



Marvels of the East. A Study in the History of Monsters

Rudolf Wittkower

Journal of the Warburg and Courtauld Institutes, Vol. 5 (1942), 159-197.

Stable URL:

<http://links.jstor.org/sici?sici=0075-4390%281942%295%3C159%3AMOTEAS%3E2.0.CO%3B2-Z>

Journal of the Warburg and Courtauld Institutes is currently published by The Warburg Institute.

Your use of the JSTOR archive indicates your acceptance of JSTOR's Terms and Conditions of Use, available at <http://www.jstor.org/about/terms.html>. JSTOR's Terms and Conditions of Use provides, in part, that unless you have obtained prior permission, you may not download an entire issue of a journal or multiple copies of articles, and you may use content in the JSTOR archive only for your personal, non-commercial use.

Please contact the publisher regarding any further use of this work. Publisher contact information may be obtained at <http://www.jstor.org/journals/warburg.html>.

Each copy of any part of a JSTOR transmission must contain the same copyright notice that appears on the screen or printed page of such transmission.

JSTOR is an independent not-for-profit organization dedicated to creating and preserving a digital archive of scholarly journals. For more information regarding JSTOR, please contact support@jstor.org.

MARVELS OF THE EAST

A Study in the History of Monsters

By Rudolf Wittkower

“Vous vous étonnez que Dieu ait fait l’homme si borné, si ignorant, si peu heureux,
Que ne vous étonnez-vous qu’il ne l’ait pas fait plus borné, plus ignorant, plus malheureux.”

VOLTAIRE

The following pages are concerned with a strictly limited aspect of the inexhaustible history of monsters, those compound beings which have always haunted human imagination. The Greeks sublimated many instinctive fears in the monsters of their mythology, in their satyrs and centaurs, sirens and harpies, but they also rationalized those fears in another, non-religious form by the invention of monstrous races and animals which they imagined to live at a great distance in the East, above all in India. It is the survival and transmission of this Greek conception of ethnographical monsters which will here be studied.

But even the history of this one trend in the conception of monsters cannot yet fully be written, for the “Marvels of the East”¹ determined the western idea of India for almost 2000 years, and made their way into natural science and geography, encyclopaedias and cosmographies, romances and history, into maps, miniatures and sculpture. They gradually became stock features of the occidental mentality, and reappear peculiarly transformed in many different guises. And their power of survival was such that they did not die altogether with the geographical discoveries and a better knowledge of the East, but lived on in pseudo-scientific dress right into the 17th and 18th centuries. In order to illustrate the fluctuating history of this tradition it will be necessary to lay before the reader a great bulk of material, which may seem bewildering but which may serve to convey an impression of the impact which the Marvels made on the European mind.

1. *The Sources of the Indian Monsters*

It was the Greeks who were responsible for the western conception of India. The earliest surviving report of India is by Herodotus.² But his

I wish to express my gratitude to Dr. Otto Kurz and other friends who have generously helped with bibliographical notes and other suggestions. Some of the material which had been collected before the war could unfortunately not be checked under present conditions.

¹This is the title given by Montague Rhodes James to an early mediaeval tract about the wonders of the East; *Marvels of the East*. A full reproduction of the three known

copies. Oxford, printed for the Roxburghe Club, 1929.

²Bk. IV, 44. Herodotus’ other remarks about India are condensed in Bk. III, 97-106. Herodotus wrote his *History* towards the end of his life, in the second half of the 5th century B.C. His account on India was probably based on that of Hekataios of Miletus (written about 500 B.C.) who in his turn drew on Skylax’s report of a journey made c. 515 B.C.

The classical sources about India have been

knowledge of that country was scanty and vague. About fifty years later, at the beginning of the 4th century B.C., a special treatise on India was published by Ktesias from Knidos who had resided as royal physician at the court of Artaxerxes Mnemon of Persia.¹ Apart from numerous fragments transmitted by later authors his work has unfortunately only survived in an abridged version of the 9th century A.D. by Photios, the patriarch of Constantinople, who had probably a still stronger predilection for marvels than Ktesias himself.

In any case, it is certain that, owing to Ktesias' book, India became stamped as the land of marvels. He repeated all the fabulous stories about the East which had been current from Homer's time onwards and added many new ones, including tales of the weather, of miraculous mountains, diamonds, gold, etc. He populated India with the pygmies, who fight with the cranes;² with the sciapodes, a people with a single large foot on which they move with great speed and which they also use as a sort of umbrella against the burning sun;³ and with the cynocephali, the men with dogs' heads "who do not use articulate speech but bark like dogs."⁴ There are headless people with their faces placed between their shoulders;⁵ there are people with eight fingers and eight toes who have white hair until they are thirty, and from that time onwards it begins to turn black; these people have ears so large that they cover their arms to the elbows and their entire back.⁶ In certain parts of India are giants, in others men with tails of extraordinary length "like those of satyrs in pictures."⁷ Of fabulous animals he describes the martikhora with a man's face, the body of a lion and the tail of a scorpion,

collected, translated and commented upon in different works published by J. W. McCrindle. His sections dealing with Herodotus are in *Ancient India as described in Classical Literature*, Westminster 1901, p. 1 ff. Cf. also the article Herodotus in *Paulys Real-Encyclopädie*, Suppl. II, 1913, c. 430. On the earliest Greek sources about India cf. Wilhelm Reese, *Die griechischen Nachrichten über Indien*, Leipzig 1914. Christian Lassen, *Ind. Alterthumskunde*, Bonn 1849, II, p. 621 ff. "Geschichte des griech. Wissens von Indien" is still very useful. For the first part of this article cf. also H. G. Rawlinson, *Intercourse between India and the western World. From the earliest Times to the Fall of Rome*, Cambridge 1926.

¹ Cf. J. W. McCrindle, *Ancient India as described by Ktesias the Knidian*, 1882. Reese, p. 7 ff. Ktesias returned to Greece in 398/7 B.C. where he wrote his *Ἰνδικά*. Cf. article Ktesias in *Paulys Real-Encycl.* XXII, 1922, mainly c. 2037 f.

² This famous story appeared first in the *Iliad* III, 6. Herodotus III, 116, IV, 13,

although himself incredulous, reported on the authority of Aristeas' *Ἀριμάσπεια* that the one-eyed Arimaspi, inhabitants of the North, were the enemies of the griffins, and said that the Scythian word Arimaspi means "people with one eye" (IV, 27). Both traditions remained alive and reached the Middle Ages which represented either a dwarf-like race or cyclopes as fighting the birds.

³ For earlier references to the sciapodes by Skylax, Hekataios and Herodotus cf. Reese, *op. cit.*, p. 49. Pliny VII, ii, 23 calls this race also Monocoli and this name remained the alternative for Sciapodes.

⁴ Ktesias gave the first elaborate account of this people. See Reese, *op. cit.*, p. 75 f.

⁵ Transmitted through Pliny, *Hist. nat.* VII, ii, 23 and then repeated over and over again.

⁶ Skylax first mentioned the people with large ears (cf. Reese, *op. cit.*, pp. 49, 51). For Megasthenes (see below, p. 162, note 6) they were different from the people with eight toes on each foot.

⁷ Ktesias 33.

the unicorn and the griffins which guard the gold.¹ Indian cocks, goats and sheep, he asserts, are of prodigious size.²

In 326 B.C. Alexander the Great invaded India, and his conquest changed the western conception of India completely. Alexander's own geographical ideas were still so vague that, when he first came to the Indus, he was convinced he had reached the sources of the Nile³—a confusion between India and Ethiopia which goes far back into the past and existed throughout the greater part of the Middle Ages.⁴ Alexander took with him numerous scientists to describe his expedition and the countries through which they passed. As a result several works were written which have been lost, but which appear condensed in later authors.⁵

The most important book on India was, however, produced after the end of the campaigns. Its author, Megasthenes, was sent about 303 B.C. by Seleucus Nicator, the heir to Alexander's Asiatic empire, as ambassador to the court of Sandracottus (Chandragupta), the most powerful of the Indian

¹ Ktesias 7 says that the name "martikhora" means in Greek *ἀνθρωποφάγος*, i.e. man-eater, which is correct, the derivation being the Persian *mar*=man and *khora*=eater. Cf. McCrindle, *Ktesias, op. cit.*, p. 12. See also Pausanias, *Boiot.* IX, 21, 4 and the detailed account in Aelian, *De natura animal.* IV, 21. Ktesias was the first to locate and describe the unicorn. The belief in its existence was widely accepted after Aristotle, *hist. an.* II, 1 (501^a), had followed Ktesias' tale. Ktesias blended his story about the griffins with that reported by Herodotus (III, 102 ff.) about the gold-digging ants. Cf. C. Robert's analysis in *Pauly's Real-Encl.* XIV, 1912, c. 1920 (s. v. "Gryps").

² *Ind.* 13 and Aelian, *De nat. anim.* XVI, 2.

³ Arrian, *Anab.* VI, 1, 2; Strabo XV, i, 25 (696). Cf. McCrindle, *The Invasion of India by Alexander the Great*, 1893, p. 131 f., *Pauly's Real-Encl.* Suppl. IV, 1924, c. 558 (s. v. "Geographie").

⁴ This confusion seems to be traceable to Homer (*Od.* I, 23 f.) who divides the Ethiopians into those who live at the world's end towards the setting of the sun or towards its rising. Later authors use the words "Indians" and "Ethiopians" almost as synonyms. Ktesias frequently calls the Indians Ethiopians. With Herodotus and Hekataios the sciapodes dwell in Ethiopia, Pliny finds the martikhora in that part of the world, etc. Cf. the compilation of the relevant material in E. A. Schwanbeck, *Megasthenis Indica*, Bonn 1846, p. 1 ff. After a period of comparative enlightenment the confusion gets even worse

during the decay of the Roman Empire. So the anonymous author of the *Itinerarium Alexandri Magni*, written in 345 A.D., says: "India taken as a whole, beginning from the north and embracing what of it is subject to Persia, is a continuation of Egypt and the Ethiopians . . ." (cf. McCrindle, *Class. Lit., op. cit.*, p. 153). Eusebius in his *Chronicon* (325 A.D.), mentions to the 5th year of the government of Amenophis that the Ethiopians left the Indus and settled in the neighbourhood of Egypt. This was repeated by Isidore (*Etym.* IX, 2, 128) whose report about the three peoples inhabiting Ethiopia, the Hesperii in the West, the Garumantes in the centre and the Indians in the East, reappears with a number of later authors, e.g. Gervase of Tilbury (*Otia imperialia*, ed. Leibnitz, 1707-11, II, p. 759). The same division exists in Roger Bacon's *Opus Majus* (1267), ed. J. H. Bridges 1897, I, p. 312, who specified now, however, that the Ethiopian Indians were called Indians because of their nearness to India. (Still repeated by Pierre d'Ailly, *Ymago Mundi*, 1410, ed. E. Burton, 1930, p. 360 f.) In fact, Ethiopians and Indians appear as neighbours or were mixed up in most of the mediaeval maps. About the confusion of the three Indies in 13th century travellers' reports cf. Yule, *Cathay and the Way thither*, London 1914, II, p. 27 f. Valuable material for the whole question is to be found in John Kirtland Wright, *The geographical Lore of the Time of the Crusades*, New York 1925, p. 302 ff.

⁵ McCrindle, *Invasion of India, op. cit.*, p. 7 ff.

kings who resided at Pātāliputra—the modern Patna—on the Ganges.¹ Megasthenes' treatise survives in Diodorus Siculus, Strabo, Pliny, Arrian, Aelian and others.² Megasthenes gives for the first time comprehensive statements about the geography of India, about its inhabitants, its social and political institutions, its natural products, its history and mythology. Although this report was unsurpassed in reliability and abundance of material for many centuries to come, Megasthenes relates in it the stories of Indian marvels, of fabulous races and animals.

He not only repeated the old tales but added considerably to the list.³ We hear of serpents with wings like bats, of winged scorpions of extraordinary size;⁴ he repeats from Herodotus the story of the gold-digging ants;⁵ he knows of the people whose heels are in front while the instep and toes are turned backwards,⁶ of the wild men without mouths who live on the smell of roasted flesh and the perfumes of fruit and flowers.⁷ The Hyperboreans, he relates, live a thousand years;⁸ there are people who have no nostrils, with the upper part of their mouth protruding far over the lower lip,⁹ and others who have dog's ears and a single eye in their forehead.¹⁰

Megasthenes' report on India remained unchallenged for almost 1500 years. Through the political confusions in the East direct contact by land between the West and India was made difficult. Owing to the emancipation of Bactria and Parthia from the Seleucid Empire (about 250 B.C.) and the disruption of Chandragupta's Maurya dynasty (about 185 B.C.) the land-route to India was almost closed. Communications, however, were never wholly interrupted, even after the foundation of the Sassanid Empire in 226 A.D.¹¹ Meanwhile

¹ The implications of the dating of Megasthenes' embassy fully discussed by O. Stein in *Paulys Real-Encl.* XXIX, 1931, c. 231 f.

² Cf. K. Müller, *Fragmenta historicorum Graecorum*, 1848, II, p. 397 ff. The earlier collection of the fragments of Megasthenes by Schwanbeck (see above, p. 161, n. 4) was used by McCrindle for his translation: *Ancient India as described by Megasthenes and Arrian*, 1877.

³ Mainly in Strabo XV, i, 57 and II, i, 9 and Pliny, *Hist. nat.* VII, ii, 21-30.

⁴ Aelian, *De nat. anim.* XVI, 41.

⁵ These animals are the size of foxes, and fiercely attack people who try to carry off the gold. The accounts of Megasthenes and other authors about the ants are most circumstantial. Herodotus (III, 102) asserts that some specimens were preserved by the Persian king, and Arrian in his *Indika* XV, 4 quotes Nearchos, the admiral of Alexander's fleet, who reported that "he had seen several of their skins which had been brought into the Macedonian camp." (Cf. also Strabo XV, i, 44.) Even in the 16th century one of these ants was said to have been sent by the Shah of Persia to Sultan Soliman at Constanti-

nople. Cf. E. H. Bunbury, *A History of Ancient Geography*, London 1879, I, p. 230; Jules Berger de Xivrey, *Traditions tératologiques*, Paris 1836, p. 263.

⁶ Cf. above p. 160, note 6. The report that these people have eight toes on each foot only in Pliny VII, ii, 23. They were later identified with the Antipodes. Cf. below, p. 182.

⁷ All authors agree that these people live near the source of the Ganges. Pliny VII, ii, 25 calls the race Astomi.

⁸ These happy people, belonging to the oldest mythological conceptions of Greece, were generally located in the farthest north. Their opposite number in Sanscrit literature, the Uttarakurus, also inhabit the northern regions. Cf. McCrindle, *Megasthenes, op. cit.*, p. 78.

⁹ Strabo calls this race Amuktères and Pliny Sciritæ.

¹⁰ Strabo XV, i, 57 calls them Monommati. Other cyclopic people are the Arimaspi, cf. above, p. 160, note 2.

¹¹ Cf. *The Cambridge History of India*, vol. I, 1922, pp. 59 f., 425 f., 516 f., etc.; Arthur Christensen, *L'Iran sous les Sassanides*, Copenhagen 1936, p. 122. For the whole question

the sea-route to southern India grew steadily in importance. And when, in the first century A.D., a captain, Hippalus, discovered how to make use of the monsoon for navigation, merchandise from India flowed into the Roman Empire on a considerable scale.¹ However, this trade was almost completely in the hands of the Arabs.² The lack of direct contact also barred the way to an expansion of geographical and ethnological knowledge, and Greek and Roman authors of the last centuries B.C. and the first centuries of our era continued to transcribe faithfully the by then classical accounts of India.³ Thus, the knowledge of India in the Hellenistic and Roman world and consequently in the early Middle Ages was based mainly on the two works by Ktesias and Megasthenes.

How was it possible, it will be asked, that such a scholarly mind as that of Megasthenes, not to mention Ktesias and other writers, could be induced to accept the fabulous stories which have been mentioned? The reasons seem to have been manifold. In some cases, as for instance the cynocephali⁴ and the cyclopic races,⁵ the Greeks brought with them ideas which were similar to those of the Indians; they may have had a common mythical origin in times beyond our historical reach.⁶ In other cases the Greek writers

of trade between the Roman Empire and India, cf. E. H. Warmington, *The Commerce between the Roman Empire and India*, Cambridge 1928.

¹ Cf. McCrindle, *The Commerce and Navigation of the Erythraean Sea; being a Translation of the Periplus Maris Erythraei* . . . 1879, §57; Willfrid H. Schoff, *The Periplus of the Erythraean Sea*, 1912, pp. 45 f., 227 f. The Periplus, written by an anonymous writer probably about 60-80 A.D. gives the first account of the discovery of the monsoon. Cf. the discussion of the trade route by sea in Bunbury, *op. cit.*, II, p. 470 ff. and of the trade policy of the Roman Empire in the centuries before and after our era in M. Cary and E. H. Warmington, *The Ancient Explorers*, London, 1929, p. 73 ff., and K. A. Nilakanta Sastri, *Foreign Notices of South India from Megasthenes to Ma Huan*, Madras 1939, p. 4 ff.

² Mainly after the 2nd century A.D., cf. Cary and Warmington, *op. cit.*, p. 84. But even at the time of the Periplus cargoes changed hands about six times, cf. Schoff, *op. cit.*, p. 228. The caravan trade remained also in oriental hands, cf. Rostovtzeff, "The Near East in the Hellenistic and Roman Times," *Dumbarton Oaks Inaugural Lectures*, Cambridge (Mass.) 1941, p. 35.

³ Cf. the considered statement in the *Cambr. Hist. of India*, *op. cit.*, p. 425.

⁴ The belief in the existence of dog-headed creatures is known to us in all parts of Asia, in China as well as in Java and Siberia, in

Egypt as well as in America and Europe. Cf. the material collected by Henri Cordier, *Les monstres dans la légende et dans la nature*, Paris 1890, with further references; *idem*, *Les voyages en Asie au XIVe siècle du Frère Odoric de Pordenone*, Paris 1891, pp. 206-17; *idem*, *Ser Marco Polo. Addenda*, London 1920, p. 109 f.; W. Klinger, "Hundsköpfige Gestalten in der antiken und neuzeitlichen Überlieferung," *Bull. international de l'Acad. Polonaise des sciences . . . Cl. d'hist. et de phil.* 1936, pp. 119 ff.

⁵ One-eyed races, familiar to the Greeks as the Cyclopes, are mentioned in the *Mahabharata* and in other Indian epics, cf. Schwabbe, *op. cit.*, p. 70 and McCrindle, *Megasthenes*, *op. cit.*, p. 77. To have only one eye seems to have been in India the symbol of the barbarian. As late as the 15th century an Italian traveller, Nicolò Conti, reported, that the Indians say "that they themselves have two eyes and that we have but one, because they consider that they excel all others in prudence." (Mario Longhena, *Viaggi in Persia, India e Giava di N. de' C.*, Milan 1929, p. 179.) In this detached symbolical form the device occurs also in English literature, cf. Joseph Glanvill, *The Vanity of Dogmatizing*, 1661, p. 129: "We judge truth to be circumscrib'd by the confines of our belief . . . and . . . repute all the rest of the world Monoculous."

⁶ Klinger, *op. cit.*, has shown that the cynocephali were originally probably chtonic demons, traces of which have been preserved

thought they found in India—probably without basis—their own conceptions such as satyrs and sirens. Sometimes the visual arts had their share. The description of the griffin was obviously influenced by representations which were current in Greece.¹ Sometimes real observation may have been at the bottom of the story. It has been established beyond doubt that Ktesias' and Megasthenes' unicorn is the Indian rhinoceros; for in India and China people still attribute the power of protection against poison to the horn of this animal—the same power which Ktesias reported about the unicorn.²

But the majority of the fabulous stories were of literary origin; they were borrowed from the Indian epics. Megasthenes himself said that he owed his knowledge of some of the marvels to the Brahmans,³ and he had, of course, no reason to distrust the reports of the highly esteemed cast of philosophers. An example may show how his conceptions originated. Races with long ears were quite unknown to western mythology, but they are frequently mentioned in the Indian epics, particularly the Mahabharata, as *Karna-pravarana*, i.e. people who cover themselves with their ears;⁴ other races were called "the camel-eared," others "people having hands for ears," others again "people having the ears close to the lips."⁵ For the Indians of the epic period, barbarous tribes had long ears, and the story that people exist who sleep in their ears was still current in Hindustan in the 19th century.⁶ A translation from the Sanscrit has also been discovered in the peculiar story of the gold-digging ants. The gold collected in the plains of Tibet or East Turkestan was commonly known as "Pipilika," signifying "ant-gold." This name was probably due to the shape of the gold-dust brought to light not by ants, but by marmots or pangolins while they were excavating their holes.⁷ Possibly these animals may have been seen by the Greek authors.

in folklore adaptations of the early myth. About the diffusion of the myth of one-eyed creatures cf. *Paulys Real-Encycl.* XXII, c. 2346 with further references.

¹ Aelian, *De nat. anim.* IV, 27 gives from Ktesias a detailed description including the colour of feathers, wings and neck, and goes on "its head is like the representations which artists give in paintings and sculptures." It is quite probable that Ktesias' account was based on Persian representations of the griffin with which he must have become familiar during his stay in Persia.

It may also be recalled that Ktesias refers to pictures of satyrs in the description of tailed men, cf. above, p. 160.

² Cf. Steier s.v. "Nashorn" in *Paulys Real-Encycl.* XXXII, 1935, c. 1780 ff. It may also be noted that the figure of a unicorn occurs frequently on seals from Mohenjo-Daro (John Marshall, *Moh.-Daro and the Indus civilisation*, London 1931, II, p. 382 ff. and pl. CXV) and that the unicorn was familiar to the civilizations of the Near East.

Hennig, "Der kulturhist. Hintergrund der

Gesch. vom Kampf zwischen Pygmäen und Kranichen," *Rhein. Mus. f. Philologie*, N.F. 81, 1932, p. 20 ff. believes to have found the ethnographical basis of the pygmy legend.

In some cases perhaps too realistic explanations have been sought. The people without mouths who live only on smell were according to H. Hosten ("The mouthless Indians," *Journal and Proceedings As. Soc. of Bengal* VIII, 1912, p. 291 ff.) Himalayan tribesmen who used strongly smelling fruits and vegetables as remedy against height-sickness.

³ Strabo XV, i, 57.

⁴ Lassen, *Ind. Altertumskunde*, *op. cit.*, II, p. 651.

⁵ Cf. Schwanbeck, *op. cit.*, p. 66; McCrindle, *Megasthenes*, *op. cit.*, p. 75.

⁶ *Ibid.*, *loc. cit.*

⁷ Cf. Bunbury, *op. cit.*, p. 257; Reese, *op. cit.*, p. 69 f. O. Peschel, *Abhdl. Zur Erd- und Völkerkunde*, Leipzig 1877, p. 41 ff.; Hennig in *Rheinisches Mus. f. Philologie*, N. F. 79, 1930, pp. 326-332. A new satisfactory explanation of all the details of the story by George Jennison, *Animals for Show and Pleasure in Ancient*

It may not now seem so strange that even an accurate observer like Megasthenes should have believed the fabulous stories, which—it must be remembered—played only a negligible part in his work. They formed part of his own Greek inheritance and were too well attested by Indian verbal and literary tradition to be disregarded.¹

2. *An Enlightened Interlude*

It is characteristic of the progressive scientific attitude of the Greeks that they themselves turned against the stories of marvels, prodigies and fabulous races. Censure by a number of later authors has survived. The most critical is perhaps Strabo, whose *Geography* was written in the first years of our era. However Strabo's merits as a geographer may be judged, he did not hesitate in dealing relentlessly with old superstitions.

Generally speaking, he says,² the men who hitherto have written about India were a set of liars. Deimachos holds the first place in the list (he was like Megasthenes, ambassador at an Indian court; his work is lost), Megasthenes comes next; while Onesikritos (the pilot of Alexander's fleet) and Nearchos (Alexander's admiral) with others of the same class, manage to stammer a few words of truth . . . They coined the fables concerning men with ears large enough to sleep in, men without mouths, without noses, with only one eye, with spider legs, and with fingers bent backward . . .

and he goes on with the whole list of absurdities reported by earlier authors.

No less refreshing is what the learned Aulus Gellius has to say about 150 years later in his *Noctes Atticae*.³ He had studied in Athens, and on his way back to Italy he strolled along in the streets of Brindisi and found in a bookshop some old Greek works "full of marvellous tales of things unheard of and incredible, but written by ancient authors of no small authority." After recording the superstitious beliefs found in them concerning the existence of cynocephali, sciapodes, pygmies, etc., he thus concludes:

Rome, Manchester 1937, pp. 190-93. An interesting, though erroneous, attempt of explanation was made by A. F. Graf von Veltheim, *Von den goldgrabenden Ameisen und Greiffen der Alten*, Helmstädt 1799.

For other translations from the Sanskrit see Lassen, Schwanbeck and McCrindle.

¹ The Indian conceptions of monsters made their way also into China, where they can be traced long before our era. Berthold Laufer ("Columbus and Cathay," *Journal of the American Orient. Soc.* 1931, pp. 87-104) said that the Chinese "had outlined a complete picture and a fixed scheme of geography and ethnography of wondrous nations as early as the 6th century A.D." Cf. also Bazin

in *Journ. asiat.*, 3 sér., VIII, 1839, pp. 337-82; F. de Mely, *De Périgeux au Fleuve Jaune*, Paris 1927, p. 21 ff. The fabulous races in the cosmography of Piri Re'is, were published by Kahle in *Beiträge zur histor. Geographie, Kultur-geographie, Ethnographie und Kartographie, vornehmlich des Orients*, ed. H. von Mzik, Leipzig and Wien, 1929, pp. 60-76. Kahle has shown that the monstrous nations described by the Turkish author of the 16th century can be traced back to a pre-Christian Chinese source (Shan Hai King, between 1122 and 249 B.C.).

² Strabo II, i, 9. Translation after McCrindle.

³ Gellius IX, 4. Gellius' miscellaneous work was written c. 169 A.D.

The books contained these and many similar stories, but when writing them down I was seized with disgust for such worthless writings which contribute neither to adorn nor to improve life.

While some enlightened men of the Hellenistic world thus dismissed the tales about marvels,¹ Strabo had nevertheless to rely for his material on India almost exclusively on Megasthenes and other writers of Alexander's time. In more than 300 years of geographical research the knowledge about India had hardly been increased.

The main progress lay in another field. From Aristotle to Ptolemy geography had developed into a true science. It may be recalled that it was Aristotle who proved that the earth was a sphere,² that as early as the 3rd century B.C. Eratosthenes, the head of the great library in Alexandria, had employed a modern astronomical method for measuring the circumference of the earth,³ and that about 350 years later Ptolemy, in prosecution of this work, determined the location of places by means of latitudes and longitudes.⁴ It is true that most of his mathematical locations were not the result of astronomical calculation, but had been determined through measuring and comparing itineraries. But he drew up *ex post* long tables in which he laid down in degrees and parts of degrees the position of every place known to him. Six of the eight books of his *Geography* consist of such tables and with them his map of the world can be reconstructed.

Ptolemy came near to a precise geographical description of the world as it was then known. But the parts concerning India demonstrate that his knowledge of that distant country was still very inadequate. Above all, he made the old mistake of letting the coastline run from the mouth of the Indus almost due east and he also greatly overestimated the size of Ceylon.⁵ Still, with Strabo's practical geography and Ptolemy's mathematical geography Hellenism had achieved a rational conception of the world in which the Indian marvels had no place. But here the development of scientific geography breaks off for no less than 1200 years. From the 5th century A.D. onwards, when East and West became definitely separate entities, Eratosthenes, Strabo and Ptolemy were almost completely forgotten. The Latin West, without knowledge of the Greek language, lost for a time direct contact with Greek scholarship of the past.

3. *The Heritage of Antiquity and the Christian Standpoint of the Middle Ages*

One of the main sources for the mediaeval lore of monsters was Pliny's *Historia naturalis* (finished 77 A.D.). Pliny's work is a vast uncritical collection of miscellaneous material, and the geographical parts have been censured as the most defective portions of the whole. It is in line with this unscientific

¹ Other critical authors quoted by James, *Marvels*, *op. cit.*, p. 36.

² *De caelo* II, 14.

³ Cf. Bunbury, *op. cit.*, I, p. 615 ff.

⁴ The best English edition of Ptolemy's

work by E. L. Stevenson, *Geography of Claudius Ptolemy*, New York, 1932.

⁵ Bunbury, *op. cit.*, II, p. 642, discussed the difficulties of reconstructing correctly Ptolemy's map of India.

approach that Pliny—unlike his Greek contemporary Strabo—accepted all the miraculous stories related by earlier authors. He introduced the fabulous races of India with the following words: “India and the regions of the Ethiopians—characteristically enough, they appear here together again—are particularly abundant in wonders . . .”¹

But the Christian writers of the Middle Ages gave preference over Pliny to yet another author. He is Solinus who in the 3rd century A.D. wrote his *Collectanea rerum memorabilium*,² large parts of which are based on Pliny with an emphasis on remarkable and strange occurrences, on fables and marvels. This vast storehouse of wonders is cast in a geographical setting in which something of the great wealth of the Greek tradition is still alive. The 5th century A.D. brought about a further narrowing of geographical knowledge with the works of Macrobius³ and Martianus Capella.⁴ The latter, who drew his geographical material largely from Pliny and Solinus,⁵ not only abounds in misconceptions and geographical mistakes but displays above all a wealth of geographical mythology which includes, of course, a great number of fabulous races.⁶ The importance of Martianus Capella’s work, one of the most popular sources of the Middle Ages, hardly needs stressing. Mediaeval writers had to rely for their geographical material on books like these, in which sound judgment and exact knowledge were replaced by imagination and fanciful stories, curiosities and marvels.

But Christianity could not simply swallow this geographical and ethnographical heritage of pagan antiquity. It had to be brought into line with the authority of the Bible. The way to reconcile the marvels with Christian doctrines was shown by St. Augustine. Chapter 8 of the 16th book of the *Civitas Dei* is entitled: “Whether certain monstrous races of men are derived from the stock of Adam or Noah’s sons?”⁷ The Christian outlook was founded upon the words in Genesis (9, 19): “These are the three sons of Noah: and of them was the whole earth overspread.” Augustine’s answer is given with cunning ingenuity.

¹ Pliny VII, ii, 21: “Praecipue India Aethiopumque tractus miraculis scatent.”—Here Pomponius Mela should also be mentioned, who in 41 A.D. finished a rather pedestrian treatise on geography—*de situ orbis*—in which the marvels have their full share. Although Mela was much read and quoted during the Middle Ages his influence cannot be compared with that of either Pliny or Solinus.

² Critical edition by Mommsen, Berlin 1895 (2nd ed.). Cf. also the chapter on Solinus by C. R. Beazley, *The Dawn of modern Geography*, London 1897, I, pp. 246-73.

³ Geographical remarks mainly in his commentary to Cicero’s *Somnium Scipionis*, ed. F. Eyssenhardt, Leipzig 1893, Lib. II, ch. 5 ff. About Macrobius’ geographical views cf. George H. T. Kimble, *Geography in the Middle*

Ages, London 1938, p. 8 f.

⁴ *De nuptiis Philologiae et Mercurii*, ed. F. Eyssenhardt, Leipzig 1866. Cf. Kimble, *op. cit.*, p. 9 ff. Capella’s geography is to be found in his 6th book on geometry.

⁵ Cf. Mommsen’s Solinus, index locorum, p. 243 f. and *Paulys Real-Encycl.* XXVIII, 1930, c. 2010.

⁶ Cf. for instance § 605 ff. Antipodes, 664 Hyperboreans, 665 Amazons, 674 Blemmyae with head in breast, Satyrs, Himantopodes who crawl instead of walking, all in the interior of Africa after Pliny V, 8, 46; 695, 697 Pygmies and giants in India, etc.

⁷ “An ex propagine Adam vel filiorum Noe quaedam genera hominum monstrosa proderint.”—The following is a paraphrase of Augustine’s text.

He argues: the stories about fabulous races may not be true—that would be the simplest way out. If, however, these races do exist, they may not be human; certainly some authors would describe monkeys and sphinxes as races of men and be even proud of their ingenuity if we did not happen to know that they are animals.¹ If, on the other hand, these races exist and are really human, then they must be descended from Adam. Just as there exist monstrous births in individual races, so in the whole race there may exist monstrous races. As no one will deny that the individual monstrosities are all descended from that one man so all the monstrous races trace their pedigree to that first father of all. Man has no right to make a judgment about these races. For God, the creator of all, knows where and when each thing ought to be or to have been created, because he sees the similarities and diversities which can contribute to the beauty of the whole. After having first used the individual case to prove the general one, Augustine, in a final *tour de force*, suggests that God may have created fabulous races so that we might not think that the monstrous births which appear among ourselves are the failures of His wisdom.

Augustine's subtle deductions were accepted by all the writers of the Middle Ages. Isidore, in his encyclopaedic work, the *Etymologiae* (written probably between 622 and 633), simply stated that monstrosities are part of the creation and not "contra naturam."² His material, largely dependent on Solinus,³ appears in a chapter entitled *De Portentis*. In accordance with the plan of the whole work he begins with an etymological explanation of "portenta," that is to say, signs which portend and foretell the future.⁴ He then deals first with individual monsters and after that with the monstrous races. Yet he never mentions under the single items what the monstrosity is supposed to portend. The monster as magical prodigy—this idea is, of course, thoroughly classical and points back via Rome and Greece to Babylonia.⁵

¹ An Ethiopian species of monkeys was called sphinx in antiquity, cf. W. C. McDermott, *The Ape in Antiquity* (The John Hopkins University Studies in Archeology, No. 27), Baltimore 1938, pp. 67 f., 84 f.

² Migne, *Patr. Lat.*, 82, c. 419. Lib. XI, c. 3, 1: "Portenta esse ait Varro quae contra naturam nata videntur; sed non sunt contra naturam, quia divina voluntate fiunt . . ."

³ Cf. Index locorum in Mommsen's Solinus, p. 245 ff.

⁴ Cap. 3, 2: "Portentum ergo fit non contra naturam, sed contra quam est nota natura. Portenta autem, nec ostenta, monstra, atque prodigia, ideo nuncupantur, quod portendere, atque ostendere, monstrare, atque praedicere aliqua futura videntur . . ."

⁵ A wealth of material published by B. Meissner, "Babylonische Prodigenbücher," *Mitt. d. Schlesischen Ges. f. Volkskunde XIII-XIV*, Breslau 1911, p. 256 ff. (Festschrift Univ. Breslau); F. Lenormant, *La divination*

et la science des présages chez les Chaldéens, Paris, 1875, pp. 103-26, chap. 7: "Présages des naissances monstrueuses"; L. Dennefeld, *Babyl.-Assyr. Geburts-Omina*, Leipzig 1914. A few examples from the birth omens may show the correspondence of the races with the Babylonian portents. If a child is born "that has no mouth, the mistress of the house will die,—whose nostrils are absent, the country will be in affliction, and the house of the man will be ruined,—that has six toes on each foot, the lord will rule over the country of the enemy, etc." (Lenormant, pp. 107, 111, and Dennefeld, p. 51 ff.). Greek and Roman divination was less based on monstrous births than on natural phenomena on the earth and in the sky, cf. A. Bouché-Leclercq, *Histoire de la divination dans l'antiquité*, Paris 1882, IV, p. 74 ff. ("Procuration des prodiges") and Daremberg-Saglio, *Dict. des Antiquités III*, p. 292 ff. (*s.v.* Divinatio). Still, Livy, Tacitus, Suetonius and others

But as his material was taken from the geographical and not the magical branch of ancient knowledge there was no literary basis for more than the general allusion contained in his explanation of the term portent¹—quite apart from his religious standpoint. And indeed, Isidore's reason for the discussion of monstrosities lay in the encyclopaedic plan of his work; from the 7th book onwards the reader is led from the Holy Trinity through the hierarchy of the Church to man himself, and here the fabulous races had to appear as inhabitants of the distant parts of the globe; after that the survey of the animal world begins.

The same purely descriptive enumeration of fabulous races and marvels after Isidore's example occurs almost without exception and with only minor divergencies in encyclopaedias, cosmographies, and natural histories of the following centuries. The long list begins with the 7th century cosmography of Aethicus of Istria, a fabulous description of the world full of geographical mythology, probably after Isidore and Solinus, which was widely used also in the cartography of the Middle Ages.² Isidore's chapter on monsters appears verbally in Hrabanus Maurus' encyclopaedia *De universo* (c. 844); the whole work is a copy of the *Etymologiae* enriched by a mystical commentary. But it is noteworthy that in his chapter on "De Portentis" Hrabanus abstained from a mystical or allegorical explanation of the single monsters.³

It is not the purpose of this paper to trace all the works of the Middle Ages in which the marvels made their appearance. Nor can the shades of opinion, temperament and imagination of different writers be touched upon. The importance that had been attached to the marvels may be judged from the fact that we find them in all the great encyclopaedias of the 12th and 13th centuries: in the *Imago Mundi*, attributed to Honorius Augustodiniensis,⁴ in Gauthier of Metz's *Image du Monde* (1246)⁵ in Gervase of Tilbury's *Otia imperialia*,⁶ in the popular encyclopaedia by Bartholomew the Englishman,

abound with reports of auguries from miraculous births. Julius Obsequens, an author probably of the 4th century A.D., collected from Livy the material for his *Liber prodigiorum*, which contains the Roman prodigies from 190-12 B.C. listed together with the events which they foreshadowed. About Obsequens' rediscovery in the 16th century cf. below, p. 186, note 7.

¹ Based on Cicero, *De nat. deorum* II, 3, 7.

² H. Wuttke, *Die Kosmographie des Istrier Aithikos*, Leipzig 1853. Cf. Bunbury, *op. cit.*, II, p. 705; Beazley, *Dawn, op. cit.*, I, p. 355 ff.; Lynn Thorndike, *A History of Magic and experim. Science*, London 1923, I, p. 600 ff. About Aithikus' influence on cartography cf. Miller, *Mappae Mundi*, IV, 1896, p. 47.

³ Migne, *PL.* CXI, c. 195, Lib. 7, 7. Isidore's text was, however, supplemented by a short paragraph at the end in which the Prophets are quoted to show that portents fortell "aliquid de futuris."

⁴ Migne, *PL.* 172, Lib. 1, 8: Paradisus;

chap. 11: De India; chap. 12: De Monstris; chap. 13: De Bestiis. Written c. 1100. The geographical parts depend largely on Isidore, the marvels of India on Solinus. Sources and influence of the *Imago Mundi* discussed by Doberentz, "Die Erd- und Völkerkunde in der Weltchronik des Rudolf von Hohen-Ems," *Zeitschr. f. deutsche Philologie* XII, 1880, p. 298 ff.

⁵ In verse, chiefly dependent on the *Imago Mundi*. This work was very popular and amongst other translations is an English one by William Caxton, *The Mirrouer of the Worlde*, published in 1481. Cf. Sarton, *Introduction to the History of Science*, 1931, II, p. 591. About the influence of the *Image du Monde* cf. Charles-Victor Langlois, *La vie en France au moyen-âge*, Paris 1927, III, p. 151 ff. For Italian versions of the *Imago Mundi* and the *Image du Monde* cf. F. L. Pullé, "La cartografia antica dell' India," *Studi Italiani di filol. Indo-Iranica* V, 1905, Appendix I.

⁶ Written c. 1211 for Emperor Otto IV.

written between 1220 and 1240,¹ in the widely read *Trésor* of the Florentine Brunetti Latini from the 1260's,² as well as in Vincent of Beauvais' standard encyclopaedia of the later Middle Ages.³ The "Mirabilia Indiae" still form a chapter of Pierre d'Ailly's *Ymago Mundi* of 1410.⁴ We find them also in historiography. Adam of Bremen included in his history of the diocese of Hamburg down to the year 1072 a cosmography of northern Europe and transplanted the fabulous races to these parts of the world.⁵ We find them in the world chronicles from Rudolf of Ems in the 13th⁶ to Hartman Schedel in the 15th century,⁷ and in the natural histories from the credulous Thomas of Cantimpré⁸ to Conrad of Megenberg's *Book of Nature*.⁹ Even scholars

The third part of this encyclopaedia, which includes the marvels, is largely borrowed from the letter of Fermes to Hadrian (see below, p. 172). The two texts printed side by side by James, *Marvels*, *op. cit.*, p. 41 ff.

¹ *De proprietatibus rerum*. A full list of the marvels in the 18th book on animals. Pliny, Solinus and Isidore seem to be the main sources, but for the martikhora (18, 69) Aristotle is cited. Apart from the great number of Latin printed editions between 1470 and 1601, Bartholomew's encyclopaedia appeared in French, English, Spanish and Dutch translations in the 15th and 16th centuries. Cf. Lynn Thorndike, *History of Magic*, *op. cit.*, II, p. 401 ff. Robert Steele, *Medieval Lore*, London 1893 (excerpts from Bartholomew with notes).

² Written in French during his exile. The popularity of this encyclopaedia is shown by the fact that apart from the great number of MSS three Italian editions appeared between 1474 and 1533. The marvels form part of the sections on geography and natural science, book I, 4 and 5. Brunetti's main source is Solinus. Cf. Thor Sundby, *Della vita e delle opere di Brunetti Latini* (translation by Rodolfo Renier), Florence 1884, p. 99 ff.

³ Written about 1250. The monsters are treated in great detail in the *Speculum Naturale*, Lib. 31, cap. 118-127 (ed. 1624, vol. I, c. 2387 ff.), mainly based on Solinus and Isidore. The *Speculum Historiale* contains a short and a long passage about the marvels (vol. IV, c. 24 and c. 131): (a) after the dissemination of the human race, Lib. I, cap. 64: "De India et eius mirabilibus," and (b) amongst the exploits of Alexander the Great, Lib. 4, cap. 53-60: "De mirabilibus quae vidit Alexander in India," copied chiefly from the *Epistola Alexandri* (cf. below, p. 179).

⁴ Ed. E. Buron, Paris 1930, p. 264 ff. "De

Mirabilibus Indie." The sources are Pliny and Solinus.

⁵ *Gesta hammaburgensis ecclesiae pontificum*, MG. SS. VII, p. 373 (IV, 12) Hyperboreans in Denmark and Sweden, p. 375 (IV, 15) Amazons, cynocephali, anthropophagi and others after Solinus, also p. 379 (IV, 25) and passim. Cf. Beazley, *op. cit.*, II, pp. 514-48; Manitius, *Gesch. d. lat. Lit. d. Mittelalt.*, II, 1923, p. 398 ff.

⁶ Written 1250-54, based on Honorius Augustodiniensis' *Imago Mundi*; cf. Doberentz, *op. cit.* (above, p. 169, note 4). G. Ehrismann, *Rudolfs von Ems Weltchronik* (Deutsche Texte des Mittelalters XX), 1915, mainly vv. 1417-1848.

⁷ Cf. below, p. 182 f.

⁸ *De natura rerum*, written between 1228 and 1244. The third part contains the marvels, published by Alfons Hilka, *Liber de monstruosis hominibus Orientis*, (Festschr. z. Jahrhundertfeier d. Univ. Breslau. Herausgeg. vom Schles. Philologenverein) Breslau 1911, pp. 153-165. Cf. also F. Pfister in *Berliner philolog. Wochenschrift*, Sept. 7, 1912, c. 1129 ff. who gives a valuable summary of the literary transmission of the monster stories. Cantimpré is largely dependent on Jacques de Vitry (cf. below, p. 180).

⁹ Megenberg's *Buch der Natur*, written c. 1350, is a free translation after Cantimpré's *De natura rerum* (a translation into Flemish had already been made in the second half of the 13th century by Jacob van Maerlant). A great number of MSS of Megenberg's work are preserved and it was printed seven times in the 15th century alone. Cf. Helmut Ibach, *Leben und Schriften des Konrad von Megenberg* (Neue Deutsche Forschungen, Abtlg. Mittelalt. Geschichte, vol. 7), Berlin 1938, p. 58 ff.

of the calibre of Albertus Magnus¹ and Roger Bacon² fell under their spell.

4. *The Pictorial Tradition*

The literary transmission from Ktesias and Megasthenes through Pliny and Solinus to Isidore and down to Vincent of Beauvais and the encyclopaedists of the later Middle Ages was not the only way in which the western world came into contact with the Marvels of the East. We know that pictures of the fabulous races existed in antiquity. St. Augustine mentions a mosaic in the harbour esplanade of Carthage with elaborate representations of monstrous peoples.³ This pictorial tradition can be retraced though many of its mile-stones seem to be lost.

The first links in this reconstruction are the works of late classical authors themselves. We have good reason to believe that an early illustrated Solinus existed, and it is also not unlikely that Martianus Capella manuscripts were illuminated at an early date though no fully illustrated manuscript has so far come to light.⁴ But the Italian miniatures of a Solinus of the 13th century⁵ in many ways point back to an archetype of the 6th-7th century A.D. (Pls. 42a, 48a). The greater number of the illustrations appear to be copies after a 9th century Solinus which must have had qualities similar to those of the Vatican Cosmas Indicopleustes. This is borne out by the spaceless arrangement and the loose assemblage of figures and groups, by the insertion of the numerous explanatory inscriptions, as well as by the frames, on the lower edges of which figures and animals are standing. Also the modelling of the figures, their 'top-heaviness,' their meagre legs and their characteristic profiles

¹ *De animalibus libri XXVI* (ed. H. Stadler, Münster 1916-20). Written in the 1250's. Although Albertus Magnus was extremely critical he accepted for instance the martikhora (Lib. 22, 120). He tells the story of the gold-digging ants, but concludes on a critical note: "sed hoc not satis est probatum per experimentum" (Lib. 26, 21). The main source for books 22-26 was Thomas of Cantimpré.

² Bacon, in the geographical section of his *Opus Majus* (1267) selected with great discrimination from his main sources, Pliny, Isidore and Aethicus. But there still appear the Hyperboreans, the Indian people who live a hundred years and the Amazons. He also accepted other geographical myths: the sources of the Nile in Paradise (cf. below p. 181), the kingdom of Prester John (cf. below, p. 181) and some of Alexander's exploits (cf. below, p. 179). Cf. ed. by J. H. Bridges, Oxford 1897, I, pp. 291, 304, 308, 310, 319, 354, 361, 364, 368.

³ *De Civ. Dei* XVI, 8: "Hominum vel quasi

hominum genera, quae in maritima platea Carthaginis musivo picta sunt, ex libris depromta velut curiosioris historiae." Pliny VII, 3, 34, recorded that "Pompey the Great among the decorations of his theatre placed images of celebrated marvels . . . by eminent artists."

⁴ An illustration of Minerva in the 10th century Vienna MS. cod. 177 is of purely mediaeval invention (cf. Saxl, *Verz. astrol. und mythol. ill. Handschr. des latein. Mittelalters*, II, Heidelberg 1927, p. 79, fig 3), just as the miniature from Remigius' commentary to Martianus Capella (9th century) from c. 1100 in Munich, cod. lat. 14271 (cf. Panofsky and Saxl in *Metropolitan Museum Studies* IV, 1933, p. 260, fig. 39). But R. Uhden, "Die Weltkarte des Martianus Capella," *Mnemosyne* III, 3, 1936, p. 98 ff. was able to show that the map in the *Liber Floridus* in Wolfenbüttel (12th century) reproduces the original world map by Martianus Capella.

⁵ Milan, Ambrosiana, cod. C. 246 inf. The discovery of this MS. is due to F. Saxl.

disclose a prototype with the stylistic peculiarities of the Cosmas illustrations. Now it has been shown that the latter are the 9th century transformation into framed pictures of 6th century strip compositions, made in Alexandria.¹ It is perhaps therefore not too daring to suggest a corresponding genesis for the Solinus illustrations. Moreover, there are indications that the original Solinus contained late Egyptian features. Folio 37^r of the Milan manuscript shows a scene in which a seated ape ("Scimia") is confronted by a standing satyr ("Saturis") (Pl. 48a).² A similar grouping of two figures is well known to us from innumerable Egyptian examples, the satyr seems to be dependent on the jackal-headed Anubis, and the staccato movement and gestures of the figures still betray something of the Egyptian prototype.³

A second class of illustrations has survived in manuscripts which deal exclusively with the Marvels of the East. The earliest text of these treatises seems to go back to the 4th century A.D. and is probably a Latin version from the Greek. It is written in the form of a letter from a certain Fermes addressed to the Emperor Hadrian, and pretends to be the report of a journey to the remote East.⁴ Three other similar treatises, variants of the first one with modifications mainly taken from Isidore, originated between the 7th and the 10th centuries.⁵ Through the interest in geography fostered by Alfred the Great's Anglo-Saxon version of Orosius these texts seem to have attracted a lay public in England and were therefore translated into the vernacular.⁶ The best illustrations have come to light in the Tiberius B V of the British Museum of about 1000 A.D.⁷ The pictures of this manuscript have simple rectangular frames and the types and structures of the bodies have a decidedly classical quality. Moreover, they sometimes represent a genuine classical

¹ Kurt Weitzmann, *Die Byzantinische Buchmalerei des 9. und 10. Jahrhunderts*, Berlin 1935, p. 4 f.

² Cf. below, p. 191 about the survival of this group in later monuments.

³ Another group in the same manuscript (f. 34^r) shows the fight of dragon and elephant, which is also a feature of the Physiologus-Bestiary tradition. One pair of dragons appears with necks twisted round each other, a motive familiar from Sumerian seals (cf. Delaport, *Cat. des cylindres orientaux du Mus. du Louvre*, Paris 1920, Pl. 64, 9). This motive may have been introduced with the Arab transmission of oriental prototypes—as is the case in the mosaic pavement in Reggio Emilia and other 11th and 12th century monuments—and may therefore belong to the later additions to the original Solinus. However, it is not unlikely that such eastern elements formed part of the original manuscript.

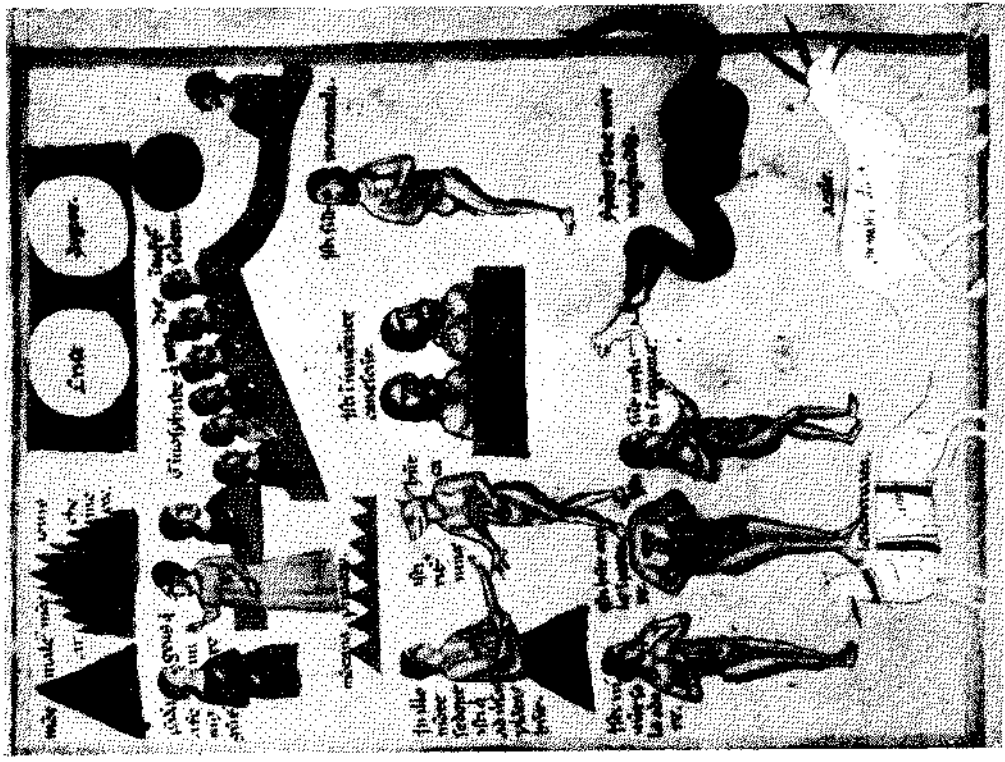
⁴ The text printed by H. Omont, "Lettre à l'Empereur Adrian sur les merveilles de l'Asie," *Bibl. de l'Ecole des Chartes* LXXIV, 1913, p. 507 ff. after a MS. of the 9th century

(Paris, B. N. Nouv. acq. lat. 1065, f. 92^v-95). Cf. also E. Faral in *Romania* XLIII, 1914, p. 367 ff.

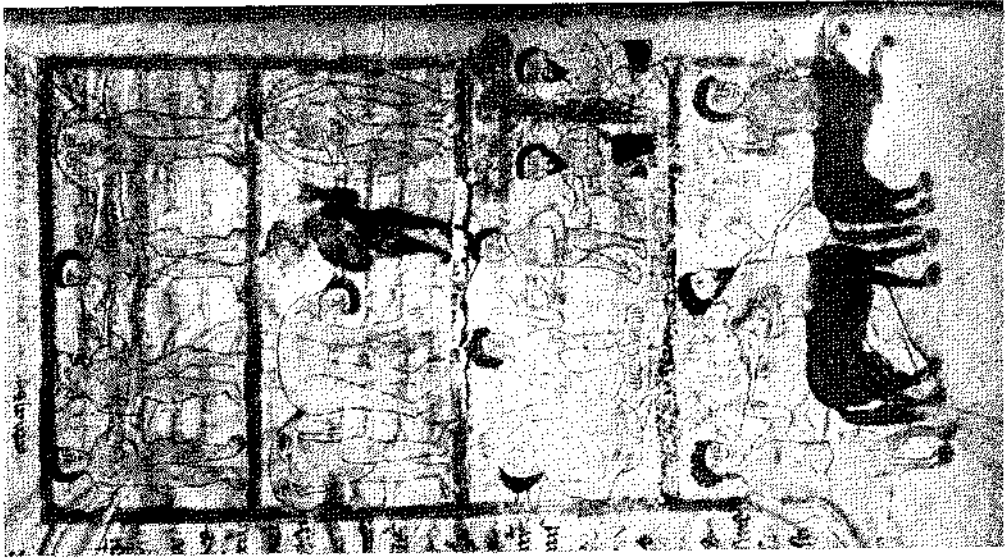
⁵ The earliest of the tracts, "Marvels," was published by James, *Marvels*, *op. cit.*, p. 15 ff., together with the text of the second tract (p. 37 ff.) the "Epistola Premonis regis ad Traianum Imperatorem" which is a shortened replica of the same archetype as the "Marvels." The last tract, "De Monstris et bellvis," was edited by Moritz Haupt, *Opuscula*, 1876, II, p. 221 ff. The relationship of these tracts to each other has been discussed by James, pp. 9 ff., 33 ff.

⁶ The text of the "Marvels" in Brit. Mus. MS. Tiberius B V is in Latin and Anglo-Saxon, Vitellius A XV only in Anglo-Saxon.

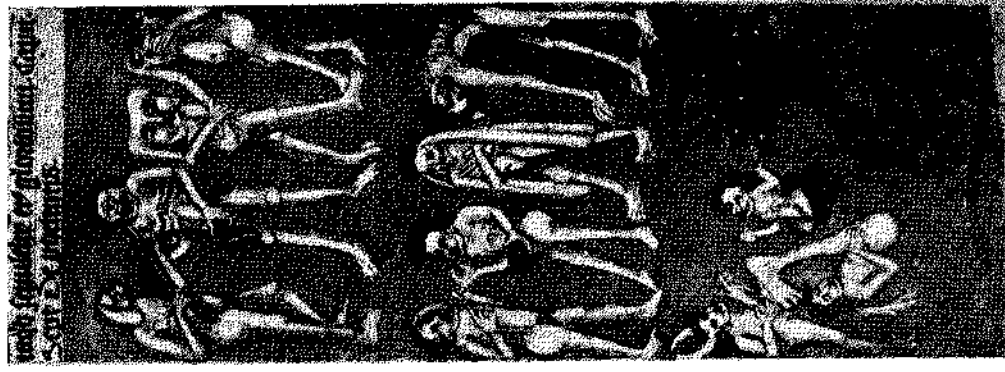
⁷ James, *op. cit.*, illustrates the pictures of three MSS: (1) Brit. Mus. Vitellius A XV. About 1000, (2) Tiberius B V; between 991 and 1016, (3) Oxford, Bodl. 614. Early 12th century. Although all three texts are identical, the illustrations follow two different pictorial traditions. The pictures of 3 appear to be copied from 2 or to go back to the same archetype; 2 is much superior in quality.



a—Solinus MS. Italian, 13th Century. Milan, Ambrosiana, cod. C. 246 inf., f. 57^r (p. 171)



b—Hrabanus Maurus. Italian, c. 1023. Montecassino, cod. 132, f. 166 (pp. 173, 185)



c—Hrabanus Maurus. German, 1425. Rome, Bibl. Vat., Pal. lat. 291, f. 75^v (p. 174)



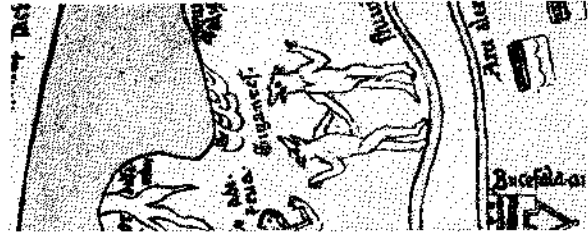
a—"Marvels," English, c. 1000. British Museum, Tiberius B V, f. 83v (p. 173)



b—"Marvels," English, c. 1000. Brit. Mus., Vitellius A XV, f. 104f (p. 173)



c—People with large Ears. Vézelay, Tympanum of Main Entrance to Abbey, 12th cent. (p. 173)



d—"Gigantes" from Hereford Map, 13th cent. (p. 175)



e—Kazwini MS. 1280. Munich, cod. arab. 464, f. 211v (p. 175)



f—Cynocephali. Vézelay, Tympanum (p. 175)

creature where the text describes an 'Eastern' non-classical monster. So an ancient centaur (f. 82v) illustrates the words "men down to the middle, then wild asses, with birdlike legs."¹ While this is a valuable hint as to the derivation of the pictures from an antique model, more definite conclusions can be drawn from another inaccuracy. The specimen of the race with long ears (fol. 83v, Pl. 43a) has his snakelike ears wound round his arms, but the text says that these people "have ears like winnowing fans; at night they lie on one and cover themselves with the other."² It is obvious that the picture is derived from a different source from the text.

The illustration in the British Museum manuscript Vitellius A XV (fol. 104r, Pl. 43b) shows this man, as one expects to find him, with fan-like ears. And this type is to be found again in the realm of monumental art in the famous 12th century tympanum at Vézelay. Here three representatives of this race appear, father, mother and child, the last demonstrating ingeniously how, in accordance with the text, the ears may be arranged for sleeping (Pl. 43c).

These two different pictorial types have their origin in different translations by Greek authors from the Sanskrit. Skylax, writing in the 6th century, B.C., called this race *ὠτόλινοι*, i. e. people with ears as large as a winnowing fan,³ and added that they sleep in their ears, while Ktesias said that their ears cover the arms as far as the elbows.⁴ The picture of the Tiberius B V coincides with the description given by Ktesias, and the text with that of Skylax; as the Latin authors are in this case general and vague,⁵ it must be assumed that a pictorial formula based on Ktesias' text had been evolved in Greece.

Still another pictorial type of this race exists in the 11th century Hrabanus Maurus in Montecassino (Pl. 42b).⁶ The ears of this specimen hang down to the ground like huge palm leaves. Although this picture could be an *ad hoc* interpretation of Hrabanus' own words,⁷ it corresponds exactly to the text of Megasthenes⁸ and may reflect a much older type. There is general agreement

¹ "Homodubii qui usque ad umbilicum hominis speciem habent, reliquo corpore onagro similes, cruribus ut aves. . ."

² "Aures habentes tanquam vannum. quarum unam sibi nocte substernunt, de alia vero se cooperiunt, et tegunt se his auribus."

³ Cf. above, p. 160, note 6.

⁴ Cf. above, p. 160. Ktesias has no name for this race.

⁵ Solinus 19, 8 (Mommsen, p. 93): The Phanesii live in Scythia "quorum aures adeo in effusam magnitudinem dilatentur, ut reliqua viscerum illis contegant nec amiculum aliud sit quam ut membris membra vestiant." —Isidore 11, 3, 19: "Panotios apud Scythiam esse ferunt, tam diffusa magnitudinem aurium, ut omne corpus contegant." The first half of this sentence depends on Solinus, the second on Pliny VII, ii, 30.

⁶ Cod. 132, fol. 166. The MS. was executed c. 1023 in Montecassino. Cf. Amelli, *Miniature*

sacre e profane dell'anno 1023 illustranti l'Enciclopedia medioevale di Rabano Mauro, Montecassino 1896.

The 15 races shown here do not follow exactly the sequence of the text. They are from left to right: Androgyni (dextram mamillam virilem, sinistram muliebrem habentes), cynocephali, cyclopes, Lemniae in Lybia (oculos in pectore), alios oculos habentes in humeris, Artabaticae in Aethiopia (proni, ut pectora, ambulare dicuntur), satyri, Panotii (see last note), Sciopodes, Antipodes, Hippodes, Pygmies (two representatives), centaur, onocentaur, hippocentaur.

⁷ Corresponding to Isidore's text quoted in note 5 on this page.

⁸ In Strabo XV, i, 57, who says that these people have ears reaching down to their feet. He calls the race *ἐνωτοκοῖται*, i.e. those who sleep in their ears.

that the Hrabanus in Montecassino is an Italian copy after an early illustrated Hrabanus of the 9th century and the dependence of the illustrations on classical models has been stressed.¹ Moreover, Panofsky and Saxl have shown that not only the text but probably also the illustrations of Hrabanus were copied from Isidore,² that, in other words, the late antique illustrated Isidore is still traceable in the Montecassino manuscript. A measure of what the stylistic change from the early to the 11th century manuscript involves may be given by the comparison of the Montecassinensis with the 15th century Hrabanus in the Vatican (Pl. 42c).³ But on the other hand this comparison also gives evidence of the stability of the old types.

A further, and perhaps the most important, class of works which shows marvels going back to classical prototypes consists of the maps of the world. On these the representation of marvels is a constant feature. The Hereford map of the last quarter of the 13th century is perhaps the most outstanding example. Here we find pictures of the fabulous races and animals distributed all over the globe.⁴ India and Ethiopia have the main share. In India live the sciapodes, the pygmies and giants, the mouthless people, the martikhora and the unicorn. North of India, in Scythia and bordering countries and islands, there are horse-hoofed men, people with long ears, Anthropophagi and Hyperboreans and also the Arimaspians who fight with the griffins. Ethiopia is inhabited by satyrs and fauns, by people with long lips and people with their head in their shoulders and breasts, by basilisks and gold-digging ants, etc.⁵ The accompanying texts are largely based on Solinus.⁶ Some of the figures are similar to those of the Solinus manuscript,⁷ others to the Hrabanus illustrations.⁸ But it is not likely that the Hereford monsters depend on either of them; they have probably another pedigree.

It seems that by far the greatest number of mediaeval maps depend directly or indirectly on the famous *mappa mundi* which Agrippa, the friend of Augustus, had had designed and which was painted on a wall of the

¹ Cf. Adolph Goldschmidt, "Frühmittelalterliche illustrierte Enzyklopädien," *Vorträge der Bibl. Warburg 1923-24*, p. 217 f.

² Panofsky and Saxl, *Dürer's "Melencolia I"* (Studien der Bibl. Warburg II), 1923, p. 125 ff. Saxl, in a still unpublished paper, has gone more fully into this problem.

³ Pat. lat. 291, f. 75^v. German, 1425. Cf. Paul Lehmann, "Fuldaer Studien," *Sitzungsber. Bayer. Akad. Philos.-philol. u. hist. Kl.* 1927, 2. Apart from the more naturalistic conception of the figures, the strip composition has been given up, the order of monsters has been slightly rearranged and the choice of races has somewhat changed. We see now: Cynocephali, cyclopes, Lemniae, oculis in humeris, alii labro subteriore prominente, alii concreta ora esse modico tantum foramine, calamis avenarum haurientes pastus, Panotii, Artabaticae, satyri, sciopodes, probably pygmies showing one instead of 7 in a hole (sub uno

caule), hydra.

About other illustrated Hrabanus MSS cf. Lehmann in *Zentralblatt f. Bibliothekswesen* LV, 1938, pp. 173-181.

⁴ Cf. Konrad Miller, *Mappae Mundi. IV. Die Herefordkarte*, Stuttgart 1896. W. L. Bevan and H. W. Phillott, *Mediaeval Geography. An Essay in illustration of the Hereford Mappa Mundi*, London 1873, is still very useful.

⁵ The two other main examples with a full display of these marvels are the large Ebstorf map from 1284 (cf. Miller, *op. cit.*, V, 1896) and the 13th century Psalter map of the Brit. Mus. (Add. 28681; Miller III, 1895, p. 37 ff.).

⁶ A full analysis of the sources in Miller, IV, p. 47 ff. Next to Solinus, Isidore and Aethicus have been used.

⁷ For instance the dragons with twisted necks, cf. above, p. 172, n. 3.

⁸ For instance the sciapod.

portico of Vipsania in Rome.¹ But whether this map did or did not show all the main features familiar to us from mediaeval cartography—namely the eastern orientation, painted symbols for towns, harbours, deserts, etc., long written commentaries, and the pictures of fabulous races and monsters—it could only have been a link between Greece and the Middle Ages. One example may make this evident. In the Hereford map there appear under the inscription “Gigantes” two dog-headed men facing each other in a symmetrical group (Pl. 43d);² it is clear that instead of talking they are barking at each other. Now the fabulous races form part of Arabic illuminated manuscripts also. Manuscripts of Kazwini’s cosmography, the Arabic Pliny of the 13th century, exist in which some of the representations of these races show an astonishing similarity to the western types, as can be seen from the cynocephali group of the famous Kazwini in Munich (Pl. 43e).³ According to the sources the cynocephali have no articulate speech and express themselves by barking.⁴ The grouping together of two of them is a typical pictorial creation to bear out this idea, and it cannot be doubted that the same prototype lies behind the Kazwini and the Hereford pictures. This prototype must ultimately have been Greek⁵; it spread on the one hand through Byzantium to the East, and possibly through illustrations on Roman maps to the West.⁶ A very similar cynocephali group is to be found again in the tympanum at Vézelay (Pl. 43f). The monsters are here arranged with less rigid symmetry, but they still reveal the same source of inspiration as the Hereford and Kazwini groups.

From all this material the conclusion can be drawn that there must have

¹ Miller, *op. cit.*, VI, 1893, pp. 108 and 143 ff. reconstructed this map with all the paraphernalia of the large mediaeval maps. Detlefsen, *Ursprung, Einrichtung und Bedeutung der Erdkarte Agrippas* (Sieglin, Quellen u. Forschungen XIII) 1906, pp. 113-17. refuted any influence of Agrippa on mediaeval cartography. But modern investigations have shown that Miller was probably nearer the truth. Cf. R. Uhden, “Zur Herkunft und Systematik der mittelalterlichen Weltkarten,” *Geographische Zeitschr.* XXXVII, 1931, pp. 321-40. A detailed analysis of the pictures would, it seems, strengthen Uhden’s case.

² There was a tradition which identified the cynocephali with the giants. Cf. Klinger (above, p. 163, note 4) p. 119 ff. Cristophorus, the giant, was said to be a cynocephalus, “Sanctus de Cynocephalorum oriundus genere,” (*Acta Sanctorum*, July 25, p. 139), cf. also Ratramnus’ *Epistola de Cynocephalis* (*Patr. Lat.* CXXI, c. 1155); P. Saintyves, “Saint Christophe successeur d’Anubis, d’Hermès et d’Héraclès,” *Revue anthrop.* XLV, 1935, mainly p. 319 ff. In Isidore (XI, 3, 13-15) the description of the cynocephali follows immediately after the giants.

The cynocephali proper appear on the Hereford map in the north of Europe (cf. Miller, p. 18), also as a barking group but sitting. The northern tradition goes back to Aethicus c. 28, p. 15. Cf. the material collected by Wuttke, *Aethicos, op. cit.*, p. XIX ff.

³ Cod. Arab. 464, f. 211v. This is the earliest Kazwini MS. known to us, written in 1280; cf. Buchthal-Kurz-Ettinghausen in *Ars Islamica* VII, 1940, p. 162.

⁴ Cf. above, p. 160.

⁵ The group may have a still older pedigree, being perhaps derived from a Babylonian ‘antithetical’ model. Saxl in *Islam* III, 1912, p. 151 ff. could retrace the representations of planets in Kazwini’s cosmography to Babylonian sources.

⁶ It is, of course, not impossible that the type reached the West through Byzantine MSS, but none of the western MSS show the cynocephali as a group. Cf. Tikkanen, *Die Psalterillustr. im Mittelalter*, p. 56; Strzygowski, *Der Bilderkreis des griech. Physiologus*, p. 85; Dalton, *Byzant. Art and Archeology*, 1911, p. 161.

been a large stock of classical marvel illustrations.¹ They reached the Middle Ages through different channels: the maps of the world, the monster treatises, the illustrated Solinus and probably the illustrated Isidore. It is this visual material which, together with the literary transmission, impressed itself on the minds of the people and proved so influential in many branches of mediaeval thought.

5. *The Fabulous Races Moralized. Their Part in Mediaeval Art and Literature*

From about the 12th century onwards the marvels penetrated into the field of religious art. The fabulous races were the products of God's will who "is righteous in all his ways and holy in all his works."² It was, therefore, part of the mission of the apostles to bring them the Gospels. This idea is expressed in the tympanum at Vézelay, which represents Christ's summons to the apostles on Ascension Day: "Go ye therefore, and teach all nations, baptizing them in the name of the Father, and of the Son, and of the Holy Ghost" (Matt. xxviii, 9).³ Rays go out from the fingers of the Christ in glory to the foreheads of the apostles, and in reliefs below and round the half-circle all the peoples to whom the apostles preached the Gospels are represented. Amongst them are the fabulous races from the borders of the world who, as descendants of Adam,⁴ are capable of redemption.⁵ Mâle has shown⁶ that representations of the apostles bringing the word of Christ to the pagan nations were a Byzantine conception which can be traced back to the times of Justinian. It may be added that the seated Christ of the Ascension in the tympanum is a Syrian type, that the cynocephali from Vézelay appear in the Kazwini manuscript, and that recently a 12th century Syrian miniature has been published⁷ which shows the conception of the tympanum in a peculiar contraction. A king and a cynocephalus stand here for the peoples to whom the Gospels were preached. It is not impossible, therefore, that the sculptor of Vézelay may have drawn for his composition on a manuscript from Asia Minor.

Though the elaborate programme of Vézelay is unique, the marvels were a favourite subject in Cluniac churches; we find specimens on the column in the Abbey of Souvigny, on capitals of the (destroyed) church of Saint-

¹ It may be noted, that the original of the Physiologus illustrations can now be dated back as far as the 2nd to 4th century A.D. (cf. Helen Woodruff, "The Physiologus of Bern," *The Art Bulletin* XII, 1930, p. 242).

² Psalm cxlv, 17, quoted by Hrabanus at the end of his chapter on "De Portentis."

³ Cf. Abel Fabre, "L'iconographie de la Pentecôte," *Gazette des Beaux-Arts*, 1923, ii, p. 39 ff. against E. Mâle, *L'Art religieux du XIIe siècle en France*, 1924 (2nd ed.), p. 326 ff.

⁴ The views of St. Augustine on this point were confirmed by writers of later times, cf. Ratramnus' letter (9th cent.) in *Patr. Lat.*

CXXI, c. 1153 ff.

⁵ According to apocryphal legends St. Thomas and St. Bartholomew preached in India and St. Matthew in Ethiopia. This was repeated by mediaeval authors in different ways. Gervase of Tilbury, to quote one instance (*Otia imp.* ed. Leibnitz, 1707-11, vol. I, p. 911), says that St. Bartholomew preached in "India superior," St. Thomas in "India inferior," and St. Matthew in "India meridiana."

⁶ *Op. cit.*, p. 328 f.

⁷ H. Buchthal in *Journal R. Asiatic Soc.*, 1939, p. 613 ff.

Sauveur at Nevers, in the western doorway of the Cathedral of Sens, in St.-Lazare at Autun, on a capital of St.-Parize-le-Châtel (Nièvre) (Pl. 46a), etc.¹ In England a rich collection of monstrosities, mostly carved on misericords, appears during the later Middle Ages.² And in Italy the fabulous races seem to have been often represented on mosaic pavements of the 11th and 12th centuries. The best example has survived in the Cathedral of Casale Monferato where they appear together with the seven-headed dragon of the Apocalypse and a representation of Jonah³; unfortunately also this pavement is too fragmentary to disclose its iconographical programme.

The interpretation of a number of monsters in ecclesiastical art is sometimes not easy, for it has to be established whether the mediaeval craftsman received his material through the geographical-ethnological tradition or from the Physiologus and its derivatives, the Bestiaries. However, from the 13th century onwards the marvels were incorporated into a group of Bestiaries and in this way the two branches—the encyclopaedic and the mystical—which had sprung from the same antique roots, were again united. In their new sphere the marvels were invested with an allegorical meaning and adapted to the Physiologus-Bestiary character. In a 13th century Bestiary in the Westminster Chapter Library,⁴ for instance, the pygmies stand for humility and the giant for pride, the cynocephali typify quarrelsome persons and the people who cover themselves with the lower lip are the mischievous, according to the word of the psalm: "Let the mischief of their own lips cover them" (Pl. 44c).⁵

It is not surprising that the idea of looking at the monsters as 'moral prodigies' was evolved in the later Middle Ages when the allegorical aspect and interpretation of the world, as conceived by M. Capella and other late antique authors, was extended into a comprehensive system. This is the time

¹ The whole material collected and analysed by Mâle, *op. cit.*, p. 323 ff.

² The relevant material has been collected by Francis Bond, *Wood Carvings in English Churches. I. Misericords*, 1910; M. D. Anderson, *Animal Carvings in British Churches*, Cambridge 1938; and by G. C. Druce in his fundamental study, "Some abnormal and composite human Forms in English Church Architecture," *The Archaeological Journal*, LXXII, 1915, pp. 135-186.

³ Aus'm Weerth, *Der Mosaikfussboden in St. Gereon zu Köln*, Bonn 1873, p. 20 f.; Venturi, *Storia dell'Arte It.* III, p. 420 ff.

⁴ MS. 22. The fabulous races on fols. 1^v and 3^r (Pl. 44c), cf. J. A. Robinson and M. R. James, *The MSS of Westminster Abbey*, Cambridge 1909, p. 77 ff. and Druce, *op. cit.*, p. 135 ff. and plates 1 and 2. M. R. James, *The Bestiary*, Oxford 1928, p. 22 ff. lists five Bestiaries with fabulous races: No. 10 (Sion Coll.), No. 36 (Fitzwilliam Mus. 254), No. 37 (Cambridge Univ. Libr. Kk. 4. 25), No. 38

(Westminster 22), No. 39 (Bodl. Douce 88), all dating from the 13th century.

Further bestiaries incorporated only the martikhora and the satyr (cf. below, p. 191), others the story of the gold-digging ants (cf. above, p. 162, note 5). See *Guillaume Le Clerc. Le Bestiaire*, ed. R. Reinsch, Leipzig 1890, p. 91 ff. and Druce, "An account of the Μυρμηγκόλεων or Ant-lion," in *The Antiquaries Journal* III, 1923, p. 354 ff.

⁵ Psalm cxl, 9. The page here illustrated shows the triple-headed giant, pygmy, sciapod and 4 Brahmins in a cave; cf. Druce's comment to these figures.

At the same time or even earlier other monsters were invested with allegorical significance. They are composite creatures of different animals, each part of which signifies that virtue or vice for which the special animal was renowned. Cf. an example in A. Katzenellenbogen, *Allegories of the Virtues and Vices in Mediaeval Art*, London 1939 (Studies of the Warburg Inst. 10), fig 61.

which saw moralizations of the Bible and of Ovid's *Metamorphoses*, of the gods of antiquity, of history and science. This is also the time in which preachers used for their sermons the stories of the *Gesta Romanorum*, that late mediaeval collection of moralized fables and tales which had an unrivalled success down to the 16th century. In such a collection the marvels could not of course be omitted. The 175th tale "De mirabilibus mundi" contains a full account of them. The people with the long lower lip appear here as symbols of justice, those with the long ears listen to the word of God, the cynocephali are the preachers who ought to be coarsely clad just like the dog-headed people, and the headless monsters are the symbol of humility, and so on.¹

It appears that, unlike the immutable Christian allegories of the Physiologus tradition, such late mediaeval moralizations are interchangeable and attach to the moral values of human society.² This was carried to the point of using the marvels as material for satirizing contemporary failings. In a French 14th century translation of Thomas of Cantimpré's *Liber de monstruosis hominibus*³ such a commentary was added to the original scientific text, and the cynocephali with their inarticulate barking are now the symbol of calumny, and the people without heads are the lawyers who take excessive fees in order to fill their bellies.

In view of the complexity of the material it is at present impossible to trace exactly the infiltration of the visual heritage of antiquity into the 13th, 14th and 15th centuries. The monsters of the Westminster Bestiary, for instance, are thoroughly 'modernized' specimens of the old stock, and a 15th century manuscript of Thomas of Cantimpré's *Liber de monstruosis hominibus*⁴ shows most of the fabulous races in Flemish bourgeois costume (Pl. 44a). Here also influences from outside the monster tradition seem to be traceable. The anthropophagus appears eating a naked human being. This is the traditional occupation of the god Saturnus who is shown in innumerable manuscripts—astrological and mythological—in a similar pose devouring one of his children.

The woodcut illustrations of the many early editions of Meigenberg's *Book of Nature* (Pl. 44b)⁵ show certain types, such as the sciapod with the webbed

¹ Cf. Hermann Oesterley, *Gesta Romanorum*, Berlin 1872, p. 574 ff. Oesterley cites in his introduction 138 manuscripts of the *Gesta*, but not all of them contain the chapter on the "mirabilia." 23 Latin editions were printed during the 15th century alone. The "*Gesta*" appeared in French, English (9 editions during the 16th and 17th centuries), German and Dutch translations. Cf. bibliography in Grässe, *Gesta Romanorum*, Leipzig 1905, II, p. 307 ff.

² The change from the mystical to the moral allegorization can be followed up in the Bestiaries themselves, cf. Goldstaub and Wendriner, *Ein Tosco-Venezianischer Bestiarius*, Halle 1892, pp. 4, 6 ff., 207 ff. and passim.

³ Publ. by A. Hilka, "Eine altfranzösische

moralische Bearbeitung des Liber de monstruosis hominibus orientis aus Thomas von Cantimpré, De natura rerum," *Abhandlungen d. Ges. d. Wiss. zu Göttingen* III, 7, 1933. MS. Paris, Bibl. Nat. fr. 15106, with miniatures which I was unable to consult.

⁴ Bruges cod. 411. The page shows representatives of the anthropophagi, cyclopes, sciapodes, of the people with their head in shoulders and breast, people who subsist on their sense of smell, people with six arms, amazons and women with long beards. The race with 6 arms, borrowed from the Romance of Alexander, obviously goes back to Indian models which had reached Europe.

⁵ Illustration to the 12th book combining fabulous people with marvellous fountains,

foot, the bearded woman and the monster with six arms, corresponding to those in the Bruges manuscript of the *Liber de monstruosis hominibus* (Pl. 44a). This indicates that just as Megenberg's text was a translation after Cantimpré, the illustrations too were taken from the same author. Moreover, the figures are naked and in their delightful *naïveté* far from the fashionable Bruges illustrator, and their arrangement reveals that an older strip composition has here been turned into a uniform picture—the same transformation which could be found from the Montecassinensis to the Vatican Hrabanus. It is therefore almost certain that these woodcuts preserve a good deal of the original 13th century Cantimpré illustrations.¹

One of the most important sources of inspiration during the Middle Ages was the "Romance of Alexander" which contains under the guise of the great king's adventurous campaigns many of the Indian fables. The original had been written in Greek;² in the early Middle Ages translations into every conceivable language followed, and in the middle of the 10th century it was recast by the archpresbyter Leo of Naples. It is this version, commonly called the *Historia de proeliis*, which was of the greatest importance for the future spreading of the Romance and on which most of the translations into the vernacular down to the 14th century depend.³ In addition the letter by Alexander to Aristotle on the Marvels of India⁴ had a wide circulation, which was current as a separate work by about 800 A.D., and which was used over and over again until it appeared in print in 1499 and several times throughout the 16th century.

A number of the Alexander manuscripts is adorned with a wealth of miniatures which show conspicuously all the fantastic creatures encountered

shown top right hand corner. This woodcut which appeared first in Bämmler's edition, Augsburg 1475, was either used or copied in the other editions of the 15th century, cf. Richard Muther, *Die deutsche Bücherillustration der Gothik und Frührenaissance*, München 1922, I, Nos. 43-45, 171, 269, 323. Two illustrated Megenberg MSS are in Heidelberg, Univ. Bibl. pal. germ. 300 (c. 1440-50) and pal. germ. 311 (c. 1450-60), cf. H. Wegener, *Beschr. Verz. der deutschen Bilderhandschr. d. späten Mittelalters* . . . Leipzig 1927, pp. 42 f., 48 f.

¹ It must, however, be mentioned that two other illustrated Cantimpré MSS show also isolated pictures like the Bruges MS., but in all three MSS the single types of monsters follow different traditions. Cf. MS. Breslau, Stadtbibl., cod. Rehdig 174, c. 1300; publ. by Hilka (cf. above, p. 170, n. 8) and MS. Prague, Metropolitan Libr., L. 11, f. 51^v-53^v, dated 1404, cf. Podlaha, *Topogr. d. hist. u. Kunst-Denkmale im Königr. Böhmen*, II, 2, Prague 1904, p. 212, figs. 236, 237.

² Dated by Adolf Ausfeld, *Der griechische*

Alexanderroman, Leipzig 1907, p. 237 ff., c. 200 B.C., but by W. Kroll, *Pseudo-Kallisthenes*, Berlin 1926, 3rd century A.D.

³ The original version of archpresbyter Leo's text published by F. Pfister, *Der Alexanderroman des Archipr. Leo* (Slg. mittellatein. Texte 6), Heidelberg 1913. Its history has been traced and the many poetical adaptations have been published in the fundamental work by Paul Meyer, *Alexandre le Grand dans la littérature française du moyen âge*, Paris 1886. For the tradition in England cf. Pfister, "Auf den Spuren Alexander's in der älteren englischen Literatur," *Germanisch-Romanische Monatshefte XVI*, 1928, p. 81 ff. Cf. also *The Cambridge Bibliography of English Literature*, ed. F. W. Bateson, I, 1940, p. 142 ff. For the interrelation of the *Historia de proeliis* and the marvel treatises cf. James, *Marvels*, *op. cit.*, p. 35 ff.

⁴ *Epistola Alexandri ad Aristotelem*. Cf. Pfister, *Kleine Texte zum Alexanderroman* (Slg. vulgärlateinischer Texte 4), 1910. Cf. also Thordike, *op. cit.*, I, p. 555 ff.

by Alexander in Asia.¹ One example from a 13th century Italian manuscript of archipresbyter Leo's version may show that traditional formulas were used to visualize these adventures (Pl. 45a).² On the other hand here was a field for creative artists to show their mettle. The illustrator of a 13th century manuscript in Brussels³ let loose his imagination; he emphasized in the picture of Alexander's fight against the one-eyed race (Pl. 45b) the grotesque side of the horrifying encounter, and he seems to have had a sense for the fairytale character of his text. Alexander's exploits were also an inspiring monumental decoration of the palaces of princes. Philip the Good of Burgundy had them represented in two great tapestries (now Palazzo Doria, Rome);⁴ on one of them there appear Alexander's flight to the sky, his journey to the bottom of the sea, and the fight of his knights against the awe-inspiring headless monsters (Pl. 45c).

Just as the maps of the world were considered a true image of the world, so for the Middle Ages the Romance of Alexander was real history. It was attributed amongst other classical authors to Callisthenes, one of the historians who had taken part in Alexander's campaigns, and was generally accepted as the most important source of information about India and the East. Historians did not hesitate to embody information drawn from the Romance into their works. Frutolf of Michelsberg inserted the *Historia de proeliis* and the *Epistola ad Aristotelem* into his world chronicle, written shortly after 1100, and it was probably through him that they became known to the great Otto of Freising.⁵ Even writers of contemporary history reverted to the marvels as indispensable sources for the enrichment of their narratives. When Foulcher de Chartres wrote his history of the Crusades in the early 12th century, he drew on Pliny and Solinus for the description of wild men, griffins, dragons and the martikhora, and adduced Alexander's Indian adventures as historical material.⁶ The most conspicuous case, however, is Jacques de Vitry who worked into his history of the Holy Land (written between 1219 and 1226) an abundant collection of marvels taken from different sources, amongst which the Alexander romance plays a prominent part.⁷

¹ Cf. e.g. the MSS of *Le Roman de toute chevalerie* by Eustace or Thomas of Kent (mid 13th century), Meyer, *op. cit.*, II, p. 275 ff. A number of illustrated Alexander MSS of the 14th and 15th centuries discussed by Druce, *Arch. Journal*, 1915 (*op. cit.*), p. 137 f. Cf. also Bodley 264, publ. by M. R. James, 1933.

² Leipzig, Universitätsbibl. cod. CCCCXVII. Rep II. 4^o. 143, f 103^v. Cf. R. Bruck, *Die Malereien in den Handschriften des Königreichs Sachsen*, Dresden 1906, p. 176 ff.

³ Bibl. Royale cod. 11040, f. 73. Cf. E. Bacha, *Les très belles miniatures de la Bibl. r. de Belgique*, Paris 1913, Pl. 2 (another page of the same MS.).

⁴ Made in Tournai in 1459, cf. A. Warburg, *Gesammelte Schriften*, 1932, I, p. 247.

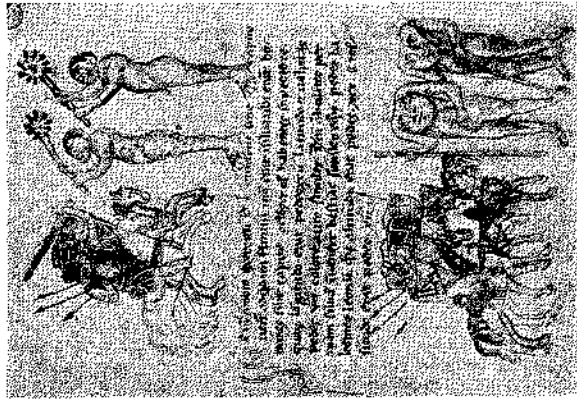
⁵ For Frutolf cf. M. Manitius, *Geschichte der*

lat. Lit. des Mittelalters III, München 1931, p. 351. *MG. SS.* 6, p. 70 ff., a long chapter: "De mirabilibus rebus, quas Alexander vidisse dicitur."

Otto of Freising, however, in his *Chronicon* (II, 25), written mid-12th century, was obviously sceptical; his reference is short: "... qui scire vult, legat epistolam Alexandri ad Aristotelem . . . in qua pericula eius quae passus est . . . et multa quae tam mirabilia sunt, ut etiam incredibilia videantur, diligens inquisitor rerum inveniet" (*MG. SS.* 20, p. 155).

⁶ *Fulcheri Carnotensis Historia Hierosolymitana* (1095-1127), ed. H. Hagenmeyer, Heidelberg 1913, pp. 780, 783 f., 815, etc.

⁷ *Historia orientalis seu Hierosolymitana*. The marvels mainly appear in the later parts of Book One. Vitry makes an interesting remark



a—Alexander Romance, 13th cent.
Leipzig, Universitätsbibl., cod. 143,
f. 103^v (p. 180)



b—Alexander Romance, 13th cent. Brussels, Bibl. Royale, cod. 11040,
f. 73^r (p. 180)



c—Alexander Romance. Detail of Tapestry. Tournai, 1459. Rome,
Palazzo Doria (p. 180)



d—*Livre des Merveilles*, late 14th cent. Paris, B.N., fr. 2810, f. 29^v
(pp. 185, 196)

But the impression made by the marvels did not stop here; they even had their share in the making of history. They played an important part in an historical mystification which excited the people of the 12th and 13th centuries and found an echo in Europe down to the 17th century. This is the story of the great Christian kingdom of Prester John in the remote East. The first mention of his realm occurs in Otto of Freising's chronicle about the middle of the 12th century. In 1164 the Byzantine emperor Manuel Comnenus received a letter from this imaginary ruler which was soon circulated throughout Europe and survives in many copies.¹ It contains a long description of the unequalled power and wealth of Prester John's empire. All the marvels appear prominently in the narrative which is a conglomeration of everything that was current about the East at the time. And it was just this fact which helped to convince people of the existence of that empire, for all their sources confirmed that the marvels existed in those distant parts of the world. The legend of Prester John became not only a stimulus to poets² but it was above all one of the strongest impulses for the exploration of Asia. Travellers set out to bring more news about Prester John, missions were sent to his court, and the peoples of Europe expected to find in this Christian ruler a mighty ally in their fight against the Saracens. In fact, every rumour of revolution in Asia was connected with him and he was even mistaken for Chinghiz Khan.³

The letter of Prester John pictures his realm as a sort of earthly Paradise, and this had a special appeal to men of the West, who had always connected India and the Paradise. According to all reports, India lay on the eastern borders of the world and this was also the position of Paradise, for it is said in Genesis (ii, 8): "And the Lord God planted a garden eastward in Eden." It is therefore habitual in mediaeval geography to show Paradise in the extreme East; and there it remained as part of the marvellous country India right into the 16th century.⁴

about his sources: "Tous les détails que je viens de rapporter, en interrompant un moment mon récit historique, je les ai empruntés soit aux écrivains orientaux et à la carte du monde, soit aux écrits des bienheureux Augustin et Isidore, et aux livres de Plin et de Solin." (Quoted from the translation by Guizot in *Coll. des mémoires relatifs à l'histoire de France*, 1825, vol. 22, p. 223). This shows that for Vitry the *mappae mundi* were sources for historical information. About Vitry's sources cf. also Doberentz in *Zeitschr. f. d. Phil.*, *op. cit.*, p. 426 ff. and Pfister in *Berliner philol. Wochenschr.*, Sept. 7, 1912, c. 1232.

¹ All the sources about Prester John were collected by F. Zarncke in *Abhandlg. der philol.-hist. Classe d. kgl. Sächsischen Ges. d. Wissenschaften* VII and VIII, 1876-79. Zarncke discussed 96 MSS with the letter of Prester John. Cf. also the references in Thorndike, *Hist. of Magic*, *op. cit.*, II, p. 236 ff. (Prester John and the Marvels of India).

² Cf. the material published by Zarncke,

op. cit., VII, pp. 947-1028, and by Langlois, *Vie en France*, *op. cit.*, III, pp. 44-70. I have to refrain from following up the story into that field, just as in the case of the Romance of Alexander. I must also omit the many references to the marvels in English literature of the 16th and 17th centuries. Much material for one side of this question can be found in P. Ansell Robin, *Animal Lore in Engl. Literature*, London, 1932.

³ Cf. Zarncke, *op. cit.*, VIII, p. 7 ff. An attempt of interpreting the letter by Prester John as a political utopia was made by L. Olschki, "Der Brief des Presbyters Johannes," *Historische Zeitschr.* 144, 1931, pp. 1-14, cf. also his *Storia letteraria delle scoperte geografiche*, 1937, p. 194 ff. Cf. also the contributions by Yule, *The Book of Ser Marco Polo*, London 1903, I, pp. 231-37, Wright, *Geographical Lore*, *op. cit.*, pp. 283-86, and Kimble, *Geography*, *op. cit.*, p. 128 ff.

⁴ Most complete collection of the material by Arturo Graf, *Miti, leggende e superstizioni del*

One of the most heated discussions of the Middle Ages was that about the existence of the Antipodes. St. Augustine¹ had rejected the idea and almost ridiculed the notion that there are men who walk with their feet opposite ours, i.e. on the other side of the globe, and from the 8th century onwards the belief in them was banned as heretical. How, it was argued, can the descendants of Noah's sons have reached that part of the world and how could Christ bring salvation to all mankind, if a portion of it was cut off from the rest?² But there was an inconsistency which seems to begin with Isidore. He refused to believe in the existence of the Antipodes in his survey of the peoples of the world,³ but mentioned them again as a race living in Libya in the chapter on monstrosities. By a masterstroke of mediaeval logic the Greek word *ἀντίποδες*, i.e. with the feet opposite, was applied to the people with feet turned backward whom the Greek authors had described in India.⁴ The race led its dual existence throughout the Middle Ages; it was located everywhere between Ceylon and Ethiopia and conceived in visual form (Pl. 47a)⁵ without the contradiction ever being so much as discussed.

6. Monsters as Portents. Humanist Historiography

Although during the 14th century men like Nicolas Oresme and Henry of Hesse mark the beginning of a strong opposition against occult sciences and credulity in monsters,⁶ the belief in the marvels only died very slowly. In fact, even the enlightenment brought about during the 15th century by the geographical expansion and the rediscovery of Ptolemy's geography⁷ did not lead to a noticeable break in the tradition. Quite apart from the popularity during the 15th and 16th centuries of such older works as Conrad of Megenberg's *Book of Nature*, Bartholomew the Englishmen's encyclopaedia or the *Gesta Romanorum*, modern authors appeared who professed their adherence to the old superstitions. Hartmann Schedel, in his *World Chronicle* (1493), followed the old Isidorian pattern of the ages of the world, and on the whole

medio evo, Turin 1892-3, I, pp. 1-238. "Il mito del Paradiso terrestre." Cf. also Pullé, *La cartografia antica dell'India*, *op. cit.*, II, p. 80 ff. A valuable résumé in Wright, *op. cit.*, pp. 71 f., 261 ff. Cf. also E. von Dobschütz, "Wo suchen die Menschen das Paradies?" *Mitt. d. Schlesischen Ges. f. Volkskunde* XIII-XIV, 1911-12, pp. 246-55, and S. Baring-Gould, *Curious Myths of the Middle Ages*, 1901, pp. 250-65: "The Terrestrial Paradise," with material also from the 17th-19th centuries. As late as 1842 Sir W. Ouseley read a paper before the Literary Society in London about the situation of Eden.

About other elements of mythical geography cf. Olschki, *Storia lett.*, *op. cit.*, pp. 142-63 with further references.

¹ *De civ. Dei* XVI, cap. 9.

² An exhaustive study of the whole question

by Giuseppe Boffito, "La leggenda degli antipodi," in *Miscellanea di studi critici ed. in onore di Arturo Graf*, Bergamo 1903, pp. 583-601. Cf. also Wright, *Geogr. Lore*, *op. cit.*, pp. 55 ff., 159 f., 385 f., 429.

³ *Etym.*, IX, 2: "Jam vero hi qui Antipodes dicuntur, eo quod contrarii esse vestigiis nostris putantur, ut quasi sub terris positi adversa pedibus nostris calcent vestigia, nulla ratione credendum est . . ." Cf. also XIV, 5.

⁴ Cf. above, p. 162, note 6. Isidore, *Etym.* XI, 3, 24: "Antipodes in Libya plantas versas habent post crura, et octenos digitos in plantis."

⁵ Bodl. 614, f. 50^r.

⁶ Cf. Thorndike, *op. cit.*, III, p. 457 and *passim*.

⁷ Ptolemy's geography was first translated into Latin by Jacobus Angelus, c. 1400-1406.

did not advance much beyond the *Speculum historiale* of Vincent of Beauvais. It is in keeping with this conservative spirit that the second *aetas* of the chronicle opens with a complete list of the fabulous races.¹ True to the Augustinian tradition they appear as the offspring of Noah; Schedel based his account about them on the ancient authors, above all Pliny but also Solinus, Augustine and Isidore,² and accompanied his text by 21 woodcuts most of which were taken from current models. The success of this work and of its innumerable illustrations was very great, and the influence of the chapter on monsters considerable; it can be found in works like Sebastian Franck's *Chronicle* of 1531³ and right into the second half of the 16th century.

The opinions of two outstanding cosmographers of the 16th century, the Frenchman André Thévet and the German Sebastian Münster, may show further how difficult it was to discard the legacy of classical authority. Thévet (1502-90) was "historiographe et cosmographe du roi" under Catherine de Medici and Charles IX. In 1571 and 1575 he published a *Cosmographie universelle*, in two voluminous folios, and in looking through them one readily accepts his assurance given in one of his books: "Je puis assurer que la plupart des bibliothèques, tant françaises qu'étrangères, ont été par moi visitées, à celle fin de pouvoir recouvrir toutes les rarités et singularités."⁴ In the introduction to the cosmography he mentions, characteristically enough, Solinus as his favourite model. Although his position and prolific pen made Thévet a figure of importance, he was in his own time and later attacked for ignorance and credulity.⁵ Yet he did not accept all the stories of marvels recorded by previous writers.⁶ His method is, however, all the more dangerous when he speaks as an eye-witness. One example of it may be given. "When I travelled on the Red Sea," he says, "some Indians arrived from the mainland . . . and they brought along a monster of the size and proportion of a tiger without a tail, but the face was that of a well formed man."⁷ This creature is, of course, illustrated in the text (Pl. 47f)—but is it a pure product of Thévet's imagination? Thévet saw probably an anthropoid ape, but for its description and illustration he used the old pattern of the martikhora which on its mythical journey has lost its tail.⁸ The martikhora from the Hereford map (Pl. 47d)

¹ *Liber Cronicarum*, Nürnberg 1493, f. 12^{r-v}. Second ed. Augsburg 1499. German ed. Nürnberg 1494, Augsburg 1496, 1500.

² He also quotes the Greek sources, but his knowledge of them probably came through Pliny. It may also be noted that Schedel made use of the cosmography by Aethicus which was known to him in a MS. of 754 A.D. Cf. Manitius, *Gesch. d. lat. Lit., op. cit.*, I, 1911, p. 233. But Schedel's immediate source was—as is well known—Filippo Foresti's *Supplementum Chronicarum*, Bergamo 1483 (and many later editions), on which also Giuliano Dati drew extensively in his very rare book on the marvels of India, *Il secondo Cantare dell'India*, Rome, 1494/5. In this work, however, the fabulous races, who appear in delightful

woodcuts, are used as a pretext of moral and devotional expositions. Cf. L. Olschki, "I 'Cantari dell'India' di Giuliano Dati," *Bibliofilia* XL, 1938, pp. 289-316.

³ *Chronika, Zeitbuch und Geschichtsbibel*, Strasbourg 1531. In the ed. of 1585, p. 23 f. His list of fabulous races follows Schedel closely, but he transferred the people with long ears from Scythia to Sicily!

⁴ In *Vie des hommes illustres*.

⁵ Cf. Moréri, *Le Grand Dictionnaire histor.*, 1759, X, p. 139.

⁶ Cf. vol. I, pp. 390, 442 f.

⁷ Vol. I, p. 52.

⁸ Ktesias described it with the tail of a scorpion, cf. above, pp. 160, 161, n. 1.

is proof enough to show that Thévet followed a pictorial tradition.¹ Also the reference to the tiger in Thévet's text is not accidental; he may have recollected the words of Pausanias: "The animal mentioned by Ktesias called by the Indians the martikhora, but by the Greeks ἀνδροποράγος is, I believe, the tiger."²

Sebastian Münster (1489-1552) from Ingelheim was one of the most widely read authors of the Renaissance.³ As professor in Basle this true polymath taught Hebrew, Theology, Geography, Astronomy and Mathematics. His copious *Cosmographia*, first published in German in 1544, contains a description of all countries and peoples, their laws and institutions. This work, which also appeared in Latin, French and Italian translations,⁴ was one of the standard encyclopaedias for the layman right through the 17th and even in the 18th century. Münster still accepted the story of the gold-guarding griffins and many other fabulous tales, but he is hesitant about the monstrous races. "The ancients have devised," he says, "many peculiar monsters which are supposed to exist in India. . . . However, there is nobody here (i.e. in the West) who has ever seen these marvels. But I will not interfere with the power of God, he is marvellous in his work and his wisdom is inexpressible."⁵ Yet by inserting illustrations of the fabulous races, which are partly dependent on Schedel, the visual appeal favours belief in what is left open to doubt in the text.⁶

Münster's text and the rather naïve woodcuts of his work enjoyed great popularity. His blocks were used by other authors and in other contexts. The picture with the fabulous races reappeared in 1554 in Johann Herold's *Heydenweldt*, which consists mainly of a translation of Diodorus Siculus into German. The woodcut (Pl. 46h) from Münster shows a grotesque assembly of the most conspicuous absurdities: to the left the sciapod, then the cyclops, the man with his head in his breast and the cynocephalus. The small creature

¹ Representations of the martikhora were common during the Middle Ages. As has been mentioned (p. 177, note 4) the martikhora is a feature of a group of bestiaries with text from Solinus; examples: Cambridge, Univ. Libr. II, 4, 26, f. 15^v (12th cent., ill. in James, *The Bestiary*, *op. cit.*) and Cambridge, Corpus Christi Coll. 53, f. 193^v (14th cent., ill. in James, *A Peterborough Psalter*, *op. cit.*). Early specimens of the martikhora on the column of Souvigny Abbey, ill. in Mâle, *op. cit.*, p. 324, and in the mosaic pavement of the Cathedral of Aosta, cf. Aus'm Weerth, *op. cit.*, p. 15 ff.

² *Boiôt.* IX, 21, 4. Pausanias thinks that the false reports were circulated "amongst the Indians owing to their excessive fear of the beast."

³ About Münster cf. F. Gundolf, *Anfänge deutscher Geschichtsschreibung*, Amsterdam 1938, pp. 53-65.

⁴ There appeared at least 46 different editions. François de Belleforest made Münster the foundation of his *Cosmographie universelle*, Paris 1552 ff. An English abstract was published by Richard Eden, *A briefe collection gathered oute of the cosmographie of S. Munster*, 1572 and 1574.

⁵ Ed. Basel 1545, p. 752 f.

⁶ Repetitions of pictures throughout the book illustrate different stories. After the fabulous races had appeared in India (p. 750 ff.) they were mentioned again and illustrated as possibly existing in Africa (p. 808 ff.). There were, of course, a number of other 16th century cosmographers who accepted the existence of monstrous races, e.g. Gemma Frisius, *De principis astronomiae et cosmographiae*, Basel 1530, pars III, cap. 26. "De India." Frisius was a follower of Copernicus. Cf. Thorndike, *op. cit.*, VI (1941) p. 275.



a—Capital, St.-Parize-le-Châtel, 1113 (?) (pp. 177, 185)



b—Beatus Apocalypse, 12th cent. Paris, B.N., Nouv. acqu. lat. 1366 (p. 185)



c—Sens, Cathedral, Grand Portal. 13th cent. (p. 185)



d—Detail from Hereford Map. 13th cent. (p. 185)



e—Mandeville, Augsburg 1482, f. e 10^v (p. 185)



f—Schedel, *Liber Cronicarum*, 1493 (pp. 185, 196)



g—Lycosthenes, 1557 (p. 185)



h—Herold, *Heydenwelt*, 1554 (p. 184)



i—Mennel, *Tractatus*, 1503. Vienna, Nat. Bibl. cod. 4417*, f. 9^v (p. 188)

in the centre is a fusion of the pygmy with a double-headed giant who is a regular feature in manuscripts of the marvels.¹

Herold lived at Basle like Sebastian Münster. A third member of this circle has a claim to be mentioned in this connection, namely Conrad Wolffhart, known under his Greek pseudonym Lycosthenes, who lectured in Basle from 1542 onwards on grammar and dialectics. His literary activity had a much wider range. In 1557 he published a large folio with the title *Prodigiorum ac ostentorum chronicon*, which appeared in the same year in a German translation by J. Herold, the author of the *Heydenweldt*. This book deals exclusively with marvels all over the earth in chronological order, it is a universal chronicle of monstrosities and wonders. Even more than in Münster's book identical woodcuts were used to illustrate marvellous events widely separate in time and space. The woodcuts were mainly based on the two works by Schedel and Münster. But these books themselves were no more than links in the old monster tradition. Lycosthenes' sciapod (Pl. 46g), for instance, was copied from that of Schedel (Pl. 46f). Schedel's sciapod in turn can be retraced step by step through 15th, 14th, 13th and 12th century monuments (Pls. 46a-e, 45d)² to the Hrabanus of Montecassino (Pl. 42b), and thus to its classical source.

Lycosthenes' work leads away from cosmologies and encyclopaedias and back into the world of magic. The subtitle to each book of the German edition runs: "About the unfathomable wonders of God, which he has created with a particular significance . . . since the beginning of the world in the form of peculiar creatures, monsters, phenomena in the sky, on the earth and in the sea as an admonition and a horror for mankind."³ While the Augustinian conception had made the monsters acceptable to the Middle Ages and monuments like the tympanum at Vézelay had given them their due share in the creation, while the later Middle Ages had seen in them similes of human qualities, now in the century of humanism the pagan fear of the monster as a foreboding of evil returns. We are faced with the curious paradox that the superstitious Middle Ages pleaded in a broadminded spirit for the monsters as belonging to God's inexplicable plan of the world, while the 'enlightened' period of humanism returned to Varro's "contra naturam" and regarded them as creations of God's wrath⁴ to foreshadow extraordinary events.

¹ The bicephali were mentioned by Isidore and often illustrated, e.g. in the Milan Solinus (f. 40^v) with the inscription cinocephali; cf. also the woodcut in Meigenberg's *Buch der Natur* (Pl. 44b).

² 15th century: Mandeville, Augsburg 1482, cf. below, p. 196—Mid-14th century: Livre des Merveilles, Paris B. N. cod. fr. 2810, cf. below, p. 196—13th century: Hereford map; Sens Cathedral, Grand Portal, as part of an encyclopaedic programme.—End 12th century: Map in Beatus Apocalypse, Paris, B. N. Nouv. acq. lat. 1366, cf. Neuss, *Die Apokalypse des hl. Johannes in der altspanischen und alchristlichen Bibel-Illustration*, 1931,

p. 49.—Probably 1113: St.-Parize-le-Châtel, capital. Cf. Kingsley Porter, *Romanesque Sculpture of the Pilgrimage Roads*, Boston 1923, p. 120, ill. 25.

³ "Von unergründlichenn wunderwercken Gottes, die er syd anbeginn der Welt in seltzamen geschöpffen, missgeburten, in erscheinungen an dem himmel, auff der erden, in den wassern den menschen zur anmahnung, schrecken, mit sonderm bedeutungen und nachgedencken fürgepracht." These subtitles do not appear in the Latin edition.

⁴ This idea was widely spread by popular pamphlets, cf. Hans Fehr, *Massenkunst im 16.*

Lycosthenes is an exponent of ideas which having long been in abeyance were revived in the circle of the German emperor Maximilian. Their effect was immediate and widespread, and they brought to the surface popular beliefs which had had no place in the official mediaeval conception of the world.

A. Warburg has brilliantly interpreted the awe of monsters in Maximilian's circle¹ resulting in the collections of prodigies by Joseph Grünpeck for Maximilian's secretary Blasio Hölzl (1502)² and by Jakob Mennel for the emperor himself (1503).³ Previously Sebastian Brant had dedicated to Maximilian his augury about the monstrous sow, born at Landser in 1496, which is so well known through Dürer's 'scientific' engraving. Such extraordinary births were now connected with extraordinary events in the sky, like eclipses of the sun and comets, and linked with the astrological belief in the power of the stars. Luther himself saw an omen of the death of the Elector Frederick the Wise in the appearance of a rainbow together with the birth of a child without a head and another with inverted feet.⁴ These superstitions remained alive in Protestant circles. Publications of portents like that by Jobus Fincelius⁵ were made up to foster antipapal tendencies, and the encyclopaedic collection of mirabilia by Johannes Wolf, first printed in 1600-1608 and re-edited in 1671,⁶ is the most comprehensive expression of this superstitious trend in Protestantism.

From the early 16th century onwards an ever increasing number of prophetic treatises based on monsters appeared in all European countries. Aldus Manutius, the Venetian publisher who more than any other man was responsible for the dissemination of the finest classical scholarship, also unearthed and published in 1508 the chronicle of prodigies by the 4th century writer Julius Obsequens which was later re-edited by Lycosthenes.⁷ Authors like Pierre Boaistuau⁸ and Marcus Frytschius⁹ and even physicians like Jacob

Jahrhundert. Flugblätter aus der Slg. Wickiana, Berlin, 1924, p. 14 ff.

¹ *Gesammelte Schriften*, II, p. 522 ff.

² *Prodigiorum ostentorum et monstrosorum quae in saeculum Maximilianum inciderunt quaeque aliis temporibus apparuerunt, interpretatio*. 1502. As MS. in the University Libr. at Innsbruck, cf. H. J. Hermann, *Die ill. Handschr. in Tirol*, 1905, No. 314.

³ Vienna, N. B. cod. 4417*: *Tractatus de Signis, Prodigis, & Portentis antiquis et Novis*.

⁴ Warburg, *op. cit.*, p. 522, note 2.

⁵ *Wunderzeichen. Warhafftige beschreibung und gründlich verzeichnus schrecklicher Wunderzeichen und Geschichten 1517-1556*, Jena 1556.

⁶ *Lectiones memorabiles*. A vast collection of chronologically arranged excerpts from other authors. Warburg characterized this sort of historiography "dass sie die Weltgeschichte gleichsam auf Schienen ablaufen lässt, an denen die Weltmirakel wie Wärterhäuschen stehen."

⁷ Cf. above, pp. 168-9, n. 5. Printed to-

gether with the letters of the younger Pliny, etc. There followed 12 new editions before Lycosthenes published the treatise, together with the *De prodigiis* by Polydore Vergil and the *De ostentis* by Camerarius, in Basel 1552. The interest in classical prodigies did not slacken. J. G. Graevius included in his *Thesaurus Antiquitatum Romanorum*, 1696, vol. 5, p. 758 ff., a lengthy treatise by J. C. Boulenger, *De Prodigis*, with a systematic arrangement of a vast material, cf. mainly cap. 16: "Monstrosi parti" and cap. 17: "De Androgynis, et Monstris."

⁸ *Histoires prodigieuses les plus memorables qui ayent esté observées, depuis la Nativité de Jesus Christ, jusques à nostre siecle*, Paris, 1560. This book which is richly illustrated was a great success. More than 10 editions appeared after 1560 as well as translations into Spanish, Dutch and English. E. Fenton published the last under the title *Certaine Secrete Wonders of Nature*, London 1569.

⁹ *Catalogus prodigiorum, miraculorum, atque*

Rueff,¹ Ambroise Paré,² and Cornelius Gemma³ correlated monstrous births with political events. One or two examples may give an idea of the trend of these works. The famous monster born in Ravenna in 1512 which was never left out in any monster treatise for almost 200 years was commonly regarded as a portent of the devastation of Italy by Louis XII of France. The interpretation of the monster as well as its picture were standardized and accepted by a host of able scholars as above reproach.

Boaistuau who protested that he had not included any fables in his work but only data supported by the authority of famous authors,⁴ published as a foreboding of the peace between Venice and Genoa a monster born in Italy with four legs and arms.⁵ The same story with the same woodcut reappeared in Paré, Fenton and others. However, this monster has an old pedigree; it is hardly distinguishable from that described by Julius Obsequens in the year 164 A.D. and illustrated in Lycosthenes' edition of 1552.⁶ John Bulwer, an empiricist who went out of his way to profess in the terms of Lycosthenes that monsters are sent by God "for the punishing and admonishing of Men," repeated Boaistuau's story in the middle of the 17th century, and at the same time adduced the six-armed people mentioned in the Romance of Alexander to prove that the multiplication of limbs can hardly be called monstrous, "because there are many Nations who appeare with such a Bracchiall Redundancy."⁷

Most of these prognostications were based on actual or imaginary individual monsters rather than on monstrous races, and therefore seem to lead into a somewhat different field. However, writers saw a genetic link between the individual monsters and the monstrous races. Up to the destruction of the tower of Babel "the whole earth was of one language, and of one speech" (Gen. xi, 1), "and from thence did the Lord scatter them abroad upon the face of all the earth" (Gen. xi, 9). Only then could the monstrous races originate and by implication also the individual monsters. It is for this reason that Lycosthenes gives in his first book all the monstrous races which have come to life after the dispersion of mankind, and from the second book onwards the individual monsters and portents in chronological sequence. Cornelius Gemma linked up the creation of monstrous races "after the Babylonian cataclysm" and the existence of individual monsters in the same way.

At the same time imagination was so much fettered by classical accounts

ostentorum, tam coelo quam in terra, in poenam scelerum, ac magnarum in Mundo vicissitudinum significationem, Nuremberg 1563.

¹ *De conceptu et Generatione hominis*, 1554. An article about "J. Rueff und die Anfänge der Teratologie," in *Janus* 30, 1926, was not available to me.

² *Deux Livres de Chirurgie*, Paris 1573. An English translation of the works by Paré by Th. Johnson, London 1634.

³ *De naturae divinis characteribus; seu Raris et admirandis spectaculis, causis, indicis, proprietatibus rerum*. Antwerp 1575. Cf. Thorndike,

op. cit., VI, 1941, p. 406 ff. Cf. also other material *ibid.*, p. 488 ff.

⁴ *Op. cit.*, p. 95^v: "j'ay protesté plusieurs fois que je me rempliray mes écrits d'aucune chose fabuleuse, ny d'histoire aucune, laquelle je ne verifie par autorité de quelque fameux auteur Grec, ou Latin, sacré ou prophane."

⁵ *Ibid.*, p. 138^v.

⁶ p. 69.

⁷ *Anthropometamorphosis: Men Transformed: or The Artificiall Changling*, London 1653 (1st ed. 1650), pp. 34 ff., 300 f.

and the pictorial tradition that many of the individual monsters were represented in the shape of a familiar type. Jakob Mennel, for instance, in his historical survey of prognostics, shows, among many other portents of the sky, a dog-headed monster which was supposed to have been brought before the emperor Louis the Pious in 814.¹ The creature corresponds exactly to the cynocephali of the monster tradition (Pl. 46i) and the arrangement of the picture with the seated monarch taking stock of the compound being appears to have been derived from illustrations of the Alexander Romance. This monster was for Mennel a sign of the vacillating character of people during that particular epoch.

7. *The Dawn of Science and the Fabulous Races*

The works by Jacob Rueff, Cornelius Gemma, Ambroise Paré and others are not histories or annals like those of Schedel, Mennel, Lycosthenes and Wolf—they are concerned with a systematic study of monstrosities, that branch of natural science for which the term teratology has been generally accepted.² From the 16th century literature of this kind sprang up in every country of Europe in ever increasing quantities. The technique was to pile together material known from classical and post-classical sources, to arrange it methodically and interpret it with the new weapons of anatomical and biological research. But the sober and scientific approach was often overshadowed by the indiscriminate discussion of the available 'cases': mythological creatures, imaginary monsters and general descriptions in literature were allowed to rank on the same level as direct observations, and a number of standard illustrations were repeated in scores of books for more than a century to represent different monsters.³

It would make a fascinating study to describe the success and failure of these 16th and 17th century scholars. Some of them saw interesting problems

¹ Cf. above, p. 186, note 3. Fol. 9^v. The inscription reads: "Anno Cristi IX^cXIII monstrum habens Caput Caninum et cetera membra sicut homo presentur Ludivico. Et bene potuit monstruosam statum significare huius temporis ubi homines sine Capite quasi canes latrando hinc inde vacillabant." The year 914 is a slip and must read 814; the last picture treated a portent under Charlemagne.—Mennel's text was taken verbally from Werner Rolevinck's *Fasciculus temporum*, a popular universal history, which was first printed in Cologne in 1474 and had an extraordinary success; 30 editions and different translations appeared during the 15th century. Cf. also Vincent of Beauvais, *Spec. Nat.*, Lib. 31, cap. 126 (ed. 1624, c. 2392).

² For the history of teratology cf. above all Jules Berger de Xivrey, *Traditions tératologiques*, Paris, 1836; Isidore Geoffroy St.-

Hilaire, *Histoire générale et particulière des anomalies*, Paris 1832-37, 3 vols.; Ernest Martin, *Histoire des monstres*, 1880; Cesare Taruffi, *Storia della teratologia*, Bologna 1881-94, in vol. I the most comprehensive study of the history of teratology (p. 152-75 about the fabulous races); Ernst Schwalbe, *Die Morphologie der Missbildungen des Menschen und der Tiere*, Jena 1906 ff., I, pp. 5-21 "Geschichte und Literatur der Teratologie." Cf. also bibliography by Grässe, *Bibliotheca Magica et Pneumatica*, Leipzig 1843.

³ Eugen Holländer, *Wunder, Wundergeburt und Wundergestalt*, Stuttgart 1921, pp. 61-83, treated the question of objective representations of monsters from a medical point of view and came to the conclusion that the earliest prints tried rather more than the later ones to give an accurate picture of individual monstrosities.



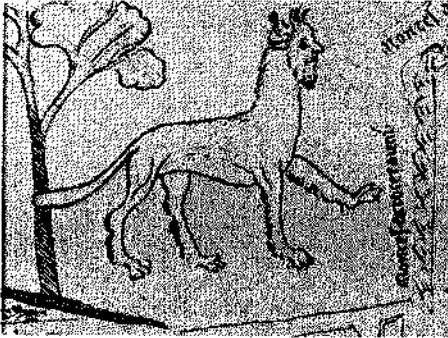
a—Antipode. Oxford, Bodl. 614, f. 50^r (pp. 182, 189)



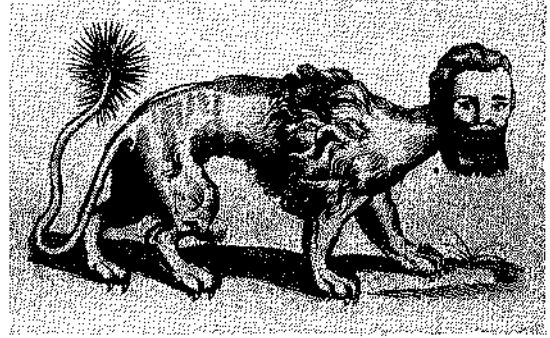
b—Schedel, *Liber Cronicarum*, 1493 (p. 189)



c—"Homo pedibus aversis," Aldrovandi, 1642 (p. 189)



d—Martikhora. From Hereford Map, 13th cent. (p. 183)



e—Martikhora. From Topsell, *Historie of four-footed beasts*, 1607 (p. 191)



f—Thévet, *Cosmographie universelle*, 1571 (p. 183)

which still engage the scientist to-day. The question of the pathological causes of individual monstrosities was tackled with great assiduity and, although one cannot expect satisfactory answers in an age when so little was known about embryology, not to speak of hormones, the stage was set and the material gathered for the critical minds of the following centuries. A few examples may suffice to show how progress was made while the old mythological tradition continued.

A number of scientists group the monstrosities according to the parts of the body in which the irregularity occurs. Head, breast, arms, hands, etc., follow each other in long-winded chapters. The system is purely formal and the spirit encyclopaedic. The German physician Johann Schenck a Grafenberg brought together a massive folio¹ on these lines, accumulating under each item excerpts from various authors in chronological order, and the material from classical sources and such writers as Lycosthenes completely overshadows the few real observations. In another of these encyclopaedic collections by Henri Kornmann² the fabulous races were treated as being of equal importance with individual monsters and there are long and weighty chapters about the people with their head in their breast, on the monoculi, the people with long ears, etc., before the discussion about deformities in the single parts of the body begins.

The fabulous races also appear one after the other in large woodcuts accompanied by learned texts in the classical work of this type, Ulisse Aldrovandi's *Monstrorum Historia* of 1642.³ His "Homo pedibus aversis" is nothing but the Antipode of the marvel treatises and the woodcut is an almost exact copy of the Schedel-Lycosthenes figure (Pl. 47a-c). In the chapter about the errors of nature regarding the form of the head the *monstrum acephalon*, the headless monster, is shown which, Aldrovandi informs us, was born at Villafranca on November 1, 1562, with its eyes and nose in its back. This monster may well serve to illustrate that even such individual cases dating from Aldrovandi's own lifetime were represented in the traditional shape of the marvels (Pl. 44d, cf. 44b). More surprising than the likeness to the old type of the headless race is the fact that this monstrous embryo was shown—as was the rule with these illustrations—in the form of a grown-up person. When this monster appeared in Aldrovandi it was already a cliché, for Aldrovandi copied an

¹ *Observationum medicarum rariorum libri VII*, Frankfurt 1600. Later ed. 1604 (Freiburg), 1609 (Frankfurt), 1644 (Lyons), 1655 (Frankfurt). Single volumes on the head, the breast, etc. appeared during the 1580's and 1590's before the general edition of 1600.

² *De miraculis vivorum seu de variis hominum*, Frankfurt 1614. Later ed. *Opera curiosa*, Frankfurt 1694.

³ Aldrovandi (1522-1605), a scholar of immense learning but somewhat more credulous than one would expect a man of his calibre to be—he accepted all the old authorities including Solinus and even Man-

deville—endeavoured to lay the foundation of a modern *Historia naturalis*. It is characteristic that for him a work on monsters had to form part of a comprehensive natural history. Of his whole work only 3 folios appeared during his life-time, the rest were edited from his manuscripts and with additions by his pupils. About A.'s life and work cf. Giovanni Fantuzzi, *Notizie degli scrittori Bolognesi*, Bologna 1781, I, p. 165 ff.; about his scientific method cf. J. V. Carus, *Geschichte der Zoologie*, München 1872, p. 290 ff. and Thorndike, *op. cit.*, VI, p. 276 ff.

illustration which had been published by Ambroise Paré and which was repeated in numbers of other books.

A second more progressive, but slightly earlier, group of scholars attempted a classification according to the biological causes producing monstrosities. Their mind was focused on the Aristotelian conception¹ that nothing can happen contrary to nature and at random. The growing sense for causation in nature and the desire to discover its functions were weakened, however, under the weight of literary authority and time-honoured tradition. Pioneers in this field like the Swiss J. Rueff and the Frenchman A. Paré, paradoxically enough, did not even escape from the belief in the monster as a portent, and they regarded God's will or rather His wrath as the primary reason for monstrous births. Caspar Bauhin (1560-1624), an anatomist and botanist of great reputation from Basle, who gave in his work on monsters² an extremely involved table with all the reasons for monstrous births, ranked the influence of the stars and the winds in addition to the wrath of God above biological causes. The purest revival of Aristotelian views on monsters is due to Fortunio Liceti, the author of one of the best known books on the subject.³ He held for a time a professorship of Aristotelian physics in Pisa and his work is imbued with the critical and experimental spirit of his great master. But although he refutes explicitly prognostic qualities of monsters and fabulous accounts about them and describes much from his own experience, his discrimination often falls short of his intentions and he only uses the old set of standard illustrations.

Meanwhile new systematizing efforts on Aristotelian lines were made in other fields of science. Edward Wotton of Oxford (1492-1555) who has been credited with one of the first modern classifications in zoology based on Aristotle,⁴ still included in his treatise *De differentiis animalibus libri decem* (Paris 1552) the monstrous animals from India and Ethiopia and, on the authority of Pliny and Solinus, gave a full account of all the fabulous races.⁵ Wotton's Swiss contemporary, the immensely learned Konrad Gesner (1516-1565) was one of the humanists with whom the written word weighed more than experiment and observation. His vast *Historia Animalium* (Zurich 1551-87) is an encyclopaedia of the zoological material then available, in which, of course, all the legendary animals of classical authors are included. Gesner's zoology enjoyed an enormous success. In England it was popularized by an abstract arranged by Edward Topsell, which appeared first in 1607 and was re-edited in 1658.⁶ The cynocephali, satyrs and sphinxes are ranged under the species

¹ *De gen. anim.* IV, 4, 770^b, 9-19. Edd. J. A. Smith and W. D. Ross.

² *De Hermaphroditorum monstrorumque partuum Natura*, Oppenheim 1614 (2nd ed. 1629), cf. mainly p. 59 ff.

³ Padua 1616; 2nd ed. 1634; 3rd ed. by G. Blasius with an appendix from the work of Tulp (cf. below, p. 191) 1665; 4th ed. 1668; French translation by Jean Palfyn, Leyden 1708. Modern French ed. by F. Houssay, *De la nature des causes des différences*

des monstres d'après F. L., Paris 1937.

⁴ Cf. Carus, *Gesch. d. Zoologie, op. cit.*, p. 265 f.

⁵ pp. 49^v-50, cap 66: "Multiformes hominum effigies, & mira quaedam de hominibus alia." pp. 71^v-72, cap 91: "De monstrosis quibusdam aliis animalibus in India aut Aethiopia prognatis."

⁶ *The historie of fourfooted beasts . . . collected out of all the volumes of Conrad Gesner, 1607.* The 2nd ed. was edited by J. Rowland.

ape.¹ A very detailed chapter is devoted to the unicorn and the old subject of the medical use which can be made of its horn.² The description of the martikhora still follows Ktesias, while the illustration of it (Pl. 47e) is in line with the pictorial tradition.³

With the accretion of zoological material during the 17th century a critical stage was reached in the rivalry between classical authority and exact observation. One example may show how scientists tried to reconcile the new with the old knowledge. Dr. Tulp, the Amsterdam physician who has become immortal through Rembrandt's "Anatomy Lesson," published in his *Observationum Medicarum Libri Tres*⁴ a few monstrosities which he had himself dissected and which he reproduced in pictures of rare precision. He also shows an excellent engraving of an ape with the inscription: "Homo sylvestris—Orang-outang" (Pl. 48d).⁵ In a long chapter entitled "Satyrus Indicus" Tulp came to the conclusion that either satyrs do not exist, or, if they do, they must be the animal shown in the plate.

This identification has an interesting genesis. Ktesias had compared a tailed race in India with satyrs.⁶ Pliny went a step further and located tribes of satyrs in India as well as in Ethiopia and in one case classed them amongst the apes.⁷ In this respect he was followed by Solinus who placed the satyrs in Ethiopia.⁸ Consequently the illustrated Solinus in Milan shows in one picture ape and satyr together (Pl. 48a).⁹ The Pseudo-Hugh of Saint Victor, whose treatise *De Bestiis* became so important for the Bestiaries, accepted Solinus' classification of apes almost verbatim.¹⁰ Therefore in Bestiaries with the text of Solinus the "satiri monstruosi"¹¹ follow directly after the "simiae."¹² And there are Bestiary illustrations in which the Solinus formula survived (Pl. 48b).¹³ The same tradition was still alive in an Italian Bestiary of the 15th century (Pl. 48c),¹⁴ but the picture was now translated into the easy-going

¹ 2nd ed., pp. 7, 8, 10, 14. This classification is based on classical sources, cf. McDermott, *The Ape in Antiquity*, *op. cit.*, pp. 36 f., 67 f., 79 f. and was kept alive throughout the Middle Ages, cf. p. 168, n. 1 and below, pp. 191-2.

² *Ibid.*, p. 551 ff.

³ *Ibid.*, p. 343 f.

⁴ Amsterdam 1641.

⁵ p. 274 ff., cap. 56, Pl. 14. The specimen was, in fact, a chimpanzee, cf. Carus, *op. cit.*, p. 340.

⁶ Cf. above, p. 160.

⁷ V, 8, 46; VII, 2, 24 and 30; VIII, 80, 216; X, 93, 199.

⁸ 27, 60 (ed. Mommsen).

⁹ Fol. 37^r, cf. above, p. 172.

¹⁰ Written early 12th century. *PL.* 177, c. 616, Lib. II, 12: "De Simiis."

¹¹ "De satiris monstruosis," heading in *Brit. Mus. Harl.* 3244 (early 13th cent.), cf. Druce, *Archaeol. Journ.* 1915, p. 157, James, *Bestiary*, p. 17, No. 22.

¹² 12th century: *Brit. Mus. Burney* 527, cf.

Mann in *Anglia* VII, p. 448; Oxford, Bodl. Ashmole 1511, f. 19^r and the later copy Douce 151, f. 15^r, cf. James, *Bestiary*, p. 14, Nos. 15, 16; Cambridge, Univ. Libr. II. 4. 26, f. 10^v-11^r, cf. James, p. 38 f.—13th century: Oxford, St. John's Coll. 61, f. 12^v, cf. James, p. 18, No. 28.—14th century: Cambridge, Corpus Christi Coll. 53, f. 192^r, cf. James, *A Peterborough Psalter and Bestiary*, 1921, Nos. 15, 16.

¹³ Oxford, Bodl. 764, f. 17^v and *Brit. Mus. Harl.* 4751, f. 11^v, both late 12th century. James, *Bestiary*, p. 15, Nos. 18, 19, says that "these two copies stand alone."

¹⁴ Rome, Vat. Urb. lat. 276, f. 51^r. Stornajolo, *Cod. Urbinates*, 1885, I: "Petri Candidi de omnium animalium naturis . . . ad illustrissimum principem D. Ludovicum Gonzagam." Luzio-Renier in *Giornale stor. d. lett. ital.* XVI, 1890, p. 147 f. identified the author as the humanist Pier Candido Decembrio. The MS. is datable by means of a letter of 1460 in which Lodovico Gonzaga asked the

manner of the Italian Renaissance; moreover, the satyr has taken on his mythological and the ape his zoological shape. This separation contains the germ of subsequent development. The complicated tradition about satyrs led 16th century writers to attempts at proper classification. Caspar Bauhin, in the beginning of the 17th century, treated this question possibly in greater detail than any other author.¹ He came to the conclusion—anticipated by the Italian miniaturist—that there are two classes of satyrs, real and fictitious ones; both classes have to be divided into two subsections. Real satyrs are either men or a species of apes; fictitious satyrs are either poetical or demoniacal. Dr. Tulp, with the mind of the practical man, made a clear sweep of all this complex analysis, but in accordance with the general trend of natural science² still tried to harmonize textual tradition with factual observation.

Meanwhile the increase in anthropological and ethnological knowledge during the 16th and 17th centuries could not fail to lead to new reflections about the old fabulous races. A most surprising line was taken by John Bulwer, who has made his name as a pioneer of the deaf and dumb alphabet. He accepted the existence of monstrous nations, but explained their deficiencies as artificial for "men have taken upon them an audacious art to forme and new shapen them."³ In no other work, to our knowledge, did the divergent claims of the written word and of sober and unbiased judgment lead to such peculiar results. It was indeed difficult for Dr. Bulwer to disregard Sir Walter Raleigh's detailed report⁴ about the Ewaipanoma, the headless nation living in the jungle of the Amazon, even if he was prepared to cast doubt on the accounts of similar races given by Pomponius Mela, Solinus, St. Augustine,⁵ Mandeville and others. Accurate observation of the native custom of artificial bodily changes like tattooing, enlargement of lips and the lobes of the ears induced him to think "that it is an affectation of some race to drown the head in the breast";⁶ and one is not surprised that he visualized this race in its classical shape (Pl. 44e). John Bulwer's pragmatic approach to the problem of monsters foreshadows the attitude of 19th century scholars.

While thus in medicine, zoology and anthropology old and new values were in the balance, the end of the 17th century brought about a complete change of approach to our particular problem. Scepticism about the existence of fabulous races had, of course, always been alive. Rabelais, equipped with a wide knowledge of classical sources, had treated the matter with sharp irony.⁷ But there is a new spirit in a treatise, full of common sense, published

author to have his work illustrated. Cf. also E. Ditt, "Pier Candido Decembrio," *Memorie del R. Ist. Lombardo di scienze e lettere, Cl. di lettere*, etc. XXIV, ii, 1931, p. 24.

¹ *Op. cit.*, pp. 140-92: "De Satyris."

² Cf. Thorndike, *op. cit.*, VI, p. 254 ff.

³ *Op. cit.* (p. 187, note 7), introduction.

⁴ Quoted by Bulwer, p. 20. Sir Walter Raleigh, *The Discovery of Guiana* (1595) (in Hakluyt, *Principal Navigations* X, 1904, p. 406 f.) states explicitly that he had not seen these people, "but I am resolved that so many

people did not all combine or forethinke to make the report."

⁵ St. Augustine's apocryphal *Sermo 37 Ad Fratres in eremo* was often quoted as proof that he saw—travelling as Bishop of Hippo in Ethiopia—many men and women without heads and with eyes in their breasts.

⁶ *Op. cit.*, p. 24 ff.

⁷ Pantagruel (lib. V, caps. 30, 31) meets the most fantastic monsters, ethnographical, mythological and imaginary ones, in the "pays de Satin, tant renommé entre les pages



a—Ape and Satyr. Milan, Ambrosiana, cod. C. 246 inf., f. 37^r
(pp. 172, 191)



b—British Museum, Harley 4751, f. 11^v. 12th cent. (p. 191)



c—Rome, Vat. Urb. lat. 276, f. 51^r. 1460 (p. 191)



d—"Homo Sylvestris." From Tulp, *Obseru. med. Libri tres*, 1641 (p. 191)

in 1663 "to the discouraging of a superstitious study of the singularities in nature" by John Spencer, Master of Corpus Christi College, Cambridge, who won fame as the founder of comparative religion.¹ This work appeared a year after the Royal Society had received its charter, and it was this authoritative body, which finally banished all marvels and fabulous stories and based research solely on experiment and exact observation.

8. *Monstrosities in Popular Imagery*

Most of the authors mentioned in the last chapter belonged to the learned world of scholars and their books were hardly known to a wide circle. In spite of this their ideas reached, often curiously distorted, the 'man in the street.' The better educated public knew such works as Topsell's from which it got its information on natural history.² On a much lower level, publications like that by F. W. Schmucken³ provided it with the monsters, "as (in the words of John Spencer) there never wanted those which would farme the weakness and easiness of the multitude." But the appeal to the largest, worst educated and most superstitious section of the people was reserved to popular pamphlets. After the invention of printing this method was chosen to advertise monstrosities far and wide. The reasons for it were manifold: prognostications, satire, political and religious propaganda and, above all, business, which can always rely on the attraction of the horrible. The material used for these pamphlets was frequently borrowed from the higher flights of literature and adapted to the newsreel character required. One example of this method may suffice.

In Schedel's list of monsters appeared the crane-man with enormous neck and long beak (Pl. 49a) whom he had taken over from the *Gesta Romanorum*.⁴ The same monster was published after Schedel with a learned text by Lycosthenes (Pl. 49b), and later by Aldrovandi (Pl. 49c). But as early as 1585 the monster was also presented to the public in an Italian popular pamphlet (Pl. 49d).⁵ According to the inscription, based on Lycosthenes' text, it lives in the remotest parts of Africa where this race fights the griffins. It is evident that this monster owed its existence to a late amalgamation of the old crane

de cour."

Benedetto Varchi, the Florentine humanist, declared in a lecture read in 1548 to the Florentine Academy that the monstrous races "siano cose favolose." (*Lezione sopra la generazione de' Mostri*, in *La prima parte delle Lezioni*, Florence 1560, p. 92 ff.)

¹ *A Discourse concerning Prodigies: wherein the Vanity of Presages by them is reprehended, and their true and proper Ends asserted and vindicated*, Cambridge 1663, p. 104.

² Shakespeare probably used the old encyclopaedia of Bartholomew the Englishman in the edition of 1582, reissued after the English translation by John of Trevisa (Westminster 1495).

³ *Fasciculi admirandorum naturae accretio. Oder der Spielenden Natur Kunstwercke in verschiedenen Missgeburthen*, Strasbourg 1679-1683.

⁴ "In Europe are very beautiful men; but they have a crane's head, and neck, and beak. These designate judges, who ought to have long necks and beaks, in order that what the heart thinks may be long before it reaches the mouth." Translation by Charles Swan, revised ed. by Wynnard Hooper, London 1877, p. 340. Here the *Turkish Tales* (II, p. 364) are quoted as the source of the *Gesta*.

⁵ First published by Eugen Holländer, *Wunder, Wundergeburt und Wundergestalt in Einblattdrucken des 15. bis 18. Jahrhunderts*, Stuttgart 1921, p. 292.

and pygmy story, the process being that the pygmy has grown and has assumed certain features of the bird. A similar pamphlet appeared in Cologne in 1660 (Pl. 49e)¹ and here, characteristically enough, the creature is no more a member of a whole race but an individual monster. Its place of origin is now Madagascar where it is said to have been captured by a captain of Marshal Milleraye. The text goes on to say that it is at present at Nantes and that it will be exhibited in Paris. The imaginary monster, the late degenerate descendant of Homer's, Ktesias' and Megasthenes' mythical fantasies on the East and India has become the show-piece of a fair. The pamphlet seems to have sold very well, for in 1664 another Cologne publisher produced it after it had undergone a double metamorphosis. It appears now with human head (Pl. 49f) and has become a tartar whom Count Nicholas of Serin has captured in this very year.² Labelled in this way the monster reaches England via Holland.³ And more detailed information was now available. Count Serin had captured it in the month of February 1664 and it was taken prisoner in Hungary fighting, of course, with the Infidels against the Christians (Pl. 49g).⁴ From the English pamphlet the monster migrated back into 'literature' and was recorded by James Paris du Plessis in his *Short History of Human Prodigies* as having been on view at "Ye Globe in the ould Baily in February 1664."⁵ After it had haunted in turn Italy, France, Germany, Holland and England for almost a century, it sank into well earned oblivion.

9. *The Marvels in Travellers' Reports*

The classical conception of India as the land of fabulous races and marvels kept its hold on Europe right into the 15th and 16th centuries. At that time the outlook began to change. The Indian marvels were by no means discarded, but they lost their connection with India and were located in other parts of the world. Moreover, they were re-vitalized in prognostications, teratological treatises and popular imagery. With the increase in geographical knowledge due to the reports brought back by travellers, it was no longer possible to maintain the old views about India, and yet people were unwilling to renounce the Indian monsters which had a grip on man's mind as persistent as that of the Apollo Belvedere.

But the reports by travellers, though finally decisive in revolutionizing our conception of the inhabited world, did not further the advance of natural science, ethnology and geography in a straight line.⁶ They were almost

¹ *Ibid.*, p. 291.

² *Ibid.*, p. 290.

³ Pamphlet in 4 languages with Dutch in the first place. Copy British Museum, Print Room.

⁴ Copy British Museum. A poem about the monster at the foot of the print should be sung to the tune of "The Gallant London Apprentice," or "I am a Jovial Bachelor."

⁵ Cf. C. J. S. Thompson, *The Mystery and Lore of Monsters*, London 1930, p. 149.

⁶ The marvels remained a feature of the maps for a very long time. A few hints must suffice. The Borgia map (mid-15th century, Miller, *op. cit.*, III, p. 148 ff.) shows the "montes Yperborei" in the north with griffins and tigers, and horned people live in India, etc. Walsperger's map of 1448 (Miller III, p. 147 ff.) populates the north and Ethiopia with a long list of fabulous races. In Andrea Bianco's map of 1436 (Miller III, p. 143 ff.) Paradise and the realm of Prester John appear

without exception a curious mixture of solid observation and fabulous tradition. These men, from the Dominican and Franciscan monks of the 13th century to Columbus and Fernao de Magellan, went out to distant countries with a preconceived idea of what they would find. Many of the travellers were learned; they had a knowledge of classical authors, they knew their Christian encyclopaedias, their treatises on natural science, their romances, they had seen on their maps the wondrous nations in those parts of the world to which they were travelling—in short, their imagination was fed from childhood with stories of marvels and miracles which they found because they believed in them.¹ Most of them reported about Prester John and his country, many located Paradise. Friar Jordanus placed it between the “terza India” and Ethiopia,² John of Marignola believed it to be in Ceylon,³ Odoric of Pordenone found it 50 days west of Cathay,⁴ John of Hese on a mythical journey professed to have reached it in the extreme East;⁵ and Columbus, who thought until his death that he had discovered the sea route to India, was convinced that he had passed near it.⁶ These men found and described the fabulous races, pygmies and giants, cyclopes, sciapodes and people without heads. Friar Jordanus mentioned the unicorn in India, John of Hese saw it with his own eyes in the Holy Land and still shortly before 1600 John Huyghen van Linschoten said of the rhinoceros that “some thinke it is the right unicorn.”⁷ Giovanni Pian del Carpine reported about the cynocephali,⁸ Marco

in Asia, together with the people without heads and the cynocephali in Africa. Still in Martin Behaim’s famous globe of 1492 sciapodes are to be seen in central South Africa and sirens, satyrs, cynocephali appear in the inscriptions while Prester John is the emperor of India. Behaim quotes as his sources mainly Ptolemy, Marco Polo and Mandeville, but Pliny, Pomponius Mela, the Romance of Alexander and others were also used, cf. E. G. Ravenstein, *Martin Behaim*, London 1908, pp. 59, 62 f., 71. Finally Gio Matteo Contarini in his map of 1506 populates India with cynocephali and people without heads, cf. *A Map of the World* designed by G. M. Contarini. Engr. by Francesco Roselli 1506. Printed by order of the Trustees, Brit. Mus., 1924, p. 9.

¹ It is interesting to find this corroborated by the regulations made by William of Wykeham for the students of New College, Oxford: “When in the winter, on the occasion of any holiday a fire is lighted for the fellows of the great hall, the fellows and scholars may, after their dinner or their supper, amuse themselves in a suitable manner with singing or reciting poetry, or with the chronicles of different kingdoms and the wonders of the world.” Cf. Cooley, *The History of Maritime and Inland Discovery*, London 1830, I, p. 229.

Cf. also the chapter “Portenti e meraviglie” in Olschki, *Storia lett. delle scop. geogr.*, 1937, p. 21 ff.

² Yule, *The Wonders of the East by Friar Jordanus* (Hakluyt Soc.), 1863, p. 43. Friar Jordanus stayed in India from about 1320 onwards.

³ P. Anastasius van den Wyngaert, *Sinica Franciscana*, Florence 1926, I, p. 531 f. Yule, *Cathay, op. cit.*, III, p. 169. Marignola’s mission in the East lasted from 1338 to 1353. It may be noted that he was otherwise very critical with regard to the monstrous nations, cf. Wyngaert, p. 545 f.

⁴ Everyman’s Library, Vol. 812, pp. 267, 270. Odoric’s journey, full of marvellous events, lasted from about 1314-1330.

⁵ Graf, *Il mito del Par. terr.*, *op. cit.*, p. 3. The journey was supposed to have taken place about 1400.

⁶ A. P. Newton, *Travel and Travellers of the Middle Ages*, London 1926, p. 165 f. Olschki, *Stor. lett.*, *op. cit.*, p. 17. Here and passim detailed analysis of Columbus’ mythical geography.

⁷ A. C. Burnell and P. A. Tiele, *Hakluyt Soc.* LXXI, ii, 1885, p. 9.

⁸ Wyngaert, *op. cit.*, pp. 60, 74. Carpine was entrusted by Pope Innocent IV with a diplomatic mission to the Mongolean court.

Polo found them on the Andaman Islands,¹ Odoric in Nicobar Island,² Friar Jordanus on islands between Africa and India,³ Ibn Battuta in Burma,⁴ while a friar Benedictus Polonius discovered them in Russia.⁵ Columbus found them on the West Indian Islands,⁶ and they were mentioned as late as 1549 in Herberstein's *Rerum Moscovitarum commentarii*⁷ as being in Siberia together with the other fabulous races. It was common belief that Pigafetta had visited the Antipodes,⁸ and in his account of Magellan's conquest of the east-west passage occur amazons, pygmies, and people who sleep in their ears.⁹ Those at home were busy collecting and bringing to the notice of the public the wonderful experiences of these travellers. As early as 1351 the Benedictine Jean Le Long published such a collection and accompanied it with a series of exquisite illuminations, which were of course faithful re-editions of the fixed marvel types (Pl. 45d).¹⁰

So far no mention has been made of the travels of Sir John Mandeville who left a long narrative of a journey to Africa and Asia in the middle of the 14th century which, as is now well known, never took place. His report is one long story of marvels and fabulous tales, and it seems characteristic of the disposition of the human mind that it was this work which had the greatest success of all descriptions of travels. It circulated in beautifully illuminated manuscripts and from the end of the 15th century onwards appeared in all languages and in innumerable editions, decorated with a vast number of woodcuts.¹¹ The picture of the sciapod from the Augsburg edition of 1482 shows how strictly these illustrations follow the old tradition (Pl. 46e). One of the few unusual representations is that of the cynocephali who carry little oxen on their heads (Pl. 44f). This is based on Friar Odoric's story, that the dog-faced people live in an island near India and worship the ox, "where-

¹ Yule, *Ser Marco Polo, op. cit.*, II, pp. 309-12 and Cordier, *Addenda*, 1920, p. 109.

² Wyngaert, *op. cit.*, p. 452.

³ Yule, *Jordanus, op. cit.*, p. 44.

⁴ Yule, *Cathay, op. cit.*, IV, p. 93. H. A. R. Gibb, *Ibn Battuta. Travels in Asia and Africa. 1325-1354*, London 1939, p. 272. The Mohammedan Ibn Battuta, one of the greatest travellers of all times, began his journeys through the then known part of the world in 1325.

⁵ Travelled 1245, cf. Wyngaert, *op. cit.*, p. 138.

⁶ Olschki, *op. cit.*, p. 22.

⁷ German ed. Basle 1563, p. 91 (1st ed. Latin 1549, German 1557). Cf. also G. Hennig, "Die Reiseberichte über Sibirien," *Mitt. d. Vereins f. Erdkunde*, 1905, p. 261 ff. Siegmund Freiherr von Herberstein (1486-1566) was a German diplomat in Moscow. His mention of fabulous races goes back to a report which had reached him.

⁸ Cf. the letter by B. Castiglione to the

Marchioness of Mantua, April 15, 1524; cf. Boffito, "La leggenda degli antipodi," *op. cit.*

⁹ Camillo Manfroni, *Relazione del primo viaggio intorno al mondo de Antonio Pigafetta*, Milan 1928, pp. 248, 253, 258.

¹⁰ Paris, B. N. fr. 2810. Publ. by Omont, *Le Livre des Merveilles*, Paris (1907). Copy of the late 14th century made for Philip the Bold, Duke of Burgundy. Pl. 45d, f. 29^v, is one of the illustrations to Marco Polo showing monsters from the country of the "Merkites." Characteristically, Marco Polo only mentions this tribe as being very wild. It was located by Yule, *The Book of Ser M. P.*, 1903, I, p. 271, south-east of the Baikal.

¹¹ The original Mandeville, written in Liège in about 1355 has not been preserved, but more than 300 Mandeville MSS are known. His main source was the marvellous report of Friar Odoric. Cf. A. Bovenschen, "Johann von Mandeville and die Quellen seiner Reisebeschreibung," *Zeitschr. d. Gesellschaft f. Erdkunde zu Berlin XXIII*, 1888, pp. 177-306.

fore they always wear upon the forehead an ox made of gold and silver, in token that he is their god."¹

The real and imaginary travellers of the Middle Ages and the Renaissance brought back these stories and inevitably influenced science and literature at home. For men like Aldrovandi and the encyclopaedists of the 16th and 17th centuries these eye-witnesses were still a welcome support of the classical authorities. On the other hand people slowly learned to discriminate between fictitious and trustworthy matter in the reports from Marco Polo to Sir Walter Raleigh, and the belief in the existence of fabulous races in Asia was already shaken in the 14th century.² But instead of repudiating the whole story, some writers now located the marvels in the still unexplored corners of the world. Abyssinia, from times immemorial a favourite alternative to India, became the kingdom of Prester John,³ Paradise was banished into the South of Africa,⁴ just as the sciapodes and many of the other monsters found temporary exile there.⁵ It was also in the interior of Africa that travellers of the 19th century rediscovered Ktesias' race of tailed men.⁶

* * *

Monsters—composite beings, half-human, half-animal—play a part in the thought and imagery of all peoples at all times. Everywhere the monster has been credited with the powers of a god or the diabolical forces of evil. Monsters have had their share in mythologies and fairy-tales, superstitions and prognostications. In the Marvels of the East this old demonic inheritance was at the same time preserved and made pseudo-rational. But their ethnological shadow existence sank back into the sphere of magic whenever the innate awe of the monster came to the fore. The Greeks gave to some of these primeval conceptions visual forms which were generally accepted for 1500 years. They shaped not only the day-dreams of beauty and harmony of western man but created at the same time symbols which expressed the horrors of his real dreams.⁷

¹ Odoric, cap. 24.

² The better knowledge of India and the East made itself felt already during the 13th century. In Genoa a society for the promotion of commerce with India was founded in 1224, cf. Pullé, *La cartogr. antica dell' India*, *op. cit.*, p. 63. For commercial interrelations at a somewhat later period cf. Friedrich Kunstmann, *Die Kenntnis Indiens im 15. Jahrh.*, München 1863, p. 1 ff.

³ Mainly in the 14th and 15th centuries after the search in Asia had been unsuccessful, cf. Hennig, *Terrae incognitae*, Leiden 1938, III, p. 69, Olschki, *Stor. lett., op. cit.*, p. 200 ff. *idem* in *Bibliofilia* 1938, p. 297 f. A valuable chapter, in which the Portuguese contribution of the 15th and 16th centuries is discussed, by E. Denison Ross, "Prester John and the Empire of Ethiopia," in Newton, *Travel and Travellers of the M. A.*, 1926, pp.

174-194.

⁴ Pullé, *op. cit.*, p. 80 ff.

⁵ Cf. above, p. 194, note 6 and A. Rosenthal in this *Journal* I, p. 258 f.

⁶ Tailed men always stimulated the imagination of travellers. Marco Polo found them in Sumatra, others in Borneo, Formosa, Paraguay and New Guinea. Cf. C. J. S. Thompson, *The Mystery and Lore of Monsters*, 1930, p. 22 f., and S. Baring-Gould, "Tailed Men," in *Curious Myths of the Middle Ages*, 1901, pp. 145-160, who also collected folklore material and the 19th century reports.

⁷ S. Freud, "Mythologische Parallele zu einer plastischen Zwangsvorstellung," *Internat. Zeitschr. f. ärztl. Psychoanalyse* IV, 1916-17, p. 110 f. S. Ferenczi, "Gulliver Phantasies," *The internat. Journal of Psycho-Analysis* IX, 1928, p. 283 ff.