellect but a mediocre style of writing that was too ornate and mannered. Al-Asqalānī concludes, however, that his better pieces of writing were acceptable. Unfortunately he does not tell us for whom al-Mawṣilī edited the Kitāb manāfi' al-ḥayawān. In all probability, the compilation took place in Syria, and in Damascus where, in 1354—the date given in the colophon, we may assume that al-Mawṣilī was living. This biographical evidence for a Syrian origin of the manuscript is confirmed by a stylistic analysis of the miniatures, as we shall see.

#### The Textual Tradition

The Kitāb manāfi' al-ḥayawān divides the various animals with which it deals into a number of classes: Man, Domestic and Wild Quadrupeds, Birds, Fishes, and Insects. The treatment of each animal is divided in two sections: the first is a general introduction in which are discussed the principal characteristics of the animal, its habits, and its reactions in different situations. The second deals with the different parts of the animal and how they may be used to cure various human illnesses. These sections derive from two different textual traditions. In the concluding statement, before the colophon, on folio 153r, we read that our text was collated with the text of the manuscript from which it was copied, and then corrected; this statement clearly defines its relationship to

a specific earlier manuscript, which is, however, not extant.

A comparison with the Kitāb na't al-ḥayawān, in the British Library,<sup>20</sup> reveals various points of disagreement, including systematic differences in referring to the two principal, and ultimate authorities, Ibn Bakhtishū'<sup>21</sup> and Aristotle.<sup>22</sup> If the London manuscript were the source, it would hardly be possible to speak of collation, muqābalah, but rather of paraphrase, at least in part. Our text, therefore, would exemplify the common phenomenon, in Medieval Islam, of the summarizing of important and extensive works, the writer's personal contribution being to organize, clarify, and, sometimes, update. Our text and the London Na't are nevertheless closely related, and both stand in the tradition of Ibn Bakhtishū's Manāfi'. Particularly puzzling, therefore, is that Ibn Bakhtishū' is never mentioned in the Escorial Manāfi', an omission for which there seems no obvious reason. The London Na't, on the other hand, clearly states that the Manāfi' portion is derived from the Manāfi' al-ḥayawān by Ibn Bakhtishū', while the Na't section is derived from the Kitāb na't al-ḥayawān by Aristotle. However, a comparison with Aristotle's Zoology, particularly with that part referred to as Historia Animalium, reveals that there is no direct correspondence between the Arabic and the Greek texts. It is therefore obvious that, despite the mention of the name of

Aristotle in both the Na't and the Manāfi', transmission was not directly from Aristotle but through a pseudo-Aristotelian intermediary. Examination of various translations and different transmissions of the Historia Animalium to the Arabs indicates that, in the present case, the source is likely to have been a translation into Arabic of the pseudo-Aristotelian text on animals by Timotheus of Gaza, usually referred to by its Arabic title, Kitāb al-ḥayawān.23 Not only is the organization of the two texts very similar, but almost all the material on the animals is identical. The main source for Timotheus' work on animals seems to be Aristotle's Historia Animalium: one-third of Timotheus' book is directly taken from the Historia Animalium.<sup>24</sup> It is therefore surprising that in Timotheus' text Aristotle should only be mentioned once.

The Kitab al-ḥayawan of Timotheus of Gaza has a further source in the late Classical text known as Physiologus,25 which had an extraordinary diffusion. From the 5th century onwards, the Greek text was translated into Ethiopic, Armenian, Syriac, Arabic, and Latin. To the first Latin version of the Physiologus were added sections from other Greek texts; this was subsequently followed by still other versions from which, in the 12th to the 14th centuries, originated French, German, Italian, and English texts of the bestiary. It is interesting to note that Timotheus' Kitāb al-ḥayawan completely omits the religio-moralistic aspect with which the Physiologus was coloured, probably because the tradition of the School of Gaza was in general opposed to theologi-

cal and moralizing insertions.26

This analysis confirms that al-Mawsilī's Kitāb manāfi' al-ḥayawān derives from Aristotle's Zoology and reinforces the hypothesis that Timotheus of Gaza's book on animals could have been its direct source. The text itself frequently refers to ancient sources: Aristotle (folios 53v, 64r, 67v, 86v, 136r, 152r); Galenus (folios 10v, 48r, 123r, 126v, 139v); Dioscurides (folios 67v, 152v); Ahrun (folio 28r); Casocrates (folio 119r); 'Īsā ibn 'Alī (folio 139v); al-Aḥwāzī (folio 139v); Yānis ibn Iṣṭifān al-Turḥumān (folio 112v mentioning his Risālah min falak al-rūm ilā al-ḥaḍrah al-sharīfah al-naṣriyyah ); Shaykh Abū al-Ḥasan (folio 120v); Muḥammad ibn Mūsā al-Munayyim (folio 64r), referring to his Kitāb al-masālik wa al-mamālik. The author/authors of the Characteristic of the Animals / Book of the Animals are mentioned 22 times; "Coptic sages" are mentioned on folio 62r; the author of our text mentions himself once, on folio 67v, but without his name. Writers on the music sciences and of commentaries on ancient books are mentioned on folio 112r; the writers on medical science are mentioned on folio 113r; authorities on the science of nature are mentioned on folio 128v; the authors of books of antidotes are mentioned on folio 135v; and finally, books on medicine, and the characteristics of poisons are mentioned in a marginal note on folio 138v.

## The Miniatures

The Kitāb manāfi' al-ḥayawān contains 91 miniatures. Although they illustrate the animal under discussion in the text, they are not a reflection of the text which omits any physical description of the animal; their character is essentially didactic, and, with the single exception of "The Herons" (folio 80r, Fig. 7), they have no landscape elements. In "The Fish" (folio 118r) water is shown as a fragmented pattern; in "The Crabs" (folio 126v) there is also a strip of grass running all around the miniature, rendered in the typically Mamluk manner of overlapping leaves forming a "rope". While in these two miniatures the space is filled by water, all the others have a gold back-

ground which is very well preserved.

The range of colours of the Manāfi' is quite rich. Earth-tints predominate in all their gradations. Orange, red, and reddish-brown are very common. Also frequently used are yellow, cadmium-yellow, scarlet, flesh-pink, and salmon-pink. Various shades of grey-dark-grey, paynes-grey, ice; and also Prussian-blue, azure, and cobalt-blue are found. The range of greens includes bluish-green (only in the miniature of the blue magpie on folio 111r), emerald, dark green and olive-green. White, black and gold sometimes occur; but lilac, violet, deep cadmium-red, and bluish-grey, very common in Arab painting from early in the 13th to the end of the 14th centuries,27 are surprisingly absent. The Escorial Bestiary has a less traditional use of colour, a richer chromatic range, and a more refined technique.

The animals are first sketched in black ink; black ink is also used for the details of eyes, mouth, feathers, fur, and scales. They are then painted, the pigment being surprisingly thick-textured. Brush-strokes are broad for the body-colour but fine for the details, for example, for fur, as is usual in Mamluk painting. On the other hand, the technique of applying colour for the shadows is less commonly seen, these being realized by juxtaposing gradations of the same colour. In miniatures in which part of the colour has disappeared, as on folio 2r—"The Ram," and folio 57r—"The Cheetah", one can see that a layer of light colour was used as a base on to which surface tints were applied. This, too, is an unusual painting process, for the technique is more complex and refined than that found elsewhere.<sup>28</sup>

The miniatures are framed by double black lines surrounded by a thicker blue line with ornate additions outside the frame at the corners; some frames also have these decorative additions in the middle of the sides (for example, "The Unicorn," on folio 63v, and "The Lion," on folio 40v). Almost all the animals are shown in pairs, the male and the female of the species, one in motion while the other is still (for example, "The Eagles," on folio 94r). Every animal is depicted with minute attention to detail, yet the general effect is decorative. The animals are fixed in movements and appear to float in an abstract, gold space. Their eyes are wide open, their heads often uptilted, their mouths open. One fore-leg is raised, a position symbolizing movement, but it is without realistic intent, and thereby accords the animal emblematic status.

#### The Miniatures and Their Context

Consideration of the Escorial Manāfi' in the context of the 14th-century Mamluk pictorial tradition is rendered difficult by the peculiar complexity of Mamluk painting, especially as many Mamluk manuscripts have still not received close examination. Given the present state of scholarship, a comprehensive account of Mamluk painting is hardly possible, but in general it can be described as a combination of Syro-Iraqi elements in the Byzantine and late-classical tradition, and Arab elements peculiar to the Baghdad School; to these have been added Seljuk elements, and even Mongol elements, although they appear only in a few illustrated Arabic manuscripts of the 14th century. These "foreign" elements affect only specific features of a given Mamluk painting; although they are well integrated with Syro-Iraqi and Seljuk elements, they have produced no stylistic transformation.

For these reasons the Escorial Bestiary provides a good example of the complexity of Mamluk illustrated manuscripts. Certain elements in it stand in the Syro-Iraqi tradition.<sup>29</sup> These include, among other things, decorative details of animal fur. Markings with three lobes, as, for example, in "The Bull" (folio 6v), are also to be found in the bull on a detached leaf, in the Freer Gallery of Art, in Washington, DC, from al-Jazarī's Automata of 1315.30 Similar markings are also found on the skin of the giraffe in the Kitāb al-ḥayawān in the Ambrosiana Library in Milan, on folio 26r.31 Other features are the handling of certain decorative motifs. In the Milan manuscript, garments often display an interlaced arabesque or scroll, for example in the caparison of the giraffe on folio 26r, or on the robe of a woman seated at the edge of a pool on folio 29r. These are very similar to the decorative background of illuminated cartouches and colophons in the Escorial Manāfi'. The Escorial Bestiary has certain features in common also with the Paris Kalilah wa Dimnah of the mid-14th century, 32 as already suggested by de Lorey, 33 in conventions such as the representation of water as a tile-pattern, or the manner in which grass is depicted, similar in both manuscripts. Yet even if these suggest points of contact between the two manuscripts which might suggest affiliation with the Syro-Iraqi tradition, it does not follow that there is a real stylistic similarity between the two. Indeed, from an iconographical point of view, it is evident that the two codices are in two completely different traditions: the Paris manuscript clearly belongs in the Syro-Iraqi tradition, while in the Escorial codex, Seljuk and Mongol elements are dominant. In the Escorial Bestiary, in fact, it is possible to recognize a Seljuk source for the representation of animals. Comparison with the Kitāb al-diryāq in Paris and Vienna34 reveals this connection. In the upper register of the frontispiece of the Vienna Kitāb al-diryāq (Pl. III D), for example, there is represented a hunting scene with horses which it is possible to relate to the Manāfi' horse (Fig. 4, Pl. IIIC). There is the identical stance and the same heavy and massive body, the various parts of which are outlined by curved lines. The horse on the right of the frontispiece band of the *Diryāq* has also the knotted tail<sup>35</sup> and rectangular saddle-cloth. The only difference is that in the Escorial *Manāfi*', despite the text, the horse does not amble. This is very strange because horses are typically represented as ambling: this is the case in all the Arab manuscripts of the 14th century, and also in the *Kitāb* al-bayṭarah and the Ḥarīrī-Schefer *Maqāmāt*.<sup>36</sup> The miniatures of the Escorial *Bestiary* do not therefore represent the content of the text, but are, rather, didactic and emblematic. In the same *Kitāb* al-diryāq frontispiece is another animal which could have been a model for the painter of the *Manāfi*': "The Onager" (Fig. 5). Not only is the form of the animal the same in the two manuscripts but also the colours of the hide are identical: the back is pink, the belly and the rump are white. Representing the different parts of animals in different colours is also a feature which comes from the Seljuk school.

None of the illustrated Mamluk manuscripts of the 14th century has an indication of provenance, and as a result scholars have disagreed as to whether they should be considered Syrian or Egyptian. In one case at least—the *Maqāmāt* of the British Library (Or. 9718), a Syrian origin has been accepted as certain.<sup>37</sup> A further four manuscripts may similarly be considered to be Syrian in

origin. These are:

1. Maqāmāt, Vienna, Nationalbibliothek, A. F. 9, 734/1334;

- 2. Maqāmāt, Oxford, Bodleian Library, Marsh 458, 738/1337;
- 3. Sulwān al-muṭā', Kuwait, Homaizi Collection, and various detached leaves: two in The Freer Gallery of Art in Washington; one in the Sadruddin Aga Khan Collection in Geneva; one in the al-Sabaḥ Collection, now on loan to the National Museum in Kuwait, datable to the middle of the 14th century;
- 4. Kitāb manāfi' al-ḥayawān, S. Lorenzo del Escorial, Biblioteca Real, Ms. Ar. 898, 755/1354.38

Hitherto, these manuscripts have been attributed to Egypt but without any evidence to support this hypothesis.<sup>39</sup> Moreover, they have always been examined separately, without taking their common elements into consideration. In all four manuscripts, the miniatures have a golden background and the same kind of frame, consisting of one or more blue lines with decorative additions at the corners, and sometimes also in the middle of the long sides. A further common element is that all four exhibit evident Seljuk features. 40 On comparing the Manāfi' animals with those in the other three manuscripts, we notice that the horses have the same massivity of treatment with different parts outlined in different colours, and the same immobility. The camels are treated similarly, and in the Escorial, Vienna, and Oxford manuscripts they also share the interesting feature of upturned tails with tufts representing fur (compare "The Camel" in the Escorial Bestiary on folio 14r, Fig. 6, Pl. III E, and the Vienna Maqamat on folios 92r, 154r, 165r [Pl. III F], where the tail breaks through the frame of the miniature, forming an independent decorative element).41 But the most important feature linking these four manuscripts is the Mongol element which—in different degrees—is present in all. Barely hinted at in the Vienna Maqamat,42 the Mongol influence is more strongly felt in the others, reaching its peak in the Sulwan: water represented in a receding plane; grass and foliage rendered in thin black lines and narrow, long leaves; and floral elements like peonies or lotus-flowers. The fur of the animals is often rendered in thin brush-strokes in the same way as in the Kitāb al-ḥayawān in the Pierpont Morgan Library in New York (MS. 500). The Sulwan is especially interesting as evidence of the presence in a fully Mamluk environment, of a Seljuk tradition which also includes Far Eastern elements. It is striking that though harmoniously integrated into the whole composition, these Mongol features do not alter the essentially Mamluk iconography of the miniatures.

In the Oxford Maqāmāt, the Mongol element consists of crockery and household furnishings which seem copied from real models. The floral elements are also mixed in style, consisting of multi-coloured flowers, often peonies or lotuses. Moreover, on folio 75r is a simurgh flying in the sky. The manuscript also shows clear Seljuk elements, particularly in the frontispiece which is

divided into three parts. In the upper register is a wonderful hunting scene, exceptionally close to

that in the upper register of the frontispiece in the Vienna Kitāb al-diryāq (see Note 36).

In the Escorial Bestiary a Mongol element is also found, particularly in the miniature of "The Herons" (folio 80r, Fig. 7), the only picture with any indication of landscape. The two birds are represented among clumps of grass and spherical stones, and between their legs are blue clouds, serpentine in form. On the left rises a narrow stem with thin, curved green and blue leaves ending in a flower similar to that of the date-palm, from the base of which grow short green, red, and yellow leaves. This miniature is one of the most successful of the entire manuscript, the herons not only being drawn with accuracy but with an elegance of movement that distinguishes them from the other birds in the manuscript.

Both de Lorey and Ettinghausen compared this miniature with the detached leaf representing two herons, from a dispersed Persian bestiary of the beginning of the 14th century (now in the Freer Gallery, Fig. 8); both hypothesized that the latter served as a model for "The Herons" in the Escorial Manāfi'. Yet the two miniatures, although they have strong similarities in composition, are not identical. That in the Manāfi' is more solid in its forms and has greater clarity of line, and moreover, the golden background in the Escorial miniature prevents any attempt at the "realism" which is quite evident in the Freer miniature. What is important is not whether the painter had a particular model to refer to, but that he was surely aware of, and worked within, an iconographical

tradition incorporating Far Eastern elements.

Another heron miniature that can be related to these two (Diez Album, folio 73r, Fig. 9)<sup>44</sup> is later and belongs within a Persian environment. If we compare all three, however, we realize that the iconography is the same: the herons, two in each case, stand one behind the other, and the treatment of the plumage is very similar, especially in the Escorial and Berlin miniatures. Particularly interesting is the ground in all three: developing from grass tending to volutes (Freer), to snake-like clouds (Escorial) and, finally, to Chinese-like clouds (Berlin), the style developing from

the Freer miniature, to the Escorial painting, and then to the drawing in Berlin.

Another of the four manuscripts discloses similarities in the depiction of animals in the Sulwan to that of the Escorial. Compare, for example, "The Elephant" of the Escorial (Fig. 10, Pl III A) with that on folio 104v in the Sulwan (Pl. III B): the same composition, the massive round body, and the ears drawn with wrinkles, rendered in thin, black lines, which stresses their size. These lines are similar to the "rippling-waves" found on garments in Mamluk painting. The same posture with the front leg bent, the same trappings consisting of a gold ring with a pendant on the top of the head, gold anklets on all four legs, and a saddle-cloth fastened by a belt, characterize both beasts. Elephants are never depicted, in Mamluk painting, as wild animals even when not represented in court scenes, with all the attributes proper to a regal elephant; they always have a saddle cloth or a golden skull-cap, and rings on the ankles, often with little bells. This iconography goes back to the Sasanian period, where at Taq-i Būstān solemn, carved elephants are ready, saddled and complete with all the other trappings, to go on a boar hunt. 45 And in the Kitāb al-ḥayawān in Milan, where the elephants are depicted in the act of mating among wonderful multi-coloured flowers (folio 64r), they wear anklets, skull-cap, and saddle cloth. 46 In the Kuwaiti Sulwan on folio 104r (Fig. 11), the domestic elephant is shown in conversation with the wild elephant; 47 but the latter, though without the complete trappings of the former, still wears golden anklets and the golden ring with a pendent.

The Manāfi' painter, in other words, does not depict reality in a "veristic" manner but follows the pre-existing iconographical models established by tradition, which can be adapted to different literary contexts. The miniature of "The Hares" on folio 31v (Fig. 12) is a clear example. The two animals are set in relation one to the other: that on the left is shown in motion and turns its head towards the one on the right, which seems to be talking to it. It is a lively and fresh representation—but it could also come directly from a contemporary Kalīlah wa Dimnah manuscript. The highly refined brush-strokes and the extremely harmonious composition of the Escorial miniature, however, place it on a high artistic plane, whereas its iconography is of some age and can, for example, be found in the earliest surviving example of an Arabic illustrated bestiary, a leaf from a Kitāb al-ḥayawān of the Fatimid period.<sup>48</sup> Nor is this iconography restricted to miniature painting, for

we also find it in ceramics and textiles.49

#### Conclusion

To sum up, the Escorial Manāfi' is an important manuscript from both a literary and an iconographical point of view. It is possible to place its text in the tradition of bestiaries which derive from Aristotle's Zoology and Ibn Bakhtishū"s medical treatises. Of this tradition only 5 illustrated manuscripts are extant, 3 in Arabic and 2 in Persian, one of them now dispersed, its miniatures kept in various public and private collections. 50 As a dated manuscript it serves as a valuable fixed point for other undated manuscripts, such as the Sulwan al-muța'. 51 It is, moreover, important for the identification of a group of manuscripts from a common artistic environment and, probably, from the same atelier. As a signed manuscript it also provides us, through what we know of the life of the compiler, with information regarding the environment in which it was conceived. Al-Mawsilī grew up and was educated in Mosul but then spent most of his life in Syria, Damascus and Aleppo; his cultural formation, was therefore linked to the Syro-Iraqi environment, which surely also influenced his book from an artistic point of view. Attentive examination of the miniatures and comparison with the other three manuscripts of the group reciprocally confirm their provenance from the same Syrian environment. Despite the variety of stylistic elements that can be recognized in the Escorial Manāfi', they are welded into a convincing artistic unity, so that its miniatures stand out for the accuracy of their brush-work, and their advanced coloristic techniques. Finally, it may be recalled that the didactic nature of the animal-representations also links this manuscript to the tradition of so-called scientific painting, of which it may be considered a masterpiece.

# Notes

# The following abbreviations are used throughout:

1	AI	Ars Islamica
1		Ars Orientalis
	al-Asqalānī, al-Durar al-kāminah (1929-32)	Aḥmad ibn 'Alī, called Ibn Ḥajar al-Asqalānī, al-Durar al-kāminah fī a'yān al-mi'at al-thāminah, Heiderabad, 1348-50/1929-32, 4 vols.
	Atıl, Arab World (1975)	E. Atıl, Art of the Arab World, Washington, 1975.
	Atıl, Kalila wa Dimna (1981)	E. Atıl, Kalila wa Dimna, Fables from a 14th Century Arabic Manuscript, Washington, 1975.
	BL	British Library
	Bodenheimer-Rabinowitz, Timotheus of Gaza (1949)	F. S. Bodenheimer-A. Rabinowitz, Timotheus of Gaza on Animals: Fragment of a Byzantine Paraphrase of an Animal-Book of the 5th Century A. D., Leiden, 1949.
	Brockelmann, GAL (1943)	C. Brockelmann, Geschichte der Arabischen Litteratur, Leiden, 1943.
	BSOAS	Bulletin of the School of Oriental and African Studies, University of London.
	Contadini (1986)	A. Contadini, "Note sul Kitāb Manāfi' al- Ḥayawān dell'Escorial," Annali di Ca' Foscari, XXV, 3, 1986, pp. 109-121.
	$EI^2$	Encyclopédie de l'Islam, second edition.
	Ettinghausen, AP (1962)	R. Ettinghausen, Arab Painting, Geneva, 1962.
	Farès, "Philosophie et jurisprudence" (1957)	Bishr Farès, "Philosophie et jurisprudence illustrées par les Arabes: La querelle des images en Islam," Mélanges Louis Massignon, Damascus, 1957, pp. 77-109.
	Grabar, Maqamat (1984)	O. Grabar, The Illustrations of the Maqamat, Chicago, 1984.
	Grube, "Fusțăț" (1963)	E. J. Grube, "Three Miniatures from Fusțăț în the Metropolitan Museum of Art in New York," AO, V, 1963, pp. 89-95.
	Grube, "Hippiatrica" (1967)	E. J. Grube, "The Hippiatrica Arabica Illustrata: Three 13th-century Manuscripts and Related Material," SPA, XIV, 1967, pp. 3138-3155.
	Grube, Keir Painting (1976)	B. W. Robinson, E. J. Grube, G. M. Meredith-Owens, R. W. Skelton, The Keir Collection: Islamic Painting and The Art of the Book, London, 1976.
	Haldane, MP (1978)	D. Haldane, Mamluk Painting, Warminster, 1978.
	Hill, Devices (1974)	D. R. Hill, The Book of Knowledge of Ingenious Mechanical Devices by Ibn al-Razzāz al-Jazarī, Dordrecht-Boston, 1974.
	Holter, "Galen" (1937)	K. Holter, "Die Galen-Handschrift und die Makamen des Ḥarīrī der Wiener Nationalbibliothek," Jahrbuch der Kunsthistorischen Sammlung in Wien, Neue Folge XI, 1937, pp. 1-48.
	James, "Mamluk Painting" (1974)	D. James, "Mamluk Painting at the time of the Lusignan Crusade 1365-70," Humaniora Islamica, II, 1974, pp. 73-87.
	Libro I	C. Ruiz Bravo Villasante, Libro de las utilidades de los animales, Madrid, 1980.
	Libro II	C. Ruiz Bravo Villasante, El libro de las utilidades de los animales de Ibn al Durayhim al-Mawsili, Madrid, 1981.
	Löfgren-Lamm, Ambrosian Fragment (1946)	S O. Löfgren and G. J. Lamm, Ambrosian Fragments of an Illuminated Manuscript Containing the Zoology of al-Ğahiz, Uppsala-Leipzig, 1946.
	Löfgren and Traini, Catal. Ar. Mss. Bibl. Ambrosiana (1975)	O. Löfgren and R. Traini, Catalogue of the Arabic Manuscripts in the Biblioteca Ambrosiana, Vicenza, 1975, 2 vols.
	Lorey, "Bestiaire" (1938)	E. de Lorey, "Le bestiaire de l'Escurial", Gazette des Beaux-Arts, II, 1935, pp. 228-238.
	Lorey, "Peinture musulmane" (1938)	E. de Lorey, "Peinture musulmane ou peinture iranienne," Revue des Arts Asiatique, XII, 1938, pp. 20-31.
	Mayer, "Damascene Artist" (1942)	L. Mayer, "A Hitherto Unknown Damascene Artist," AI, IX, 1942, p. 168.
	Melikian-Chirvani, Sulwān (1985)	A. S. Melikian-Chirvani, Sulwān al-Muta' fi 'Udwān al-Atbā', A Rediscovered Masterpiece of Arab Literature and Painting, Kuwait, 1985.

Rice, "al-'Umarī" (1951)

SPA

Walzer, "Lost Kalīlah wa Dimnah" (1957)

Walzer, "Kalīla wa Dimna" (1959)

D. S. Rice, "A Miniature in an Autograph of Shihāb al-Dīn Ibn Faḍlallāh al-'Umarī," BSOAS, XIII/4, 1951, pp. 856-867.

A Survey of Persian Art, ed. by A.U. Pope and P. Ackermann, Oxford, 1939; later editions of 1964 (and 1967); 1977.

S. Walzer, "An Illustrated Leaf from a Lost Mamluk Kalīlah wa Dimnah Manuscript," AO, II, 1957, pp. 503-505.

S. Walzer, "The Mamlük Illuminated Manuscripts of Kalīla wa Dimna," Aus der Welt der islamischen Kunst, Festschrift für Ernst Kühnel, zum 75 Geburtstag 26.10.1957, 1959, pp.195-206.

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- 1. The manuscript is on exhibition in a display cabinet in the main hall of the Library. See M. Casiri, Bibliothecae arabico-hispaniae escurialensis, I, Madrid, 1760, p. 318, where the codex is included under the section, Natural History, n. 893; H. Derenbourg, Les manuscrits arabes de l'Escurial, II, Paris, 1903, pp. 115-116, states that the manuscript is illustrated by "250 miniatures belonging to the Fatimid Egyptian school of painting." See also Justel Calabozo, La Real Biblioteca de El Escorial y sus manuscritos arabes, Madrid, 1978, p. 51, 277.
- 2. The study of the integral text, both from a literary and iconographic point of view, was the subject of my thesis, "Il Kitāb manāfi' al-hayawān dell'Escorial e la pittura Mamelucca del XIV secolo," written under the supervision of Professor E. J. Grube for the University of Venice (June, 1985). Some of the miniatures have been reproduced in colour by C. Ruiz Bravo Villasante, Libro II: 57 complete miniatures and 5 details, out of the 91 miniatures of the manuscript. The author, a scholar of Arabic, mainly discusses the text of the codex, and avoids further discussion of its historical-iconographical content. Furthermore, this book is little known to scholars of Islamic art, since it was financed by the Banco Arabe Español and published in a very limited edition. Bravo Villasante has also published a translation of the text, Libro I, where some miniatures are (badly) reproduced in colour; she does not reproduce the original Arabic
- 3. This translation, hand-written and unpublished, was made by Davide Colville in 1625; it is mentioned by G. Antolin, Catalogo de los Codices latinos de la real Biblioteca del Escorial, vol. II, Madrid, 1911, n. I.III.18. Colville subdivides the text in three parts and each part into chapters, one for each animal dealt with: the first begins with "Man" and ends with "The Beaver," the second, Liber secundus de volucribus domesticis et sylvestribus quorum carnibus vescimur, terminates with "The Pelican;" the third part runs from the

- "Grasshoppers" to the end of the manuscript, "The Worms." Colville's translation is not complete, and many part of the original text have been ignored; nonetheless it is fundamental since it includes the initial pages, now missing in the manuscript. In Libro I, pp. XXX-XXXI, is a Latin transcription of these first pages and their translation into Spanish.
- See, for example, London Na't (see Note 20), fol. 103v; Morgan Manāfi' (see Note 50, n. 1), fol. 4v.
- An identical pattern is present in the Vienna Maqāmāt (Nationalbibliothek, A. F. 9), dated 734/1334, as shown in Haldane, MP (1978), p. 103. The same motif is found also in two pages from an Egyptian Qur'ān of the mid-14th century in the Freer Gallery of Art, Washington, DC, (30.59v-30.56r), which are reproduced in Atıl, Arab World (1975), pp. 98, 99.
- See, for example, the specimen reproduced in Atıl, *Arab World* (1975), pp. 96-97, 100-101, from some Qur'ans copied in Egypt in the mid-14th century.
- 7. In one date in the concluding statement (fol. 153r), we read that the compilation of the text was finished in the month of Shawwal, the tenth month of the Muslim calendar; the second date, in the second colophon (fol. 154r), states that the miniatures were finished in the month of Rabī' al-Awwal (of the same year), the third month of the Muslim calendar, suggesting that the author had painted the miniatures before writing the text. This seems to contradict the usual assumptions about manuscript-production, that the text was written before the miniatures were painted. It is not unusual, however, to find dates in conclusions or colophons referring to the final revision of the entire book, when the miniatures had already been painted. In this case the date of the final revision would be prior to the date referring to the miniatures.

- 8. See de Lorey, "Bestiaire" (1935), p. 234. Bravo Villasante in Libro I, p. 138, refers to Henri Massé's translation, but she does not mention problems regarding the interpretation of the colophons and her translation is ambiguous.
- 9. The three *alif-maddah* in the concluding statement, fol. 153r, at lines 2, 4, 5 are my additions. In the text only *alif-hamzah* are indicated.
- 10. A large number of Qur'ans name not only the calligrapher but also the illuminator. See, for example, M. Lings and Y. H. Safadi, The Qur'an, A British Library Exhibition, London, 1976, p. 52, n. 66, pls. x-xi. The reason why the names of painters are rarely noted in colophons of illustrated manuscripts might be that painters did not want to risk being disapproved of by zealous iconoclasts.
- 11. Whether one such clear statement that the scribe of a manuscript was also the illustrator may be taken as standard practice in medieval Islam is another matter that is perhaps best discussed elsewhere. The complete colophon of the Paris Maqāmāt has been published by Bishr Farès, "Philosophie et jurisprudence" (1957). For a translation into English, see Grabar, Maqamat (1984), p. 11.
- 12. Ahmad ibn 'Alī, called Ibn Ḥajar al-Asqalānī, al-Durar al-kāminah (1929-32), 3, pp. 106-108. For further information about al- Mawsilī, see also W. Ahlwardt, Königliche Bibliothek zu Berlin: Arabische Handschriften, 2, Berlin, 1889, pp. 508-509, n. 2235, who quotes the most famous works by al-Mawsilī: Kitāb ghāyat al- mughanim fi al-ism al-a'zam, concerning the names of Allah, and Tuhfat al-'aja'ib wa tarafat al-ghara'ib, a description of the universe; Brockelmann, GAL (1943), Sup. II, 165, n. 7, par. 2, quotes only the Kitāb ghāyat al-maghnam fī al-ism al-a'zam; Hājī Khalīfa, Lexicon Bibliographicum, Leipzig, 1837, reports many works by al-Mawsilī, but not the Kitāb manāfi' al-ḥayawān; N. L. Leclerc, Histoire de la medicine arabe, Paris, 1876, 2 vols.: 2, p.
- 13. See Brockelmann, GAL (1943), I, p. 267, n. 9.
- 14. Mamluk Sulţān, son of Malik al-Nāṣir Muḥammad; he ascended the throne in the month of Rabī' al-thānī 746/August 1345; he was assassinated in the month of Jumāda al-thānī 747/November 1346.
- 15. Mamluk Sultān from 747/1346 to 748/1347.
- 16. See I. M. Lapidus, Muslim Cities in the Later Middle Ages, Cambridge Mass., 1967, p. 21.
- 17. Mamluk Sulţān who ruled in two different periods: from 748/1347 (after al-Muzaffar Hājī) to 752/1351, and from 755/1354 (after al-Ṣāliḥ Ṣāliḥ al-Dīn) to 762/1361.
- 18. In Egypt, north of Luxor, on the river Nile.

- 19. There is no dedication in the text, nor any reference to the person for whom it was edited. Nor is there any reference to it in the Latin translation of the first pages, presently missing in the Arabic manuscript.
- 20. Or. 2784. See C. Rieu, Supplement to the Catalogue of Arabic Manuscripts in the British Museum, London, 1894, 2 vols: 2, p. 531, n. 778. This manuscript, illustrated by 86 miniatures, is very important, since it is to be considered the earliest illustrated copy of Bakhtishū's text, and the earliest known illuminated (and complete) Arabic bestiary as well. This codex is presently the subject of the Ph. D. thesis I am preparing at the University of London. This manuscript will be carefully investigated from different standpoints; the paging of the text will be tentatively reconstructed since it is presently in dramatic disorder. Its iconographic and stylistic features deserve special attention.
- 21. 'Ubayd Allāh ibn Jibrīl ibn Bakhtishū' was the last member of a family of Nestorian physicians who ran the School of Medicine at Gondeshapur, founded in Sasanian Iran in the 3rd century. Since the time of the Caliph al-Manṣūr, in the 8th century, members of the family had been personal physicians to the Abbasid rulers. 'Ubayd Allāh ibn Jibrīl lived at Mayyāfāriqīn and died in 450/1058; he wrote several books on medicine, but his best-known work is the Kitāb na't al-ḥayawān. See Brockelmann, GAL (1943), Sup. I, p. 417, n. 8, and D. Brandenburg, Islamic Miniature Painting in Medical Manuscripts, Berlin, 1982, who draws Bakhtishū's family tree on p. 18.
- 22. Aristotle's zoological writings include five books which are generally known under their Latin titles: Historia Animalium, De Partibus Animalium, De Generatione Animalium, De Motu Animalium, and De Incessu Animalium, all of which form what is usually known as Aristotle's Zoology. Some information concerning animals is also found in a brief collection of treatises known as Parva Naturalia. In the Arabic translation, the first three books of the Zoology are combined in a single, large corpus known as Kitāb al-ḥayawān, which was translated from Greek into Arabic, probably through a Syriac intermediary, by Yaḥyā ibn al-Bitrīq in the 8th-9th century. This, in turn, was later translated into Latin. No Arabic translation of the remaining two books of the Zoology is known, but many fragments from translations of the Parva Naturalia have come to light. See F. E. Peters, Aristoteles Arabus: The Oriental Translations and Commentaries on the Aristotelian "Corpus", Leiden, 1968, p. 47 ff. For a translation into English of De partibus animalium see R. Kruk, Aristoteles semiticus-latinus. The Arabic version of all Aristotle's Parts of Animals. Book XI-XIV of the Kitāb al-ḥayawān, Oxford, 1979, which is also a survey of the whole contents and of the Arabic transmission of Aristotle's Zoology.

The Historia Animalium was the most popular of all Aristotle's zoological works among the Arabs, and references to this particular book are much more frequent in Arabic literature than to the other four. For a translation into English of Historia Animalium see Historia Animalium, tr. by W. T. D'Arcy, Oxford, 1910.

- 23. For Timotheus of Gaza, see Bodenheimer-Rabinowitz, Timotheus of Gaza (1949). See also M. Ullmann, Die Natur und Geheimwissenschaften im Islam, Leiden, 1972, p. 15. For a general view of the Arabic transmission of pseudo-Aristotelic texts, see C. E. Dubler, "Über arabische Pseudo-Aristotelica", Asiatische Studien, 14, 1961, pp. 33-92.
- 24. Bodenheimer-Rabinowitz, Timotheus of Gaza (1949), p. 7.
- 25. For the Physiologus see F. Lauchert, Geschichte des Physiologus, Strasburg, 1889; E. Peters, Der griechische Physiologus und seine orientalischen Übersetzungen, Berlin 1898; J. Strzygowski, Der Bilderkreis des griechischen Physiologus, Leipzig, 1899; F. Sbordone, Physiologus, 1936; and F. Zambon, Il Fisiologo, Milano, 1982, where an exhaustive bibliography concerning the different editions and studies on this text is listed.
- 26. See Bodenheimer-Rabinowitz, Timotheus of Gaza (1949), p. 9. The purpose of the Physiologus, and consequently of the bestiaries derived from it, is to present Nature as a mirror of Celestial reality. To each characteristic of an animal corresponds an analogue, through the comprehension of which it will be possible to attain the Truth which is beyond mere natural reality. For example, a characteristic of the lion is that the lioness gives birth to a dead cub but keeps it for three days; on the third day the lion comes and blows on the face of its cub, which then revives. The lion, clearly, represents God who on the third day resuscitated Christ. This property of the lion is also to be found in Timotheus' book on animals, in the London Na't, in the Escorial Manafi' and also in al-Damīrī's Ḥayāt al-ḥayawān. In these last four texts, of course, the characteristics of the animals do not have the corresponding analogue.
- 27. In the first scientific bestiary, the Kitāb na't al-ḥayawān (see Note 20), of the first quarter of the 13th century, lilac and violet are frequently employed for robes, trunks, and for the skin of some animals, as the elephant on fol. 136r. In the Da'wat al-atibbā' of 671/1272 (Milan, Ambrosiana Library, A. 125 inf. S.P. 67 bis), for example, the older physician wears always a lilac garment: see Löfgren and Traini, Catal. Ar. Mss. Bibl. Ambrosiana (1975), vol. I, col. pls. I, II, III, V, VI. In the London Maqāmāt, British Library, Add. 22114, datable to the first quarter of the 14th century, lilac is often used for garments and architectural motifs (as for example on fol. 94r): see

Ettinghausen, AP (1962), p. 146. In the Milan Kitāb al-hayawān (see note 29 n. 14) of the second quarter of the 14th century, lilac is employed for the stems of floral decoration and for the skin of animals as, for example, a cat and a lizard (fol. 9r) or the wolf (fol. 22r), both miniatures published in Löfgren and Traini, Catal. Ar. Mss. Ambrosiana (1975), vol. I, col. pl. VIII, vol. II, col. pl. VIII. In the Oxford Maqamat (see p. 213, n. 2) of 738/ 1337 violet is used to paint the rocks (fol. 7v), some floral decorations, and the fur of certain animals as, for example, the camel: see Ettinghausen, AP (1962), p. 152. In the Oxford Kalīlah wa Dimnah (see note 29 n. 3) of 755/1354 both lilac and violet are frequently employed for the stems of flowers, the arches of some buildings, and for some animals, as for the horse on fol. 12v: see Atıl, Kalila wa Dimna (1981), col. pl. 13. Clearly lilac and violet were often employed by the painters of the first Mamluk period, and both these colours would have been used in later times by those painters who, working in a traditional way, retained an archaic style of painting.

- 28. For example, where the colour has disappeared in the Oxford *Maqāmāt* (see p. 213, n. 2), the gold background is revealed, as in the miniature on fol. 48r; colours, therefore, were applied directly over the gold. In the Oxford *Katīlah wa Dimnah* (see Note 29, n. 3) and in the Milan *Kitāb al-ḥayawān* (see Note 29, n. 14) the miniatures have no background, and where the colour has disappeared the underlying paper can be seen (see for example fol. 60r for the *Katīlah wa Dimnah* and fol. 18r for the *Kitāb al-ḥayawān*).
- 29. The illustrated Arabic manuscripts of the 14th century which can be classified in the Syro-Iraqi tradition are: 1. Kalīlah wa Dimnah , Münich, Staatsbibliothek, MS. 616, datable to the second quarter of the 14th century. See H. C. Graf von Bothmer, Kalila und Dimna: Ibn al-Muqaffa's Fabelbuch in einer mittelalterlichen Bilderhhandschrift; Cod. arab. 616 der Bayerischen Staatsbibliothek München, Wiesbaden, 1981, where 39 of its 73 miniatures are published. 2. Kalīlah wa Dimnah, Paris, Bibliothèque Nationale, Ar. 3467, datable about the middle of the 14th century. See E. Blochet, Musulman Painting, XII-XVII Century, London, 1929, pls. XVIII-XXIII; Ettinghausen, AP (1962), p. 155. 3. Kalilah wa Dimnah, Oxford, Bodleian Library, Pococke 400, 755/1354. See Atıl, Kalila wa Dimna (1981), where all the miniatures are published, most of them in colour. 4. Leaf from a Kalīlah wa Dimnah, Cambridge, University Library, T-S Box Ar. 51, fol. 60, datable to about the first quarter of the 14th century. See the discussion on this page in Walzer, "Kalīla wa Dimna" (1959), p. 204. 5. Kalīlah wa Dimnah , Cambridge, Christi College Library, Ms. 578, 791/1388. See Haldane, MP (1978), Figs. 1-3; Walzer, "Lost Kalīlah wa Dimnah" (1957), pl. 2, Fig. 5; Walzer "Kalīla wa Dimna" (1959), Figs. 4, 8, 12, 16, 20. 6. Kitāb fī

ma'rifat al-hiyāl al-handasiyyah, 715/1315, formerly in the collection of the Kevorkian Foundation. The manuscript was sold at Sotheby's on April 3rd, 1978, lot 133, still containing 98 miniatures. See the list of the miniatures and the translation of the colophon in Grube, Keir Painting (1976), p. 114, note 339 and col. pl. 3.II.6. In Hill, Devices (1974), several miniatures and drawings are published. 7. Kitāb fī ma'rifat al-ḥiyāl al-handasiyyah, Istanbul, Ahmet III Library, n. 3603, 755/1354. See A. Coomaraswamy, "The Treatise of al-Jazari on Automata, leaves from a Manuscript of the K. fi marifah al-h. al-handasiyyah in the mus. of Fine Arts, Boston, and elsewhere", Museum of Fine Arts, Boston, Communications to the Trustees, 1924, 8 pls.; Hill, Devices (1974), pls. I, VI, VII, XIII, XIX, XXI, XXIII, XXV, XXIX, XXX, XXXI. 8. Six leaves from a Kitāb fī ma'rifat al-hiyāl al-handasiyyah, of the 14th century (the present owner is unknown but photographs of these paintings are in the Metropolitan Museum of Art in New York). The miniatures are in bad condition and coarsely painted, and without further investigation it is difficult to suggest a more exact date. 9. Kitāb al-su'l wa al-umniyah fi ta'allim al-furūsiyyah, Istanbul, Suleymaniye Library, n. 4197, undated. H. Ritter, "La parure des cavaliers und die Literatur über die ritterlichen Kunste," Der Islam, XVIII, 1929, pp. 116-154, lists the miniatures and briefly describes their subjects but does not suggest a date. As far as I know, no miniatures of this codex have yet been published. See also Grube, "Hippiatrica" (1967), p. 3150. 10. Kitāb al-su'l wa al-umniyyah fi ta'allim al-furūsiyyah, London, Keir Collection, datable to the second half of the 14th century. All the miniatures are published in M. Mostafa, "An illustrated Manuscript on Chivalry from the late Circassian Mamluk Period," Bulletin de l'Institut Egyptienne, 51, 1969-70, pp. 1-13. For a discussion on the miniatures of this codex, see also Grube, Keir Painting (1976), pp. 72-84, pl. 4 and Fig. 12. Three pages from this manuscript are in the Museum of Islamic Art in Cairo, nos. 18019, 18235, 18236; these three pages have been published in M. Mostafa, "Unity in Islamic Art", Guide to an Exhibition, Cairo, 1958, p. 26, nos. 16-18, p. 39, Figs. 36-38. Nos. 18019 and 18235 have been published also in M. Mostafa, Islamic Art in Egypt 969-1517, Cairo, 1969, pp. 292-293, n. 279a and b. Yet another page from the same manuscript is in the Sharif Sabry Collection in Cairo, published by M. Mostafa, "Darstellung des täglichen Lebens in der islamischen Kunst. Mit besonderer Berücksichtigung der ägyptischen Kunst," Bustan, 2, 1960, pp. 33-48, Fig. 23. See also Grube, "Hippiatrica" (1967), p. 3150. 11. Kitāb al-su'l wa al-umniyyah fi a'māl al-furūsiyyah, Cairo, formerly in the National Library, 801/1398. See James, "Mamluk Painting" (1974), p. 74 where "J/N KH 391 N'A 17739", as the catalogue-number of the manuscript, is given. He refers to M. Luft al-Ḥuq, "A Critical Edition of Nihāyat al-Su'l wa al-Umniyyah fī Ta'allim A'māl al-Furūsiyyah of Muḥammad b. 'Isā b. Ismā'īl al-Ḥanafī," Ph. D. Thesis, University of London, School of Oriental and African Studies, 1955: on pp. 4-5 we read that the manuscript was on loan to the former King Faruk and presently still missing in the library. 12. Magāmāt, London, British Library, Add. 22114, datable to the first quarter of the 14th century. See Ettinghausen, AP (1962), p. 146; Grabar, Magamat (1984). 13. Magamat, London, British Library, Add. 7293, 723/1323. See the discussion in H. Buchtal, "Three Illustrated Hariri Manuscripts in the British Museum", Burlington Magazine, 77, 1940, pp. 144-152, p. 148, pl. 1, E and F; Grabar, Magamat (1984). 14. Kitāb al-ḥayawān, Milan, Ambrosiana Library, MS. D 140 inf. S. P. 67, datable beginning of the second quarter of the 14th century. In Löfgren-Lamm, Ambrosian Fragments (1946), all the miniatures of the manuscript are published in black-and white. In Löfgren and Traini, Catal. Ar. Mss. Bibl. Ambrosiana (1975), 2 vols., several miniatures of the codex are published in colour: I vol., pls. VII-XV; II vol., pls. I-II, IV, VI, VIII, X, XII, XIV-XV. 15. Dama'at al-bākī, Dublin, Chester Beatty Library, 745/1345. The detached colophon with a miniature has been studied and translated by Rice, "al-'Umarī" (1951), pp. 856-867, pl. 22-23. The 36 miniatures, however, are considered to be fake. I am particularly grateful to Ernst I. Grube, without whose generosity in making three decades of his files on Mamluk painting available to me during my research on this manuscript this Note, as well as Notes 40 and 50, could not have been assembled.

- 30. See the colour illustration in Atıl, Arab World (1975), pp. 103-110.
- See the colour illustration in Löfgren and Traini, Cat. Ar. Mss. Bibl. Ambrosiana (1975), vol. II, col. pl. X.
- 32. See Note 29, manuscript 2.
- 33. de Lorey, "Bestiaire" (1935), pp. 236-237.
- 34. Paris, Bibliothèque Nationale, ms. ar. 2964. Vienna, Nationalbibliothek, A.F. 10. For the frontispiece in the Paris manuscript, see Bishr Farès, "Le Livre de la Thériaque", Art Islamique, II, Cairo, 1953, pp. 1-56 (see especially the horses on pls. XIII, XIV, and the ass, pl. XV and col. pl. X); see also Ettinghausen, AP (1962), pp. 84-85 and p. 91, for the Vienna frontispiece.
- 35. The knotted tail, whose prototype probably derives from representations on Sasanian metalwork, is always present in the iconography of horses in the Seljuk school of painting.
- Kitāb al-bayṭarah, Istanbul, Ahmet III. Library, 2115, dated 1210. See Ettinghausen, AP (1962), p. 97. Maqāmāt, Paris, Bibliothèque Nationale, ms. ar. 5847, dated 1237. See Ettinghausen, AP (1962), pp. 118-119.

- 37. Mayer, "Damascene Artist" (1942), p. 168; see also Rice, "al-'Umarī" (1951), pp. 862-863. For al-Dimashqī, see al-Asqalānī, al-Durar al-kāminah (1929-32), vol. II, p. 134.
- 38. For the Escorial manuscript see above, Notes 1 and 2. For the Oxford Magamat see J. Uri, Bi biothecae Bodleianae Codicum Manoscriptorum Orientalium, Oxford, 1787, n. 353, p. 98. Illustrations are in Ettinghausen, AP (1962), E. J. Grube, The World of Islam, London, 1966, Fig. 63, K. Holter, "Die frühmamlukische Miniaturmalerei," Die Graphischen Kunste, vol. 2, n. 1, Vienna, 1937, pp. 1-14, Figs. 1, 6, 9, 12. For the Vienna Maqamat see G. Flügel, Die Arabischen, Persischen und Türkischen Handschriften der K.K. Hofbibliothek zu Wien, Vienna, 1865, I, p. 346, n. 372. This manuscript has been thoroughly studied by Holter, "Galen" (1937), where 37 out of its 70 miniatures are reproduced. For colour reproductions, see Ettinghausen, AP (1962), pp. 148, 150, 151. For the Sulwan, see Melikian-Chirvani, Sulwan (1985), three volumes: the first is the English version of the translation of the text from Arabic into Italian by Michele Amari; the second is a critical study, concerning both the text and the miniatures, by Melikian-Chirvani; the third is a facsimile reproduction in colour of the whole manuscript, including detached folios which have been fitted into the reconstructed sequence, as suggested by Melikian-Chirvani. This quite remarkable publication was issued in a very limited edition (999 copies) and it is therefore almost unavailable. The hypothesis I had advanced in my thesis on the Escorial Manāfi' (see Note 2) on the origin of this group of four manuscripts in the Syrian tradition of painting is now confirmed by Melikian-Chirvani in his study of the Kuwait Sulwan.
  - 39. For an attribution of these manuscripts to Egypt, see: Ettinghausen, AP (1962), p. 153, for the two Maqāmāt, and p. 141, for the Sulwān and the Manāfi'; Grabar, Maqamat (1984), p. 15, for the Oxford Maqāmāt, and p. 16, for the Vienna Maqāmāt; Holter, "Galen" (1937), p. 1, and J. M. Rogers, "Evidence for Mamluk-Mongol Relations, 1260-1360", Colloque International sur l'histoire du Caire, Cairo, 1969 (1972), p. 395, for the Vienna Maqāmāt. For the Escorial Manāfi' see also de Lorey, "Bestiaire" (1935), p. 238, where the author regards it as a Mongol manuscript, comparing it with the dispersed Persian Manāfi' and the Kitāb al-ḥayawān of the Pierpont Morgan Library in New York.
  - 40. In addition to these four manuscripts, those which may be classified as Seljuk are: 1. Maqāmāt, London, British Library, Or. 9718, datable around 1300. See Mayer, "Damascene Artist" (1942), p. 168, Fig. 1; Rice, "al-'Umarī" (1951), pl. 4. 2. Nihāyat al-su'l wa al-umniyyah fi ta'allum a'māl al-furūsiyyah, Dublin, Chester Beatty Library, uncatalogued, 767/1366. See the study on this manuscript, related to the BL, Add. 18866 and to MS. A 2651 of the Topkapi Sarayi Museum, in James, "Mamluk Painting" (1974), where 7 out of

- the 19 miniatures of this manuscript are published, Figs. 1, 4, 6, 9, 10-12. 3. Nihāyat al-su'l wa al-umniyyah fī ta'allim a'māl al-furūsiyyah, London, BL, Add. 18866, dated 773/1371. Its 18 miniatures as well as the title page and the colophon are published (some of them in colour) in G. Rex Smith, Medieval Muslim Horsemanship, A 14th Century Arabic Cavalry Manual, London, 1979. Another Furūsiyyah manuscript is in the BL, Add. 23487, 785/1383; 19 blank spaces have been left for the miniatures, which were never painted. 4. Nihāyat al-su'l wa al-umniyyah fī ta'allum a'māl al-furūsiyyah, Istanbul, Topkapı Sarayı, A 2651, dated 775/1373. See James, "Mamluk Painting" (1974), Figs. 3, 8.
- 41. Published in Holter, "Galen" (1937), pl. 1 and Figs. 27, 29, and the miniature on fol. 165r also in Haldane, MP (1978), Fig. 72.
- 42. Especially on the frontispiece and in certain headgear and robes. See J. M. Rogers, "Evidence for Mamluk-Mongol Relations, 1260-1360", Colloque International sur l'Histoire du Caire, 1969, Cairo, 1972, pp. 385-403.
- 43. de Lorey, "Bestiaire" (1935), Fig. 4.
- 44. M. S. Ipşiroğlu, Saray-Alben, Diez'sche Klebebände aus den Berliner Sammlungen, Wiesbaden, 1964, abb. 41.
- 45. Illustrated in SPA, pls. 164-165.
- 46. F. Gabrieli and U. Scerrato, Gli Arabi in Italia, 1979, col. pl. 706.
- 47. Melikian-Chirvani, Sulwan (1985), Fig. 21.
- 48. Grube, "Fusṭāṭ" (1963), p. 93, pl. 3, Fig. 7, and pl. 4, Fig. 8.
- 49. See, for example, a dish from Tell Minis, 12th century, in V. Porter and O. Watson, "Tell Minis", Syria and Iran, Three Studies in Islamic Ceramics, Oxford Studies in Islamic Art, IV, Oxford, 1987, Fig. A12; Grube, "Fustāt" (1963), pl. 5, Figs. 9, 10, 11a-c, 12 for the representation of hares on textiles and in woodwork.
- 50. 1. Kitāb al-ḥayawān, New York, Pierpont Morgan Library, MS. 500, in Persian, end-13th century; 2. Manāfi al-ḥayawān, dispersed in various public and private collections, in Persian, about 1300; 3. Na't al-ḥayawān, London, BL, Or. 2784, beginning of the 13th century, in Arabic; 4. Manāfi al-ḥayawān, Paris, Bibliothèque Nationale, Or. 2782, dated 1300, in Arabic; 5. Kitāb manāfi al-ḥayawān, San Lorenzo del Escorial, Biblioteca Real, 898, dated 1354, in Arabic. The text of the Kitāb al-ḥayawān in Milan, Biblioteca Ambrosiana, D 140 inf. S.P. 67, first quarter of the 14th century, in Arabic, follows a different tradition and derives from al-Jāḥizs book on animals.
- 51. Melikian Chirvani, Sulwan (1985), pp. 76-79.







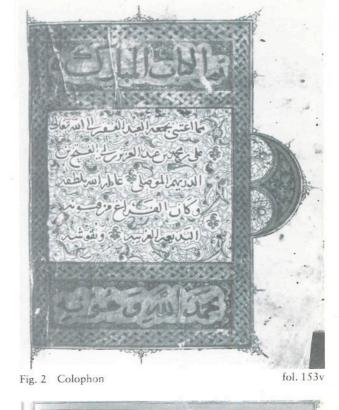




Fig. 4 The Horse

fol. 17v



Fig. 3 End of text

fol. 153r

Fig. 5 The Onager

fol. 39r

Kitāb manāfi' al-ḥayawān, Syria, 755/1354. San Lorenzo del Escorial, Biblioteca Real, Ms. Ar. 898

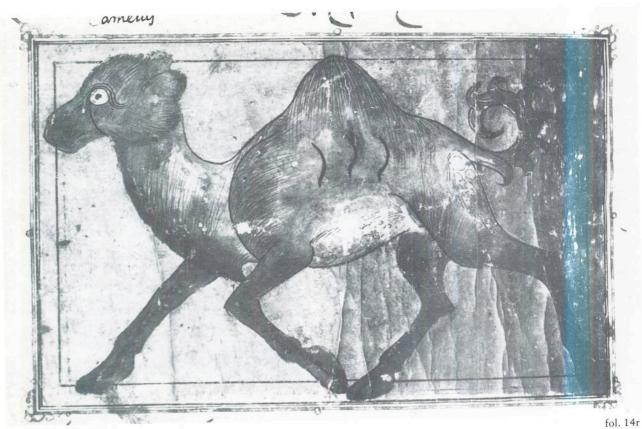


Fig. 6 The Camel



Fig. 7 The Herons Kitāb manāfi' al-ḥayawān, Syria, 755/1354. San Lorenzo del Escorial, Biblioteca Real, Ms. Ar. 898



Fig. 8 The Herons
Leaf from a dispersed Kitāb manāfi al-hayawān, Persia, end of the 13th century
Washington, Freer Gallery of Art, 27.5

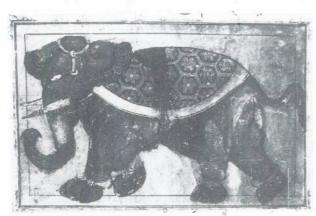


Fig. 10 The Elephant
Kitāb manāfiʿ al-hayawān, Syria, 755/1354
San Lorenzo del Escorial, Biblioteca Real, Ms. Ar. 898,
fol. 16r



Fig. 12 The Hares
Kitāb manāfi' al-ḥayawān, Syria, 755/1354
San Lorenzo del Escorial, Biblioteca Real, Ms. Ar. 898, fol. 31v



Fig. 9 The Herons
Persia, end of the 14th century (?)
Berlin, Staatsbibliothek, Diez Album, fol. 73r

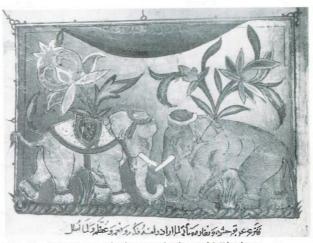


Fig. 11 The Tame Elephant and The Wild Elephant
Ibn Zafar al-Siqillī, Sulwān al-muṭā', Syria, middle of
the 14th century
Kuwait, Homaizi Collection, fol. 104r



Fig. 13 The Weasel
Kitāb manāfi' al-hayawān, Syria, 755/1354
San Lorenzo del Escorial, Biblioteca Real,
Ms. Ar. 898, fol. 56r



Fig. 15 The Polecat Kitāb manāfi' al-ḥayawān, Syria, 755/1354. San Lorenzo del Escorial, Biblioteca Real, Ms. Ar. 898

fol. 62v



The Salamander Fig. 16

fol. 63v



Fig. 17 The Rat and the Mouse

Kitāb manāfi' al-ḥayawān, Syria, 755/1354. San Lorenzo del Escorial, Biblioteca Real, Ms. Ar. 898



A The Elephant Kitāb manāfi al-ḥayawān, Syria, 755/1354 San Lorenzo del Escorial, Biblioteca Real, Ms. Ar. 898, fol. 16r



D Frontispiece
Kitāb al-diryāq, Mosul, middle of the 13th century
Vienna, Nationalbibliothek, A.F. 10, fol. 1r



E The Camel
Kitāb manāfi al-hayawān, Syria, 755/1354
San Lorenzo del Escorial, Biblioteca Real, Ms. Ar. 898, fol.
14r



The Wild Elephant Fitted Out as a War Elephant
Ibn Zafar al-Siqillī, Sulwān al-muṭā', Syria, middle of the
14th century
Kuwait, Homaizi Collection, fol. 104v



C The Horse Kitāb manāfi' al-ḥayawān, Syria, 755/1354 San Lorenzo del Escorial, Biblioteca Real, Ms. Ar. 898, fol.

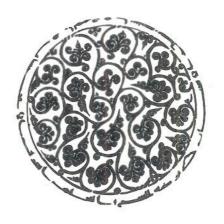


F Abu Zayd's Departure While the Others Are Sleeping Harīrī, Maqāmāt, Syria, 734/1334
Vienna, Nationalbibliothek, A.F. 9, fol. 165r

# ISLAMIC ART

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