A close-up photograph of a toucan perched on a light-colored, textured branch. The bird's head is turned to the right, showing its bright blue forehead, a yellow patch above the eye, and a large, curved, black beak. Its body is a rich green. In the background, out-of-focus green leaves and small, red, spike-like flowers are visible.

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A Brief History of Rhinos

Martin Serafini, Edinburgh Zoo, Scotland

I am no archaeologist. Nor am I an art historian, or even an expert in the field of rhino-ology (rhinology being the study of noses). It just happened that recently I found myself looking into how rhinos – any rhinos...African, Asian, one-horned, three-horned – have been depicted in the course of history, from Lascaux to Longhi. I wanted a somewhat oblique look at rhinos for a new interpretation board and, in the course of researching this, I came across all sorts of material, some of which I'd like to share with you in this photo-article of sorts.

There is no theme here – bar rhinos - or conclusion. It's just a wee look at some big animals.

Poisoned chalice

We probably all know about the use of rhino horn in Traditional Chinese Medicine (TCM), yet there are some fallacies that seem to persist despite lack of evidence and/or constant denial.

One issue is the 'insulting propensity of Westerners to claim that the primary use of rhino horn is as an aphrodisiac', according to a delegate at a TRAFFIC-sponsored symposium on TCM.

Historically, only in Gujarat and a few locations further north in India has rhino horn been used in this way. In response to domestic bans and increasing prices, even this now seems to have ceased.

It may be that as Asiatic horn was making its way to the Roman world via the entrepôts of southern India, traders embellished its properties in order to increase its value. Again according to TRAFFIC, rhino horn (*cornu rhinocerotis*) has been a revered ingredient in the pharmacopoeia of TCM for many centuries and is listed in the 2,000-year-old Chinese text, 'The Divine Peasant's Herbal'.

Cornu rhinocerotis is used for 'removing heat from the blood, inducing haemostasis, clearing away heart fire to achieve tranquillisation of the mind, removing toxic substances (my italics) and relieving feverish rashes or eruptions' (Zhang, 1990). Two forms are recognised: Guangdong, or 'water' horn from Africa and the several times more valuable Siam, or 'fire' horn from Asia.

This connection with toxins is particularly fascinating. There is an age-old belief that vessels made from rhino horn will detect, and even neutralise poisons; also that wine will absorb the 'curative elements' from rhino horn drinking cups. Written records of the antidotal properties

go back to China's 'Spring and Autumn' period (770-476BC); as a detector of toxins an early mention is made in the fifth century BC by Ctesias the Greek, physician to Artaxerxes I of Persia. The famous Taoist Ge Hong noted, 'a white foam will bubble up' when poisons are stirred in a rhino horn cup.

Chemically, horn contains keratin, amino acids, guanidine derivatives, sterols, acidic peptide and sugar- and phosphorus-containing substances. I am no chemist either, but some sort of reaction with the alkaloids present in many toxins seems a possibility.

Flight of fancy?

A curious tale surrounds the use of horn as an antidote to a poison commonly used in Bronze Age China. This poison, made by pouring rice wine over the feathers of the zhen, or 'poison bird', was used only in the south of the country, the only part of China where rhinos were, by then, surviving. Jeannie Thomas Parker and Brad Millen of the Royal Ontario Museum, Canada, have identified the zhen bird as *Spilornis cheela ricketti*, or crested serpent eagle.



The zhen bird, whose song 'is like steel or copper'

One particularly intriguing reference among many is found in the *Gewu Zhonglun*, which means, 'to explore the properties of the universe': 'The rhinoceros and the zhen bird share the same watering places. If the rhinoceros does not first dip his horn in the water to purify it, the rhino will die when he drinks. This is because the zhen bird, which eats poisonous snakes, poisons the water when it drinks.'

Stories of the wondrous properties of rhino horn echo down the centuries, interweaving with tales of unicorns in myth and legend, until we come much closer to our own

time, with James I on the throne, living in fear of the power of witchcraft and the threat of assassination.

Hanseatic traders offered the insecure king rhino horn as protection but, wary as ever, he tested it first on a servant, using arsenous oxide. Apparently the servant died in agony and the merchants were thereafter less than favoured in the royal esteem.

As late as 1789 rhino horn was being used in the French court to test the royal food for the presence of poisons.

The European view

From a Eurocentric viewpoint, notions of a rhinoceros' appearance changed as civilisations waxed and waned and rhino species came and went.

It seems the classical world knew of both two-horned African and one-horned Asiatic species. We have already met Ctesias, who mentioned one-horned rhinos but described them as having purple heads!

Knowledge of Asiatic rhinos – an Indian ruler presented Emperor Augustus with a 'greater, one-horned' rhino in 11BC – reached Rome via the ports of southern India. Through this route the East, with its spices and silk and strange beliefs, including the Chinese myth of the unicorn and its fabulous powers, became known to the western world.

In the first century BC, Julius Maternus became the first Roman to cross the Sahara to Lake Chad, where he saw white rhinos, and soon expeditions were bringing African rhinos back to the Eternal City. Apparently they were the most aggressive fighters in the arenas, impaling bears on their horns and tossing them over their heads. Martial celebrated the manner rhinos 'threw bears into the starry sky'.

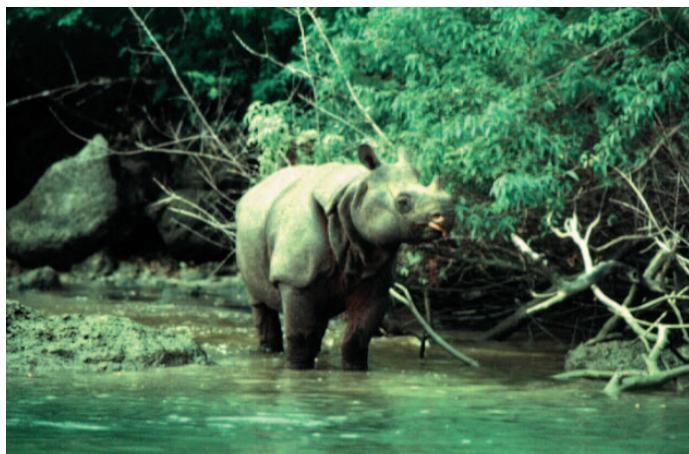
Yet the Roman Empire was not eternal, and with its collapse and the subsequent rise of Islam, Europe became cut off from the Orient, and from tropical Africa. Rhinos passed into legend and the line between the real and the imagined blurred. For nigh on a millennium Europe and the rhinoceros were estranged until, in 1292AD, renowned Venetian Marco Polo returned home after a seven-year sojourn in Asia.

Oddly, the rhino of which the explorer-trader writes is one unknown to antiquity – it had two horns yet it came from Asia, and Polo believed it was, in fact, a unicorn. On his journey home with a fleet of 14 ships, Polo put in to Sumatra, where he saw, 'lion-horns, which, though they have feet like an elephant, are much smaller than the latter, resemble the buffalo in the distribution of their hair and have two horns on their heads, with which, however, they harm no one.'

(Interestingly, a different translation of Polo reads as follows: 'There are wild elephants in the country (Sumatra), and numerous unicorns, which are nearly as

big. They have hair like that of a buffalo, feet like those of an elephant, and a horn in the middle of the forehead, which is black and very thick...')

The next rhino recorded in European history was the subject of Durer's famous 1515AD woodcut. The Asiatic armoured species gradually became familiar throughout the continent, and it was not until 1868 that African specimens reappeared when London Zoo purchased a black rhino for \$5,000. Sclater, the famous zoologist, studied it and believed it the first of its kind to arrive alive in Europe since the days of the Roman Empire.



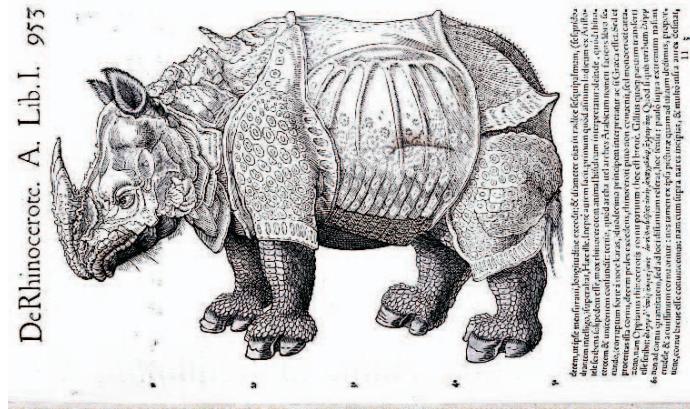
Many, many thanks to Alain Compost for this extremely rare photo of *Rhinoceros sondaicus annamiticus*

Prior to this, of course, skins and other body parts had been studied. Although Arab drawing of African rhinos has existed since the 13th century, zoologists were at first unwilling to believe they had a smooth skin lacking any folds. One museum curator ironed folds into the skin of a specimen he had received to make it 'authentic', believing it had suffered in transit. For a while this specimen, not surprisingly, caused confusion among taxonomists.

Of course, the most recent rhino to come to Europe's – and, indeed, the world's – attention, is *Rhinoceros sondaicus annamiticus*, mainland Javan rhino subspecies whose presence in Vietnam was confirmed in 1991 and which was photographed for the first time only four years ago. There aren't enough of them to make a football team.

And now I find myself running out of space without, believe it or not, having more than mentioned in passing what I had intended to be the main focus of my article – rhinos, the origins of the unicorn myth and the mythical Chinese beast Zhi. Rhinos in heraldry was another thing. And multi-horned rhinos, I never got round to them either. Oh well, here are a couple of web sites to keep you going:

<http://www.rom.on.ca/pub/unicorn>



One of the best-known rhino images is a 16th century woodcut by Albrecht Dürer, who supposedly never actually saw the beast, drawing it from a description in a letter. (If true, he did a damned fine job.) It was the first image of a rhino to appear in Europe since the classical period. The animal itself was a present from King Muzaffar of Gambay, in India, to King Manuel the Great of Lisbon, sent in 1513 after the Portuguese conquest of Goa. During its confinement in the ship's hold it developed horny excrescences on its body – these were taken as natural rhino features for the next 200 years.

Note the tiny spiral horn on the shoulders, interesting in the light of the links between rhinos and unicorns (and, a little tortuously, barbers' poles).

Sadly, this Renaissance rhino died in a storm off Genoa while being shipped to the Vatican as a (King-to-Pope hand-me-down) present for Leo X. All hands were lost but the carcass, drifting ashore, was recovered, stuffed and sent on to Rome anyway. Does it lurk there still, in some obscure vault hidden deep beneath St Peter's?

Our illustration is of Gesner's 1551 copy of Dürer's work.



Exhibition of a Rhinoceros at Venice (1751) by Pietro Longhi © The National Gallery

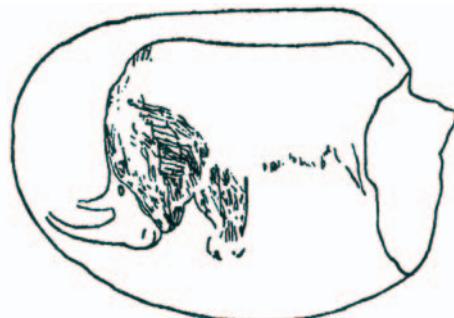
A number of Asiatic rhinos reached Europe over the next couple of centuries, inspiring poets and painters, amazing rulers and ruled alike. Longhi's picture shows a small audience of 18th century Venetians dressed for the city's annual carnival, when evenings might be spent dancing, gambling or making amorous liaisons and the days passed watching acrobatic displays or visiting wild beast shows, such as the one depicted in the painting.

The 'wild beast' is Clara, the fifth member of her species to be imported from India to Europe since the fall of the Roman Empire. Acquired by a Dutch sea captain in 1741, she toured the cities of Europe for 16 years and was 'tame as a lamb.....(running) round the tables of Gentlemen and Ladies like a lap-dog'.

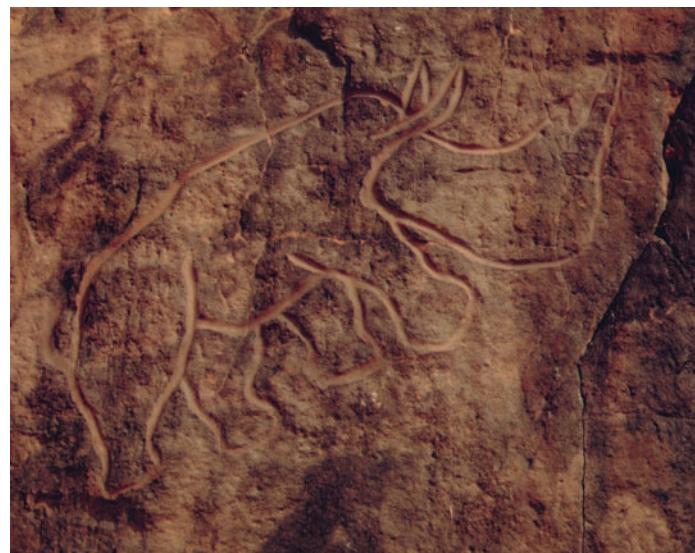
Her triumphant arrival in Paris sparked an outbreak of rhinomania, and modish ladies wore their hair à la rhinocéros.

Behind, Clara's keeper brandishes her horn, not cut off but rather rubbed off against the side of her cage by the rhino herself.

Notice how Longhi has bracketed the animal with a mound of hay at its front end and a pile of faeces at the other.



The engraved pebble, also from France, shows a woolly rhinoceros and is described as *Cro-Magnon*, a race of people who appeared first around 40,000BP.



Photos courtesy of the Bradshaw Foundation

Mankind has, of course, been depicting animals from the dawn of history, and these images from southern France have been dated 31-32,000BP (Before Present). Power exudes from the sparring rivals (or is it courtship?) while the multiple head images capture the speed of movement of a gesturing rhino.

What kind of rhinos are they? Herbert Wendt, in 'Out of Noah's Ark', writes, 'The woolly rhinoceros (*Tichorinus antiquitatis*) was hunted by the Ice Age nomads in the tundras of Europe and Siberia, its cousin the forest rhinoceros (*Coelodonta merckii*) by the men of the warm interglacial periods, and the square-mouthed African rhinoceros (*Ceratotherium simum*) by the aboriginal peoples of the Sahara.' Presumably, these are forest rhinos.

This confidently engraved rhino can be seen at Wadi Mathendous in Libya, one of the most important rock art localities in the Sahara. It is known for numerous engravings of large African fauna and expert consensus puts its date at 6-8,000BP.

'It is interesting to note', writes András Zboray, to whom we are grateful for the use of the image, 'that there are no paintings of rhinos (or elephants) anywhere in the Sahara to my knowledge, only engravings. This implies that by the time the first Saharan paintings appeared (assumed 2-3,000 years after the earliest engravings) these animals were already extinct in the region – on paintings one can only recognise giraffe, ostrich and various antelopes/gazelle.'