

# The Redouté brothers

Masters of scientific  
illustration in Paris

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## ■ King Louis XV's rhinoceros

The storming of the Tuileries Palace in Paris on 10 August 1792 (see previous chapter) was paralleled by the destruction and pillaging of the menagerie in Versailles by revolutionary hordes on that very day since the keeping of animals in confinement was seen as a symbol of royal tyranny (Péquignot 2013: 217). Many animals, quadrupeds as well as birds, were killed, some were eaten while others were passed on to the “swindler”<sup>14</sup>. However, some survived, including an old male rhinoceros (*Rhinoceros unicornis* Linnaeus, 1758) (Péquignot 2013: 217). This animal originated in India and was a gift from Jean-Baptiste Chevalier (1729-1789), the French governor of Chandannagar in West Bengal, to Louis XV (Péquignot 2013: 216). On 22 December 1769 the rhino had been put on board the *Duc de Praslin* and sailed to France where it arrived in the harbour of Lorient in Brittany on 11 June 1770 (Péquignot 2013: 217). After lengthy preparations the animal was put on a specially built cage-carriage and transported at a tremendous cost to Versailles where it arrived on 11 September 1770 (Péquignot 2013: 217). There the rhino was put in a pen measuring 23.4 m by 19.5 m which included a water pond (Rookmaaker 1983: 311) and was to become the object of curiosity for visitors and guests of Versailles. Naturalists included Buffon, who took measurements and recorded that it required about thirty kilograms of food per day. Other interested naturalists included Heinrich Sander (1754-1782), anatomist from Karlsruhe, and Petrus Camper (1722-1789), a physician and zoologist from Groningen University (Rookmaaker 1983: 309).

Four months after the pillaging, Louis-Charles Couturier, the general overseer for Versailles, wrote to Jacques-Henri Bernardin de Saint-Pierre

Citizen, you know that there is in the menagerie of Versailles a rhinoceros which becomes superfluous to this country's needs. I will keep it for you with pleasure according to the order of the minister. I ask you to let me know what will become of it. According to your answer, I will request its sale from the district of Versailles if you do not take it to the Jardin national [in] Paris; someone has already offered me some money for it, but I would rather [prefer] it becomes an object of public instruction in the hands of a philosopher like you<sup>15</sup> (Couturier cited by Hamy 1893: 20).

When Bernardin de Saint-Pierre who was accompanied by Thouin and Desfontaines, travelled to Versailles he realized that the rhino would be

14. Verbatim quote taken from Péquignot 2013.

15. “Citoyen, Vous savez qu’il reste à la ménagerie de Versailles un Rhinocéros qui devient inutile dans ce pays. Je vous le conservois avec plaisir suivant l’ordre du ministre. Je vous prie de me faire savoir ce qu’il deviendra parce que ce sera d’après votre réponse que j’en solliciterai, par un réquisitoire, la vente auprès du directeur du district de Versailles si vous ne le prenez pas pour le jardin national à Paris; on m’en a déjà offert de l’argent; mais j’aimerois que dans les mains d’un Philosophe comme vous, il devienne un objet d’instruction publique” (translation Péquignot).







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*The Amphitheatre  
in the Jardin des  
Plantes*

[pages 164-165]

"Amphithéâtre dans le  
Jardin du Roy". A building  
erected by Edme Verniquet  
on the premises of  
the Jardin des Plantes  
known as amphithéâtre.  
Watercolour on paper by  
Jean-Baptiste Hilaire (1794).  
Paris, Bibliothèque nationale  
de France, RESERVE VE-53  
(F)-FOL, IFN-10303037.  
Credit BnF.

more beneficial to his institution alive rather than stuffed or as a skeleton (Péquignot 2013: 218). In a memorandum to the National Assembly written in January 1793 he strongly urged for the creation of a menagerie in the Jardin des plantes. Owing to their current deliberations on the outcome of the expected judgement of execution on Louis XVI, this parliamentary body did not arrive at any quick decision on the matter of the rhino. They had more important matters to deal with.

The circumstances of the rhino's death remain unclear to the present day, but the most plausible interpretation is an injury to the animal as a consequence of it either having fallen into its pond or possibly it having been wounded by a sabre (Péquignot 2013: 218). The animal seems to have died in Versailles, but precisely when this happened also remains unknown. In any case, the cadaver was transported to Paris, arriving allegedly on 25 September 1793 (Rookmaaker 1983: 312) but it was found to be too massive to be dissected inside the Muséum. The dissection therefore took place outside, under a tent, in front of the doors of Edme Verniquet's Amphithéâtre on the premises of the Muséum. Dogs had to be kept away from the dead rhino day and night (Rookmaaker 1983: 312). First measurements were taken by Daubenton (Rookmaaker 1983: 312), the actual dissection was performed by Jean-Claude Mertrud (1728-1802) (Jaussaud & Brygoo 2004a), the professor of animal anatomy at the Muséum, assisted by the anatomist and physician Félix Vicq d'Azyr (1748-1794) (Jaussaud 2004b) and Daubenton (Péquignot 2013: 218-219). The rarity of the animal made the dissection an event that attracted not only physicians and surgeons but also politicians, among them Charles-Gilbert Romme (1750-1795) and Joseph Lakanal (1742-1845), both members of the committee for public instruction (Péquignot 2013: 219). In the end the carcass was divided into three parts: the skeleton, the skin and the remaining parts. The intestines, an eye, the molars etc. were passed on for pictorial documentation to the illustrators, i.e. Nicolas Maréchal, Pierre-Joseph and Henri-Joseph. They worked on paper and produced a total of forty-nine drawings, partly grisailles, partly watercolours, all of which were probably annotated by Vicq d'Azyr, who also added numbers for individual parts, e.g. the colon and the Appendix, and subsequently integrated them into the *Collection des vélins*<sup>16</sup>. The bulk of the pictorial documentation was done by Pierre-Joseph while Maréchal contributed twelve and Henri-Joseph a single drawing. It is not evident on which criteria the three illustrators divided the work amongst themselves, but one aspect is clear: the rhino's genitals caused the greatest interest and resulted in no less than nine drawings. These, with a single exception, were all done by Pierre-Joseph.

16. Paris, MNHN, BC, CdV, prtfl. 65: f. 22-26, 28-72.



In addition, a moulage of the rhino's penis was taken which has been reported to be untraceable in the Muséum (Rookmaaker 1983: 315). Karl Asmund Rudolphi (1771-1832) of Greifswald University mentioned it as having been a “plaster cast”<sup>17</sup> (Rudolphi 1804: 176) adding that Georges chevalier Cuvier (1769-1832) (Jaussaud 2004b), who followed Mertrud in his position at the Muséum, had shown him the collection of anatomical drawings that were prepared following the dissection. Rudolphi also wondered about the representation of the inner surface of the intestines, which he apparently had never seen before. More relevant is another aspect: Rudolphi refers to Vicq d'Azyr's drawings because the latter had annotated them. This is a good and representative example of a scientist's disregard for the work of the illustrator.

The thirty-seven drawings exemplify the merits of having a team of illustrators at hand who are ready to assist in the documentation of a rare specimen. What was produced by them is the only proof of the inner anatomy of the famous animal which is extant, since not a single organ seems to have been permanently preserved. Considering the poor methods of preservation of the time, this is hardly a surprise. No attempt is made here to follow the subsequent fate of the skeleton and the skin, simply because these parts were not documented by the Redouté brothers. Today the rhino's skeleton is exhibited in the Galerie de Paléontologie et Anatomie comparée<sup>18</sup>, the stuffed specimen with the original skin in the Grande Galerie de l'Évolution<sup>19</sup>, while the drawings are kept in the Bibliothèque centrale, all three collections being part of the Muséum. In our context what is much more relevant is another fact: the 49 drawings remained unpublished, and this turned out to be the fate of many watercolours on vellum that are to be discussed in this chapter.

Compared to a rhino, turtles are unspectacular animals, but at least one specimen was dissected at the Muséum by Mertrud at some time later on. In his autobiography (Becdelièvre-Hamal 1837: 461) Henri-Joseph mentions having produced six anatomical drawings of a turtle. These were also integrated into the Collection des vélins, among them a watercolour on paper depicting the preparation of the larynx, trachea, heart and lung of an unspecified turtle<sup>20</sup>. Several more rare animals may have been dissected at the Muséum and their anatomy recorded by Pierre-Joseph or Henri-Joseph, but evidence for all this still has to be found.

17. “Gipsabguss”.

18. Paris, MNHN, Inv. No. A 7974 (fide Rookmaaker 1983: 315).

19. Paris, MNHN, Inv. No. CG1991-1439 (fide Péquignot 2013: 216).

20. Paris, MNHN, BC, CvD, prtl. 67: f. 160.



## ■ Botanical rarities and well-known plants on vellum

The oldest surviving representation of a rhinoceros in Europe is a mosaic in Sicily dating from Roman times and the first living animal had arrived in the harbour of Lisbon on 20 May 1515 as a gift to Manuel I, King of Portugal (1469-1521) from Muzaffar Shah II of Cambay [now Gujarat, India] (Péquignot 2013: 220). Much more recent introductions than those, however, were three plants to be documented by Pierre-Joseph during the first decade of the new arrangement, i.e. 1794 to 1803. Although



***The colon of Rhinoceros unicornis Linnaeus, 1758***

"Le caecum du rhinocéros, avec une portion du colon et de l'ilium".

The colon of *Rhinoceros unicornis* Linnaeus, 1758 with the ileum.

Grisaille by Pierre-Joseph Redouté, annotations by Vicq d'Azyr (1793).

Paris, Muséum national d'Histoire naturelle, Bibliothèque centrale, Collection des vélins, prfl. 65, f. 40. Credit MNHN.

we now know where they occur in the wild—in southern Brazil, in Japan and on Norfolk Island—it has not yet been elaborated as to how they arrived in Paris. Furthermore, all three plants were misidentified and the annotations added to Pierre-Joseph's watercolours are incorrect, even when taking the taxonomic concepts of the time into account.

*Fuchsia coccinea* Aiton (Onagraceae) is a sprawling ornamental shrub restricted in distribution to the summits of several of the highest mountains of Minas Gerais in Brazil (Berry 1989: 556). When receiving its scientific name, it was recorded as a native of Chile and as having been introduced in