

THE SOURCES OF COSMAS INDICOPLEUSTES' MINIATURES OF ANIMALS: THE CASE OF THE "UNICORN"

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ABSTRACT

The aim of this paper is to trace the sources of the Byzantine author Cosmas Indicopleustes' miniatures of animals, in particular of the "unicorn", in his work *Christian topography*. Cosmas, a sixth century seaman and merchant, wrote his work, *Christian topography*, based on his personal experience travelling in the Red Sea and beyond. Although his main aim was to enhance religious beliefs, his work yields important geographical information concerning navigation, peoples and animals of various countries neighbouring the Red Sea and beyond. His description of various exotic countries is decorated with drawings and numerous designs relevant to his cosmological interpretation of the Bible. While Cosmas' cosmological theory and the relevant designs have been studied by a number of scholars, little attention has been paid to his drawings of animals based on his travelling experience. An attempt is made in this study to trace the origin of Cosmas Indicopleustes' illustrations of animals, focusing on the unicorn. Furthermore, a comparison with similar drawings found in Arabic manuscripts is added. An effort is also made in this study to draw information not only from the pictorial evidence but also from the literary tradition of the original Greek and Arabic sources.

INTRODUCTION: COSMAS INDICOPLEUSTES AND HIS WORK *CHRISTIAN TOPOGRAPHY*

Sailing in the Red Sea and the Indian Ocean inspired the sixth century Byzantine author Cosmas Indicopleustes to write a number of books of which only one, *The Christian topography*, has survived.¹ Cosmas, a seaman and merchant, wrote his

¹ Cosmas' *Christian topography* has been edited and translated in French with meticulous care by Wolska-Conus (3 volumes: I:1968; II:1970; III:1973). There are two translations in English, Winstedt (1909) and McCrindle (1897). Recently a voluminous book appeared

Christian topography based on his personal experience. It is mainly a cosmography inspired by religious dogmatism, but part of it contains valuable original geographical information, collected first-hand or gathered by questioning other merchants. Actually, Cosmas' work demonstrates that Christianity alone cannot be blamed for the sterility of Byzantine geography, for Christianity simply restricted certain cosmographical interpretations. Cosmas' main aim to stubbornly support the Bible's cosmological veracity left unaltered his description of foreign lands and people as well as his historical remarks.

Unfortunately, while many studies have been written about Cosmas' work, little effort has been made to examine and investigate his personal life and maritime activities, which are closely related to the Byzantine naval policy in the Red Sea and the Indian Ocean at the time of Justin I's reign (518-527) and that of Justinian I (527-565), as well as the linguistic peculiarities of his language.²

This was the time of the florescence of the Byzantine navigation originating in Alexandria where international sea trade, encouraged by the patriarchate of Alexandria, enjoyed freedom never to be repeated. The Alexandrian merchants extended their trade activities on the one hand across the Mediterranean and on the other in the Red Sea and beyond (Christides 2013:80-106).

Concerning Cosmas' language, Roger Scott correctly compares it with that of Malalas. They both shared the same hostility for the classical language and culture (Scott 1990:79), although Cosmas' style is more complicated and it lacks the vivid simplicity of Malalas' language. Regarding his language and style in contrast to his contemporary, the historian Procopius, who, enthralled by the past, imitated Thucydides rather awkwardly, Cosmas writes in an unsophisticated and often ungrammatical style, obviously for an audience of similar taste. The tenth century patriarch Photius contemptuously states that Cosmas' expression is miserable and that he ignores basic syntax (Henry 1959:21, no. 36, 8-9). Thus, some of his mistakes, for

with an analytical text criticism and commentary (see Schneider 2010); it is mainly a theological approach.

² Meager information about Cosmas Indicopleustes appears in Anastos' pioneering work, *The Alexandrian origin of the Christian topography of Cosmas Indicopleustes* (1946:73-80) and in the succinct note by Cansdale (1995:609-616).

example the confusion of the use of nominative and accusative, must have been widely used in the spoken language of his time.³

Cosmas' cosmological theory and especially the numerous designs illustrating passages from the Bible have been studied initially by Doula Mouriki, following Kurt Weitzmann's first steps,⁴ and recently by Leslie Brubaker, who demonstrated the close connection between the religious iconography in certain of Cosmas' manuscripts and the religious iconoclastic movement (Brubaker 2006:3-24). A thorough new study by Horst Schneider (2010) has completed the theological aspect of Cosmas' book.

COSMAS' DESCRIPTION OF WILD ANIMALS IN THE 11TH BOOK OF HIS *CHRISTIAN TOPOGRAPHY*

In contrast to the intensive research on Cosmas' religious illustrations, little has been accomplished concerning Cosmas' miniatures of plants and animals of exotic countries, which are mainly reported in the eleventh chapter of his book.⁵ Cosmas, in his descriptions of exotic countries and animals, had affirmed the probability of uniting the Christian spirit with the classical tradition in envisioning the religious audience of Byzantine Alexandria of Egypt, his country of origin. The audience must have been the Greek-speaking Christian population of this city whether of Egyptian or Greek origin, since at Cosmas' time most of the Egyptians beyond Alexandria were illiterate while in this city one could hardly distinguish between Hellenised Egyptians and Egyptianised Greeks. As Maria Leontsini characteristically points out, "for the Byzantines the natural world was the product of the divine creation and simultaneously the area of human activities".⁶ Thus, it is not surprising that the religious monk Cosmas adds the descriptions of countries and animals to his

³ Wolska-Conus (I 1968, Book I, 27, p. 299: τίς ἔτι χρεία σοφίζεσθαι τοὺς σοφοὺς καὶ λέγειν ἑτέρωθεν ἀνιμᾶσθαι τὸ ὑγρὸν, αὐτόθεν ἄνωθεν ἔχοντες τὸ θερμὸν καὶ τὸ ὑγρὸν.

⁴ Mouriki-Charalambous (1970); Weitzmann's book, *Studies in classical and Byzantine manuscript illumination* (1971), remains fundamental. Weitzmann's completed theory appears in another work (Weitzmann and Bernabò 1999). See also Revel-Neher (1990-1991:78-97); Wolska-Conus (1990:155-191).

⁵ Wolska-Conus (1973:315-341, vol. III, Book XI).

⁶ Leontsini (2011:285-317); Koutrakou (1992:130-141); Kolias (2005:165-166).

theological contemplations. The drawings of the animals are mainly the products of his observations while sailing in the Red Sea and plausibly in the Indian Ocean. Actually, Cosmas in his description of wild animals usually reports whether he had seen them himself, for example, in his description of rhinoceros, about whom he also adds that he had seen it in Ethiopia.⁷

Of particular importance is Cosmas' realistic description of wild animals. An important question that is raised is whether the illuminations of Cosmas' text depicting plants and animals were the product of Cosmas' personal observations which he acquired on his numerous trips to the countries around the Red Sea and Sri Lanka. It is the personal view of the present author that Cosmas' crudely drawn sketches of animals and plants were his own product, as he himself reports. Cosmas could have used drawings of animals based on the Hellenistic legacy which still continued in early Byzantine times, but such drawings were usually schematic (Kádar 1978). It should be noted that these pictures, in spite of their primitive form, were undoubtedly realistic since Cosmas was writing for an Alexandrian audience, well familiar with wild animals. A zoo of various wild animals had existed in Alexandria already in the third century B.C., established by Ptolemy II Philadelphus (285-246 B.C.).⁸ Most probably the Ptolemaic Alexandrian zoo continued to exist in Byzantine times, although details about the transportation of wild animals from the remote African countries to the Egyptian ports of the Red Sea are missing (Christides 2010:72-73).

The country of origin of Cosmas' illuminations of wild animals and plants can easily be identified. Thus the drawing of Cosmas' elephant, depicted with small ears and concave back, undoubtedly betrays African origin, clearly distinctive from the Asiatic.⁹ More important is Cosmas' depiction of a pepper plant over banana trees. Special attention to this plant was paid by Anne McCabe, who revealed that it was a precise depiction of a pepper vine planted in Asiatic India (McCabe 2009: 282). She asserts that this picture in connection with Cosmas' realistic account of five pepper trade centres on the Malabar Coast of India probably indicates that Cosmas actually

⁷ Wolska-Conus (1973:317, vol. III, Book XI, §2, 5-6).

⁸ For the zoo of Alexandria, see Hubbel (1935:68-76).

⁹ Wolska-Conus (1973:392, vol. III, appendix, fig. 9).

had visited Asiatic India (McCabe 2009, note 43).

COSMAS' DESCRIPTION OF THE UNICORN

While almost all of Cosmas' illuminations are based on first-hand knowledge derived mainly but not exclusively from African countries, his depiction of an imaginary animal, the unicorn (Greek: *monocerōs*) is irrelevant to any real animal. Following his usual practice of mentioning whether he actually saw any of the animals he described, Cosmas straightforwardly states, "I did not see it" (the unicorn), but "only four brazen figures of him set up in the four-towered palace of the king of Ethiopia".¹⁰

A full account of the various aspects concerning the unicorn in ancient and medieval times, about which there is an immense literature, would be out of the scope of this article (Le Goff 2005). It is sufficient to concentrate mainly on the unicorn as it appears in Cosmas Indicopleustes' text and image. Cosmas' illumination depicts a mythical animal with the body of a horse which bears on the top of its head an upturned horn of extraordinary size, from which it gained its name (*monocerōs*). In contrast to the realistic representation of the rest of the depicted animals in Cosmas' illuminations, that of the unicorn is one of many images which were borrowed from the illustrated manuscripts of the Old Testament, the so-called *Septuagint*. As suggested by Weitzmann, the archetype of a large number of biblical subjects created for the illustration of the *Septuagint* in early Christian times was transmitted into secondary Byzantine texts, such as patristic and hagiographical works.¹¹

Searching in the rich illustration of the *Septuagint*, the chapter of "Genesis" in particular, one discerns a clear depiction of the unicorn in one of the manuscripts. It is the scene called "The naming of the terrestrial animals" (Fig. 1). Adam appears flanked by a group of domesticated and wild animals under the inscription "θηρῶν πετεινῶν κλησις" ("naming of domesticated land animals and birds"). Among them distinctly appears the unicorn, whose name is explicitly reported in the corresponding

¹⁰ Wolska-Conus (1973:327, vol. III, Book XI, §7, 1-4).

¹¹ See the comprehensive chapter in Weitzmann (1971:45-75).

biblical text of the manuscript.¹² Although the unicorn is squeezed among the rest of the animals, we can discern his horse-like feet and the conspicuous awkward protrusion of the single horn over his head. This type of an artificially protruding horn is the prototype imitated by Cosmas, and it appears as a typical characteristic of the unicorn in early Byzantine painters and in some later Arab painters to be discussed further in this work.

In Cosmas' illumination of the unicorn (*monocerōs*) (*Codex Sin.*, fol. 202^r), a scene of hunting is presented in which a hunter carrying a bow chases wild animals, one of which is the unicorn (Fig. 2).¹³ Save the exaggerated length of its horn, Cosmas' unicorn has no signs of any extraordinary qualities as it appears in his relevant text. The attributes of Cosmas' literary *monocerōs*, based on concrete biblical references, do not exceed those described in *Septuagint*, i.e., immense physical strength based on its horn.¹⁴ Thus, Cosmas, who enjoyed describing exotic but not mythical creatures in both his text and images, presents an earthy *monocerōs*, although by his time many stories circulated about a *monocerōs* with magic supernatural powers performing miracles.

THE UNICORN (*MONOCERŌS*) IN THE BYZANTINE TRADITION

The Greek sources deal with the term *monocerōs* already from the Hellenistic times. Ailianos (third century A.D.), mixing zoology with mythology, describes the *monocerōs* as "one-horned Indian beast, size of a horse". The horn of this monster is used to make items that protect one from poison.¹⁵ Drawing from the Hellenistic legacy, the Byzantine sources frequently report on the unicorn.

¹² The picture depicting the panoramic view of "the naming of the animals", in which the unicorn appears, is presented in Weitzmann and Bernabò (with the collaboration of Rita Tarasconi, 1999, vol. 2.2, fig. 80a).

¹³ Wolska-Conus (1973:386-387, vol. III, appendix, figs. 3-4).

¹⁴ Wolska-Conus (1973:327, vol. III, Book XI, §7).

¹⁵ Scholfield (1958/I:201): "India produces horses with one horn ... and from these horns they make drinking vessels and if anyone puts a deadly poison in them and a man drinks, the plot will do him no harm ...".

During Byzantine times, when zoology and mythology were mixed indiscriminately, *monocerōs* appears in a number of sources, on the one hand as a monster and on the other as securing immunity to poison. It is invincible and can be captured only by the charm of a virgin when she approaches it and by the sound of music. Typical examples appear in the popularised zoological text *Physiologus*, written ca the third or fourth century A.D., and revised in the eleventh century.¹⁶ Gradually the mystical element of *monocerōs*, mixed with religious symbolism, prevails in Byzantine literature and art and becomes a popular topic in medieval and later Western literature and art, a field far beyond the scope of the present work.¹⁷

Suffice it to concentrate in the present work on an illumination of the Moscow Chloudov Psalter, dated to the ninth century, which is of particular importance because on the one hand it demonstrates the type of unicorn as drawn and understood by Cosmas Indicopleustes, and on the other it incorporates folkloristic elements of the Hellenistic and Byzantine tradition.¹⁸ It depicts the *monocerōs* having the common characteristics as they appear in Cosmas' drawing, i.e., the body of a horse and one extraordinary horn protruded over its head. This imaginary animal stretches one of its feet towards a seated lady who extends her hands in a gesture of embrace (Fig. 3). This scene is the most popular of all the fabulous characteristics which are described in Ailianus' work and the anonymous *Physiologus*, i.e., the scene of the capture of *monocerōs* by a virgin (Schofield 1958). Gradually it became the trademark of a large number of illustrations in Western literary works, known as *bestiaria* (Blanciotto 1980).

Cosmas' drawing of the *monocerōs* was inspired by the Bible solely based on an illustration of the *Septuagint*. In contrast, in certain other Byzantine illuminations the image of *monocerōs*, which was enriched with the folkloristic Hellenistic tradition of this imaginary animal, caused the creation of a new type of creature, originally ferocious, later trapped and tamed by a virgin maid. A typical example of this innovated image of the *monocerōs* is the above described Byzantine illumination of

¹⁶ Beck (1971); Greek translation by Nike Eideneier (1993:74-76).

¹⁷ Le Goff (2005).

¹⁸ Illumination from the Moscow Chloudov Psalter (ninth century A.D.), Moscow, Historical Museum, cod. 129, fol. 9^{3v}; reprinted from Ebersolt (1926:19, pl. XIII, 2).

the ninth century (Fig. 3), which was widely diffused in Western Europe.

It should be noted that the case of the “unicorn” reported in this article confirms Weitzman’s theory concerning the importance of the miniatures of the manuscripts of the Septuagint for the study of Cosmas Indicopleustes’ manuscript illuminations, which was unconvincingly argued by Brubaker (Brubaker 1977:45-47).

THE UNICORN IN THE ARABIC TRADITION

It is of particular interest that the imaginary unicorn (*monocerōs*) does also appear in the Arabic sources. This is not surprising since in the Arabic sea narrations, myth and reality are interwoven and sea monsters, Cyclops and other imaginary creatures are abundant. Three important sources describe sailing in the Red Sea and the Indian Ocean, i.e., *The voyages of Sindbād the sailor* (Christides 2000:19), written at the turn of the ninth century, *The book of the marvels of India* by Buzurg bn. Shahriyār, written circa tenth century (see van der Lith and Devic 1883-1886), and *The travels of the merchant Sulaymān to India and China*, written by Abu Zayd Ḥasan at about the same time (Ferrand 1922). In all three above-mentioned Arabic sources, the exotic folkloristic elements prevail with numerous imaginary creatures, sea horses, monstrous vultures and hideous black beasts,¹⁹ while simultaneously valuable information concerning navigation in the Red Sea is reported.²⁰

Among the imaginary creatures described in two of the above sources, *The travels of the merchant Sulaymān to India and China* and *The book of the marvels of India*, the unicorn appears as a species of rhinoceros. In Sulaymān’s narration, it is called *bushān* and has one horn on his nose. As in the Greek sources, the horn of the unicorn is possessed with magic power. In the inside of this horn there is the form of the image of a creature which resembles a human being. “The horn is pitch-black but the inside image is white” (Ferrand 1922:50). This Indian animal, similar to the Greek unicorn,

¹⁹ For these folkloristic motives in comparison to the similar saga in Homer’s *Odyssey*, see Gerhardt (1957:12 ff.); for the sea monsters in the Red Sea, see Seland (2009:179-185).

²⁰ For the oral maritime law in the Indian Ocean at this period, see Sergeant (1970:195-207). See also Christides (2000:23).

has immense physical power; it constantly fights with elephants and it is invincible (Ferrand 1922:50).

Sulaymān's description of the *bushān* as a species of rhinoceros, which is usually called *karkadān* in the Arabic sources, also appears almost identical in the famous Arab geographer Ibn Khurdādhbih (middle ninth century).²¹ More important is Ibn al-Wardī's information (middle fourteenth century), based on the lost work of the tenth century writer Djayhani, about the so-called rhinoceros *bushān*: "This animal resembles the donkey, but it has on his head one curved horn which is very useful as antitoxic against poison."²² Thus Ibn al-Wardī's description of the species of rhinoceros, called *bushān-karkadān*, obviously resembles that of the *monocerōs* as it appears in some Greek sources, especially in *Physiologus*.

The only Arabic text where there is a clear description in both text and image of the *monocerōs* is Qazwīnī's (d. 1283) *Kitāb 'Adjāyb al-Makhlūqāt* (Book of the marvels of the creatures).²³ Qazwīnī's book includes excellent information about the knowledge of Arab cosmology, zoology, botany and other relevant fields mixed with passages of magic and mythology. In his illuminations, he draws real as well as imaginary creatures, for example the creature called *insān baḥriyun* (human creature of the sea), the bird *rukḥ* carrying people in the air, and among others, the *monocerōs*. Qazwīnī calls the *monocerōs* "*baqr al-waḥsh*" (wild ox) and describes it as an "animal tamed by music and dance" (Fig. 4).²⁴

The pictorial representation of the unicorn continues for centuries in Islamic art. Of course, the meaning of the traditional legend is lost and it acquires the visual conception of one of the various human-head quadrupeds (sphinxes) and/or birds (harpies).²⁵ Of the numerous pictorial representations of the unicorn in Islamic art it is worth mentioning one. It appears in a miniature of the lavishly illustrated manuscript called Ḥarīrī's *Maqamāt* kept in the National Library of Paris (MS Arab 5847),

²¹ See Ibn Khurdādhbih's relevant passage in Ferrand (1913; reprinted 1986: 29).

²² See Ibn al-Wardī's relevant passage in Ferrand (1914/II:412).

²³ Qazwīnī, ed. Farouk Saad (1981).

²⁴ Qazwīnī, ed. Farouk Saad (1981:407, illumination 15).

²⁵ For all the types of these imaginary creatures see Baer (1965).

completed in the year 1237 A.D. (Fig. 5).²⁶ The painter Yahya al-Wasit depicts a ship of the Indian Ocean which had just escaped a violent storm. It carries a variety of plants and one harpy next to which a unicorn is depicted. Attached to the crowned head of the unicorn appears the typical characteristic of the unicorn, the highly projected horn.

There is no doubt that certain elements of the Greek tradition of the *monocerōs* were transmitted to the Arab world, i.e., the anti-toxic nature of the horn of the *monocerōs* and the trapping of this ferocious animal by the charm of an enchanting musician. Most probably such restricted motives were borrowed from the Greek work *Physiologus*, or perhaps both the above-mentioned Arabic sources and *Physiologus* derived their material from a previously written or oral unknown source rooted in the ancient Near East. Nevertheless, the original description of the unicorn in the Byzantine sources should be traced, as mentioned above, to the illuminated manuscripts of the Septuagint. Finally, the colourful depiction of the unicorn in Ḥarīrī's *Maqamāt* (thirteenth) is vaguely reminiscent of the ferocious biblical animal, serving only as a decorative element without any symbolism.

CONCLUSIONS

An attempt has been made in the present article to show that the sixth century Byzantine author Cosmas Indicopleustes in his *Christian topography* included, among his realistic descriptions of exotic wild animals, an imaginary animal, the unicorn, whose origin should be traced to the illuminated manuscripts of the *Septuagint*.

In connection with Cosmas' discussion of the unicorn, a reference was added to the literary and pictorial representations of the unicorn in other Byzantine sources. In addition, a contradistinction of Cosmas' unicorn with the Arabic was undertaken as it appears mainly in the works of the Arab authors Abu Zayd Ḥasan (tenth century) and Qazwīnī (thirteenth century).

²⁶ Unfortunately Ettinghausen's booklet *The Unicorn* (1950) was not available to me, in which, I suppose, examples of the unicorn in Islamic art must have been presented.

List of figures

Fig. 1. *Monocerōs* among other animals. Naming of the Animals and Creation of Eve. *Genesis*, 2:22. From Kurt Weitzmann, Massimo Bernabò and Rita Tarasconi, *The Byzantine Octateuchs*, vol. 2.2, Princeton 1999, pl. 80a (Vat. 747, fol. 42v).

Fig. 2. Scene of hunting. *Monocerōs* among other wild animals. Sin. fol. 202r. From Wolska-Conus, *Topographie chrétienne*, vol. III, Paris 1973, appendix p. 387.

Fig. 3. Trapping of a unicorn. Illumination from the Moscow Chloudov Psalter. 9th c. AD. Moscow, Historical Museum, Cod. 129, fol. 9^{3v}. Reprinted from J. Ebersolt, *La Miniature byzantine*, Paris – Brussels 1926, Pl. XIII, 2, p. 19.

Fig. 4. *Monocerōs*, so-called “*baqr al-wahsh*” (wild ox). From Qazwīnī, ‘*Adjāyb al-Makhlūqāt*, ed. Farouk Saad, Beirut 1981 (text on p. 407).

Fig. 5. Depiction of *monocerōs* on a ship. Ḥarīrī’s *Maqamāt*, National Library of Paris (MS Arab 5847).

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Fig. 1. *Monocerōs* among other animals. Naming of the Animals and Creation of Eve. *Genesis*, 2:22. From Kurt Weitzmann, Massimo Bernabò and Rita Tarasconi, *The Byzantine Octateuchs*, vol. 2,2, Princeton 1999, pl. 80a (Vat. 747, fol. 42v).

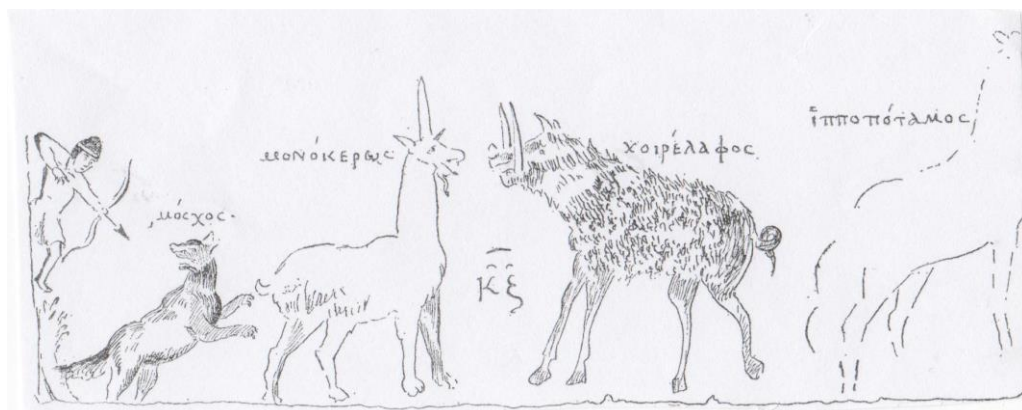


Fig. 2. Scene of hunting. *Monocerōs* among other wild animals. Sin. fol. 202r. From Wolska-Conus, *Topographie chrétienne*, vol. III, Paris 1973, appendix p. 387.



Fig. 3. Trapping of a unicorn. Illumination from the Moscow Chludov Psalter. 9th c. AD. Moscow, Historical Museum, Cod. 129, fol. 9^{3v}. Reprinted from J. Ebersolt, *La miniature byzantine*, Paris – Brussels 1926, Pl. XIII, 2, p. 19.

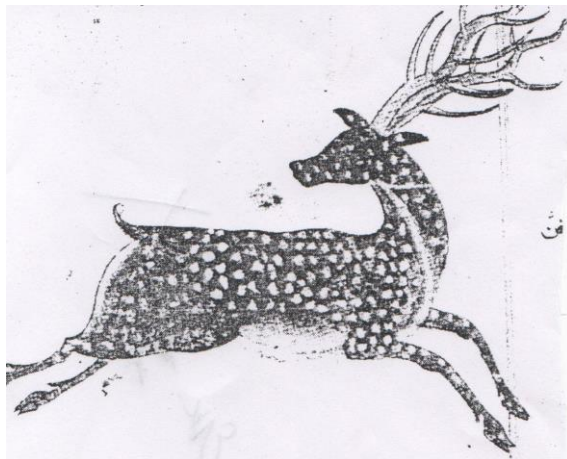


Fig. 4. *Monocerōs*, so-called “*baqr al-wahsh*” (wild ox). From Qazwīnī, *‘Adjāyb al-Makhlūqāt*, ed. Farouk Saad, Beirut 1981 (text on p. 407).



Fig. 5. Depiction of *monocerōs* on a ship. Ḥarīrī's *Maqamāt*, National Library of Paris (MS Arab 5847).