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J.N.S. Allamand's additions (1769–1781) to the *Nouvelle Edition* of Buffon's *Histoire Naturelle* published in Holland

L.C. Rookmaaker
Dokter Guepinlaan 23, 4032 NH Ommeren, The Netherlands

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Abstract

Jean Nicolas Sébastien Allamand (1713–1787), working in Holland, wrote 41 articles about mammals which were not, or only insufficiently, treated by the Count of Buffon in his *Histoire naturelle*. Allamand's contributions first appeared between 1769 and 1781 in various volumes of a French edition of the *Histoire naturelle* published by J.H. Schneider in Amsterdam. These additional articles are analysed to recognize the sources available to Allamand. The new information was mainly derived from animals seen at fairs in Holland, at the inn Blauw Jan in Amsterdam, in the menagerie and museum of Stadholder Willem V near The Hague, in the museum of the University of Leiden, and from observations made in South Africa by R.J. Gordon.

Résumé

Travaillant en Hollande, Jean Nicolas Sébastien Allamand (1713–1787) est l'auteur de 41 articles sur des Mammifères n'ayant pas été traités (ou l'ayant été de manière insuffisante) par le Comte de Buffon dans son *Histoire naturelle*. Les contributions d'Allamand paraissent pour la première fois de 1769 à 1781 dans divers volumes d'une édition en français de l'*Histoire naturelle*, publiée à Amsterdam par J.H. Schneider. Ces articles sont analysés dans le présent travail, dans le but d'en reconnaître les sources d'information. L'information d'Allamand provient surtout d'animaux vus dans des foires en Hollande, à l'auberge de Blauw Jan (Amsterdam), dans la ménagerie et le musée du Stadhouder Willem V (près de La Haye), dans le musée de l'Université de Leyde, ainsi que d'observations faites par R.J. Gordon en Afrique du Sud.

Introduction

In the second half of the 18th century there appeared two books intended to give details about all known animals (and plants): the *Systema Naturae* by Linnaeus (e.g., 10th edition of 1758) and the *Histoire naturelle* by the Count of Buffon. Both provided a framework with which new observations could be compared, creating a stimulus to look for "new" species. Buffon intended to give full descriptions of all known animals, but personally he never proceeded beyond the mammals and birds. The *Histoire naturelle* is bibliographically very complex due to a plethora of formats, editions, translations, and abridgements. When one sees a page reference to a species described by Buffon, it is only with great luck that one is even able to find the name of the animal in the same volume. In this paper I will limit the discussion to three editions, two in French and one in Dutch, to draw attention to the contributions of J.N.S. Allamand (1713–1787).

The first of these editions is the original one, published by the Imprimerie Royale in Paris, which appeared in 15 volumes between 1749 and 1767, followed by seven supplementary volumes between 1774 and 1789. These supplements included a great variety of articles, e.g., contributions by Johann

Reinhold Forster and George Forster (Rookmaaker, 1985), and by Allamand. I will refer to this set as the Paris edition; the pagination is that of the quarto format.

The next edition to be discussed in this paper is the one produced in Holland from 1766 onwards by Jan Herman Schneider of Amsterdam. Only one edition had appeared previously in Holland, published by Pieter de Hondt at The Hague in 1750, but it consisted just of the first three volumes (Tuijn, 1968). Schneider's edition in the French language was called a *Nouvelle Edition* on the title-page. It was edited by Jean Nicolas Sébastien Allamand, professor of natural history at the University of Leiden. The order of the articles is generally similar to the Paris edition, but Allamand changed the sequence when he thought it fitting and he added articles about new or little-known mammals in suitable places within Buffon's text.

The Amsterdam *Nouvelle Edition* was translated into Dutch and this translation was also published by J.H. Schneider of Amsterdam. One would expect this to be a mere translation, but because the volumes appeared a little after those of the French edition, either the editor (Allamand) or the translator (Cornelis van Engelen) changed the sequence and deleted a number of articles because the information was superseded.

In this paper I highlight 41 articles added by Allamand in these Amsterdam editions, many of which later appeared again in the supplements of the Paris edition supervised by Buffon. It gives some insight into the role played by Holland in the discovery of unknown animals and illustrates the kinds of sources from which such new information was obtained.

Life of J.N.S. Allamand

Allamand was born on 18 September 1713 in Lausanne, Switzerland. His first names are variously found in French, Dutch, and Latin, but I use the original French: Jean Nicolas Sébastien. Not much is known about his early life in Switzerland, but he studied theology there. Apparently, he married in the early 1730's and his son, Frederik Allamand, born in 1735, was known for botanical studies (Markgraf & Steiger, 1969).

In 1739, Allamand came to Holland. While working as a private tutor, Allamand lived in the home of Willem Jacob 's Gravesande (1688–1742), professor of mathematics, astronomy, and philosophy at the University of Leiden, who was one of the earliest influential exponents of Newtonian philosophy in Europe. At the same time he may have followed some lectures at the University of Leiden. It is clear from Allamand's publications and translations that he admired the work of 's Gravesande.

Allamand was appointed on 3 March 1747 as Professor of Philosophy at the University of Franeker, Friesland (which existed until 1811). He stayed there for about two years, because in 1749 he returned to Leiden. His inaugural lecture at the University of Leiden "De vero Philosopho" held on 30 May 1749 dealt mostly with the life of 's Gravesande. Allemand gave lectures on a new subject "Selecta ex historia naturali" and as such he was the first professor in Holland to deal specifically with natural history. Allamand mainly dealt with the systematics and external morphology of animals and less with their anatomical structures. His lectures were not particularly brilliant: his Latin was poor, his speech too fast (Van der Klaauw, 1926: 3–5). Nevertheless, he continued until his death on 2 March 1787. He left his widow from his second marriage, Magdalena Crommelyn (or Crommelin), without children from that marriage.

From 24 June 1751, Allamand was also put in charge of the Cabinet of Natural History maintained by the University of Leiden. At that time, this collection was kept in the botanical gardens. Allamand tried to bring together all specimens of natural history which were found in different departments of the university. He made contact with travellers, which resulted in the addition of many exotic animals. After Allamand's death in 1787, his widow donated his private collection of natural history specimens to the university. This collection was already kept in a room behind the main Academy building at the time (Anonymous, 1788). In November 1788, Allamand's widow auctioned his collection of scientific instruments, followed by his books in 1791 (Smit et al., 1986: 5).

During his life, Allamand was well known in Europe. His reputation may be largely based on his ad-

Fig. 1. Portrait of J.N.S. Allamand (photo: Prentenkabinet, University of Leiden).

ditions to Buffon's *Histoire naturelle*. Besides these, he published about 12 translations or new editions of a variety of works and about 10 papers or small original works (see Galama, 1954: 242–246).

The life of Allamand is well treated by Boeles, 1879: 504–507; Galama, 1954: 160–164; Van der Klaauw, 1926: 3–5; and De Waard, 1911. Other sources include: Anonymous, 1788: 13, 1791; Arpots, 1990: 22–23; Blok & Martin, 1914: 19; Van Kampen, 1822: 342–343; Paquot, 1768: 445–448; Siegenbeek, 1832: 203–204; Vriemoet, 1768: 863–864; and Te Water, 1802: 223–224. His portrait is reproduced in Fig. 1.

The Amsterdam editions of the *Histoire naturelle*

The *Nouvelle Edition* of Buffon's *Histoire naturelle*, with the text in French, appeared in 15 volumes plus 7 supplementary volumes between 1766 and 1799. Details about the structure of this set were given by Rookmaaker (1989: 125). The first 15 volumes basically follow the original Paris edition with only few changes. In the entire work, Allamand added 41 articles as treated below. These additions appeared in volume 12 of 1769 (1 addition), 13 of 1770 (1), 14 of 1770 (1), 15 of 1771–1776 (12), Supplement 4 of 1778 (10), and Supplement 5 of 1781 [–1785] (16), listed in Table I.

In two cases, Allamand's articles were also published separately. Three articles appeared together in 1776 with a pagination fitting at the end of volume 15, but there is a title-page which indicates Allamand as the only author (Rookmaaker, 1989: Fig. 79): "Histoire Naturelle du Gnou, du Grand Gerbo, et de l'Hippopotame. Par Mr. Allamand, Professeur en Philosophie, & en Histoire naturelle, à l'Université de Leyde."

Allamand's notes added to Supplement 5 also seem to have been published on their own. The only known title-page of the whole volume is dated 1785. However, from the order book of J.H. Schneider (Rookmaaker, 1980: 26, note 81) and from four remarks by Buffon (Paris, Supplement 6, 1782: 68, 116, 135, 180) it is clear that at least pages 1–60 with Allamand's notes already appeared in 1781. It is difficult to understand how this could have been done without a title-page or without any explanation by the publisher, but neither is known to exist.

The Amsterdam edition in Dutch runs parallel with the Amsterdam edition in French. However, even here in some cases the sequence is changed and some notes are deleted. This edition appeared in 20 volumes (no supplements) between 1773 and 1802, but the last two volumes came from a different publisher.

Tuijn (1966) raised the question whether Allamand wrote in French or in Dutch. It appears that it is most likely that he used French in the first instance and that the Dutch text was always translated from the French. In the Amsterdam editions of Buffon, the notes in Dutch always appeared later

Table I. Index of the 41 articles added by J.N.S. Allamand to three editions of Buffon's *Histoire naturelle.*

No.	French name	Scientific names	Amsterdam edition in French	Amsterdam edition in Dutch	Original edition published in Paris
1	Hippopotame	*Hippopotamus amphibius* Linnaeus, 1758	XII (1769): 28 – 29	absent	Sup. 3 (1776): 304 – 306
2	Giraffe	*Giraffa camelopardalis* (Linnaeus, 1758)	XIII (1770): 17 – 19	XIII (1782): 25 – 28	Sup. 3 (1776): 324 – 330
3	Blanc-Nez	*Cercopithecus petaurista* (Schreber, 1774)	XIV (1770): 141 – 142	XIV (1783): 182 – 184	Sup. 7 (1780): 67 – 71
4	Sanglier d'Afrique	*Phacochoerus aethiopicus* (Pallas, 1766)	XV (1771): 45 – 49	V (1775): 100 – 105	Sup. 3 (1776): 86 – 91
5	Elan, Caribou	*Alces alces* (Linnaeus, 1758)	XV (1771): 50 – 53	XV (1784): 112 – 115	Sup. 3 (1776): 133 – 138
	Renne	*Rangifer tarandus* (Linnaeus, 1758)			
6	Antilope	*Antilope cervicapra* Linnaeus, 1758	XV (1771): 57 – 59	XV (1784): 178 – 181	absent
7	Grimme	*Sylvicapra grimmia* (Linnaeus, 1758)	XV (1771): 60 – 61	absent	absent
8	Gerbo	*Jaculus jaculus* (Linnaeus, 1758)	XV (1771): 62 – 64	XV (1784): 181 – 184	Sup. 6 (1782): 262 – 267
9	Grison	*Galictis vittata* (Schreber, 1776)	XV (1771): 65 – 66	XV (1784): 188 – 189	Sup. 3 (1776): 169 – 171
10	Tapir	*Tapirus terrestris* (Linnaeus, 1758)	XV (1771): 67 – 70	XI (1779): 259 – 263	Sup. 6 (1782): 17 – 23
11	Orangs-Outangs	*Pongo pygmaeus* (Linnaeus, 1760) *Mandrillus sphinx* (Linnaeus, 1758)	XV (1771): 71 – 76	XIV (1783): 39 – 46	Sup. 7 (1789): 6 – 14
12	Palatine	*Cercopithecus diana roloway* (Schreber, 1774)	XV (1771): 77	XIV (1783): 185 – 186	Sup. 7 (1789): 77 – 79
13	Gnou	*Connochaetes gnou* (Zimmermann, 1780)	XV (1776): 113 – 116	XV (1784): 190 – 195	Sup. 6 (1782): 93 – 99
14	Gerboises	*Macropus giganteus* (Erxleben, 1777) *Pedetes capensis* (Forster, 1778)	XV (1776): 117 – 119	XV (1784): 185 – 188	Sup. 6 (1782): 267 – 271
15	Hippopotame	*Hippopotamus amphibius* Linnaeus, 1758	XV (1776): 120 – 126	absent	absent
16	Hyène	*Crocuta crocuta* (Erxleben, 1777)	Sup. 4 (1778): 102	XV (1784): 156 – 157	absent
17	Zèbre	*Equus zebra* Linnaeus, 1758	Sup. 4 (1778): 140 – 141	XII (1781): 26	absent
18	Gazelle à bourse sur le dos	*Antidorcas marsupialis* (Zimmermann, 1780)	Sup. 4 (1778): 142 – 143	XV (1784): 195 – 196	Sup. 6 (1782): 180 – 182
19	Condoma	*Tragelaphus strepsiceros* (Pallas, 1766)	Sup. 4 (1778): 143 – 146	XV (1784): 197 – 201	Sup. 6 (1782): 127 – 133
20	Pasan	*Oryx gazella* (Linnaeus, 1758)	Sup. 4 (1778): 147 – 150	XV (1784): 201 – 205	Sup. 6 (1782): 157 – 163
21	Tzeiran	*Hippotragus leucophaeus* (Pallas, 1766)	Sup. 4 (1778): 151 – 153	XV (1784): 206 – 208	Sup. 6 (1782): 169 – 173
22	Nyl-ghau	*Boselaphus tragocamelus* (Pallas, 1766)	Sup. 4 (1778): 153 – 157	XV (1784): 209 – 213	absent
23	Klip-Das	*Procavia capensis* (Pallas, 1766)	Sup. 4 (1778): 157 – 160	XV (1784): 213 – 216	Sup. 6 (1782): 278 – 282

Table I. Continuation.

No.	French name	Scientific names	Amsterdam edition in French	Amsterdam edition in Dutch	Original edition published in Paris
24	Kinkajou	*Potos flavus* (Schreber, 1774)	Sup. 4 (1778): 160 – 164	XV (1784): 163 – 171	absent
25	Lérot à queue dorée	*Echimys chrysurus* (Zimmermann, 1780)	Sup. 4 (1778): 164 – 166	X (1778): 246 – 248	Sup. 7 (1789): 283 – 288
26	Hippopotame	*Hippopotamus amphibius* Linnaeus, 1758	Sup. 5 (1781): 1 – 8	XII (1781): 45 – 53	Sup. 6 (1782): 68 – 77
27	Rhinocéros	*Diceros bicornis* (Linnaeus, 1758)	Sup. 5 (1781): 9 – 13	XVI (1785): 1 – 7	Sup. 6 (1782): 78 – 84
28	Kwagga	*Equus quagga* Boddaert, 1785	Sup. 5 (1781): 14 – 15	XII (1781): 27 – 29	Sup. 6 (1782): 85 – 88
29	Canna	*Taurotragus oryx* (Pallas, 1766)	Sup. 5 (1781): 16 – 18	XVI (1785): 7 – 10	Sup. 6 (1782): 116 – 121
30	Bubale	*Alcelaphus buselaphus* (Pallas, 1766)	Sup. 5 (1781): 19 – 21	XVI (1785): 10 – 13	Sup. 6 (1782): 135 – 139
31	Taupe du Cap	*Georychus capensis* (Pallas, 1779)	Sup. 5 (1781): 22 – 23	XVI (1785): 13 – 15	Sup. 6 (1782): 251 – 254
32	Taupe des Dunes	*Bathyergus suillus* (Schreber, 1782)	Sup. 5 (1781): 24 – 25	XVI (1785): 15 – 16	Sup. 6 (1782): 256 – 258
33	Cochon de terre	*Orycteropus afer* (Pallas, 1766)	Sup. 5 (1781): 26 – 29	XVI (1785): 17 – 20	Sup. 6 (1782): 230 – 235
34	Gazelles	Bovidae	Sup. 5 (1781): 30 – 32	XVI (1785): 21 – 24	absent
35	Ourebi	*Ourebia ourebi* (Zimmermann, 1783)	Sup. 5 (1781): 33	XVI (1785): 24	absent
36	Ritbok	*Redunca arundinum* (Boddaert, 1785)	Sup. 5 (1781): 34 – 36	XVI (1785): 25 – 27	Sup. 6 (1782): 187 – 191
37	Bosbok	*Tragelaphus scriptus sylvaticus* (Sparrman, 1780)	Sup. 5 (1781): 37	XII (1781): 184	Sup. 6 (1782): 192 – 193
38	Bontebok	*Damaliscus dorcas* (Pallas, 1766)	Sup. 5 (1781): 38 – 40	XVI (1785): 28 – 30	absent
39	Chevreuil des Indes	*Muntiacus muntjak* (Zimmermann, 1780)	Sup. 5 (1781): 41 – 44	XII (1781): 208 – 211	Sup. 6 (1782): 195 – 200
40	Orangs-Outangs	*Pongo pygmaeus* (Linnaeus, 1760) *Hylobates hoolock* (Harlan, 1834)	Sup. 5 (1781): 45 – 48	XIV (1783): 47 – 50	Sup. 7 (1789): 15 – 29
41	Giraffe	*Giraffa camelopardalis* (Linnaeus, 1758)	Sup. 5 (1781): 49 – 60	XIII (1782): 13 – 24	Sup. 7 (1789): 345 – 357

than the same ones in French, even though sometimes this cannot be quite substantiated in those cases where there is a tie of dates.

Allamand's sources

In his 41 additions to Buffon's *Histoire naturelle*, Allamand actually treated 40 mammal species, because four species occur more than once, while four articles refer to two different animals. The majority of these species were little known, to an extent that Buffon in Paris had found no or scant information about them. Still, Allamand included only ten taxa which had not been named earlier and which he (probably) introduced to science for the first time: *Cercopithecus petaurista* (note 3), *Galictis vittata*

(note 9), *Connochaetes gnou* (note 13), *Macropus giganteus* (note 14), *Antidorcas marsupialis* (note 18), *Echimys chrysurus* (note 25), *Equus quagga* (note 28), *Bathyergus suillus* (note 32), *Ourebia ourebi* (note 35), and *Redunca arundinum* (note 36). In the other cases, Allamand contributed on the whole substantially new data.

The additions by Allamand refer to species from all over the world, as appears from the following break-down (this follows Allamand's own indications of locality):

Africa (general):	1, 7, 11, 16
Africa, southern:	2, 4, 13, 14, 15, 17, 18, 19, 20, 21, 23, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 41
Africa, western:	3, 12
America (general):	5
America, North:	8
America, South:	10, 24
Surinam:	9, 25
India:	6, 22, 39, 40
East Indies:	11, 40
Australia:	14

It is not always easy to discover from Allamand's notes exactly where he obtained the information mentioned or who communicated the findings to him. However, I have tried to list below the different sources of information. It must be understood that in some cases Allamand included remarks from more than one source.

1. University of Leiden, Cabinet of Natural History: 1 (present before Allamand's time), and 2, 8, 11, 26, 30, 33, 35, 36, 37 38 (added by Allamand).
2. Allamand's private collection: 3 (alive), 9 (dead).
3. Klöckner's collection: 8, 23, 24 (alive) and 20, 21, 25 (dead).
4. Willem V's museum: 4.
5. Willem V's menagerie: 4, 6, 7, 10, 11, 13, 14, 18, 19, 40.
6. Amsterdam fairs: 5, 10, 16.
7. Amsterdam, Van der Stel: 39.
8. Amsterdam, Blauw Jan: 12, 23.
9. South Africa, R.J. Gordon: 13, 17, 20, 26, 27, 28, 29, 30, 31, 32, 34, 35, 36, 37, 38, 41.
10. England, J. Banks: 14.
11. England, other sources: 17, 22.

Some of these collections or persons which occur only a few times have been discussed in the comments to the appropriate notes. Below I will try to give some information about Allamand's more important sources.

Robert Jacob Gordon (1743–1795)

Born in Holland of Scottish descent, Gorden arrived at Cape Town in 1777 as officer in the Cape garrison and in 1782 he was appointed as commander of the Dutch troops. Besides his military duties, he had a lively interest in the people, animals and plants of the southern part of Africa. He made several expeditions into the far interior regions. Gordon never published his observations, but he left all kinds of notes, journals of the expeditions, and a large collection of drawings (Rookmaaker, 1980; 1989: 60–128; Raper & Boucher, 1988).

It is not known how Gordon came to know Allamand. In 1774, the two men must have met in Leiden, on which occasion Gorden shared some of his discoveries made on his first journey to the Cape of Good Hope in 1772–1773. It is quite likely that Allamand emphasized how much more needed to be known about the African animals and Gordon may have promised to write about his more interesting observations. It is strange that there are no letters sent by either of these men to the other. Gordon always wrote to Hendrik Fagel in Holland, never directly to Allamand. The exact material, consisting of skins, bones, drawings, and notes forwarded by Gordon to Holland, as far as can be reconstructed, was listed and discussed by Rookmaaker (1989: 118–128).

The most important source concerning the activities of Gordon is his collection of drawings preserved at the Rijksmuseum, Amsterdam, known as the *Gordon Atlas*. This collection of 455 maps and drawings, including 254 zoological and 108 botanical ones, was extensively discussed by Rookmaaker (1989: 75–111).

Private collection of J.N.S. Allamand

It is rather surprising to read in the *Algemeene Konst- en Letter-bode* of 11 July 1788 about a cabinet of natural history specimens collected privately

("voor zig afzonderlijk verzameld") by Allamand. There is no clue about its contents or its size. The newspaper stated that the cabinet was placed in a room behind the main building of the University of Leiden even before Allamand's death. His widow endowed the entire collection to the University, which was commemorated in a memorial stone, the Latin text of which was recorded anonymously (1788: 13) and by Te Water (1802: 50). Since that time, Allamand's collection probably was slowly incorporated into the general cabinet of the university. In the additions to Buffon's *Histoire naturelle* we only find two species which belonged to Allamand himself, viz. a living specimen of *Cercopithecus petaurista* (note 3) and a skin of *Galictis vittata* (note 9).

Natural History Cabinet of the University of Leiden

This was an old established collection kept in the ambulacrum of the botanical gardens since the beginning of the 17th century (Van der Klaauw, 1926: 43–44; Smit et al., 1986: 154). Catalogues were prepared from time to time, which show that the number of vertebrates was always rather small. In August 1751, Allamand was given charge of the collection of natural history specimens. They were at the time stored in a room in the botanical gardens, but away from the old collection in the ambulacrum. Thus there was space for the newly acquired cabinet of minerals and other specimens donated by Count Willem Bentinck (1704–1774) and other gifts (Suringar, 1867: 268–269). Allamand arranged the museum, but he was assisted with the usual curatorial tasks by Johannes Le Francq van Berkheij (1729–1812) from 7 May 1753 (Arpots, 1990: 22–23).

A glimpse of the mammals available at that time is found in Allamand's new edition of Brisson of 1762, where he indicated in the text which species were present in Leiden. This collection, as far as it still existed, became part of the Rijksmuseum van Natuurlijke Historie in Leiden, established in 1820 (recently renamed: Nationaal Natuurhistorisch Museum, NNM). A list dated 1 May 1834 of those specimens of mammals and birds still present at that time and transferred to the new museum was quoted in full by Rookmaaker (1989: 124). Dr. C. Smeenk, curator of mammals at the NNM (in litt., 20.8.1991) wrote that none of the old specimens described by Allamand can still be located in the museum, except the Blaauwbok (*Hippotragus leucophaeus*) (cf. note 21).

Amsterdam, Menagerie at Blauw Jan

Blauw Jan was an inn at the Kloveniersburgwal in Amsterdam established around 1675 (Pieters & Mörzer Bruyns, 1988: 197–202; Van Eeghen, 1962). In the courtyard there were some cages to exhibit strange or interesting animals. From 1742 onwards, the place was run by Anthony Bergmeijer (1706/1707–1759), followed by his widow until 1781, although the latter did not own the inn. Some idea of the animals shown at Blauw Jan around 1700 can be had from a manuscript with drawings entitled *Wonderen der Natuur* made by Jan Velten in the possession of the Artis Library, University of Amsterdam. There is much less information available for the third quarter of the 18th century. Allamand mentioned living examples of *Cercopithecus diana* (note 12) and *Procavia capensis* (note 23).

Amsterdam, private collection of J.C. Klöckner

Jacob Christoph Klöckner (sometimes Clöckner), born in 1726 or 1727 in Strasburg, Germany, graduated on 23 July 1764 from the University of Harderwijk. He sailed as ship's captain to the East Indies, after which he settled in Amsterdam (Husson & Holthuis, 1969: 152). His wife Anna Elisabeth Geertruij Lucken died on 18 March 1778, but Klöckner's death is not recorded. His collection was auctioned in 1783 (according to a list by Aernout Vosmaer; see Smit et al., 1986: 144), but a sales catalogue is not known. Klöckner must have had a good private collection and he had some fame in stuffing and mounting mammal (and bird?) specimens. Apparently, Klöckner tried to keep an eye on interesting specimens arriving in Amsterdam and sometimes he wrote about these to people with similar interests, like Allamand.

The Hague, Menagerie and Museum of Stadholder Willem V

The menagerie of the Prince of Orange, Willem V, was located at the Kleine Loo in Voorburg, near The Hague, between 1748 and 1786 (Pieters, 1980; Pieters & Mörzer Bruyns, 1988; Rookmaaker, 1989: 120). The animals mentioned by Allamand in notes 4, 6, 7, 10, 11, 13, 14, 18, 19, and 40 must have been seen there. It is likely that most of these observations were made by Allamand personally. From 1771 onwards, the menagerie was supervised by Aernout Vosmaer (1720–1799). Vosmaer had already been in charge of the prince's museum of natural history specimens from 1752. Allamand (note 4) referred only to one specimen seen in the museum. Probably, Allamand did not want to write about those specimens which might be included in Vosmaer's *Regnum Animale* (1766–1804 and 1767–1805) describing new or little known animals from Prince Willem's menagerie and museum.

The 41 additions by Allamand

In this section I will give details about the 41 additions by J.N.S. Allamand to the *Nouvelle Edition* of Buffon's *Histoire naturelle*. Each note below starts with a serial number, followed by the current scientific name(s) of the species treated. The second line gives the current English name of the animal. The third line gives the title of the article, according to the Amsterdam edition published in French. Then follows the bibliographic reference to the note concerned in the three editions discussed above; i.e., (1) the edition of the *Histoire naturelle* (*Hist. nat.*) published by J.H. Schneider, Amsterdam, in French; (2) the original Paris edition of the *Histoire naturelle* (*Hist. nat.*) edited by Buffon; and (3) the edition published by J.H. Schneider, Amsterdam, in Dutch, with the abbreviated title *Natuurlijke Historie* (*Nat. Hist.*), the translation of (1). Next, there is a note concerning the reason why the note is attributed to Allamand. This is followed by a short "Summary of contents", in which I have tried to highlight the historical data as they were presented by Allamand. Each note ends with "Remarks" concerning the information provided by Allamand. The order of the notes follows chronologically the Amsterdam edition published in French. All volume and page references in these notes are to the French edition published in Amsterdam, unless noted otherwise by the indication "Paris" for the original Paris edition and "Dutch" for the translation published by J.H. Schneider in Amsterdam.

1. *Hippopotamus amphibius* Linnaeus, 1758

(Hippopotamus)
"Addition à la description de l'Hippopotame"

Amsterdam, *Hist. nat.*, XII (1769): 28–29, pl. III.
Paris, *Hist. nat.*, Sup. 3 (1776): 304–306, pl. LXIII.
Amsterdam, *Nat. Hist.* [absent].

The author is identified in a footnote on p. 28 as "M. Allemand [sic], Professeur en Histoire Naturelle à l'Université de Leyden".

Summary of contents. – As Buffon had been unable to find an accurate plate of the Hippopotamus, Allamand added one prepared after a mounted specimen in the collection of the University of Leiden. It had been sent from the Cape of Good Hope about a century earlier. It was described and 30 measurements were given.

Remarks. – The mounted Hippopotamus in the University of Leiden was mentioned in a catalogue of the collection published in 1733: *Catalogue de plus rares & plus curieuses choses qui se trouvent à voir dans la Galerie du célèbre jardin de l'Académie dans la ville de Leide*, as follows: "163. Un Hippopotame, ou Cheval de rivière, nommé par d'autres Vache de Mer, donné par Monsieur le Bourguemaître Brouwer, 1670." This addition is absent from the Dutch translation because by the time when it could have been included, its contents were superseded by note 26 below.

2. *Giraffa camelopardalis* (Linnaeus, 1758)

(Giraffe)
"Description de la Giraffe"

Amsterdam, *Hist. nat.*, XIII (1770): 17–19, pl. I.
Paris, *Hist. nat.*, Sup. 3 (1776): 324–330 [no plate].
Amsterdam, *Nat. Hist.*, XIII (1782): 25–28, pl. I/1.

Allamand is not identified as the author, but it is clear from the text that he was responsible for the contents.

Summary of contents. – The governor of the Cape of Good Hope, Mr. Tulbagh, sent the skin of a young Giraffe from South Africa to the collection of the University of Leiden. The animal had been killed far into the South African interior, which proved that the animal was not peculiar to Ethiopia. Allamand found that its horns were solid like those of a deer, but attached to the skull. He noted that all legs were similar in length; i.e., the front ones were not longer than the hind legs. The skin was described and 35 external measurements were given.

Remarks. – This young Giraffe was captured during an expedition to Namaqualand (the country north of the Orange River) that lasted from June 1761 to April 1762 and was led by Hendrik Hop. On 5 October 1761, a female Giraffe was shot and its young was captured; the latter died five days later. The skin of the calf was preserved and sent by governor Ryk Tulbagh (1699–1771) to Allamand in Leiden (Rookmaaker, 1983: 72; 1989: 291). It was first described and depicted in an unexpected place, in an unsigned paper in a Berlin journal (Anonymous, 1769).

3. *Cercopithecus petaurista* (Schreber, 1774)

(Lesser white-nosed guenon) (Fig. 2)
"Le Blanc-Nez"

Amsterdam, *Hist. nat.*, XIV (1770): 141–142, pl. XIL.
Paris, *Hist. nat.*, Sup. 7 (1780): 67–71 [no plate].
Amsterdam, *Nat. Hist.*, XIV (1783): 182–184, pl. XIL.

The author is identified in a footnote (XIV: 141): "cet article a été fourni par Mr. le Professeur Allamand".

Summary of contents. – Allamand received a living example of this monkey. It had been sent by Mr. Butini from Surinam, but it originally came from Guinea [West Africa]. Allamand commented on its good behaviour and described its characteristics, including the distinctive white nose.

Remarks. – This was the first description of the Lesser white-nosed guenon. Von Schreber (1774, I: 103, 186, pl. XIXB: Der weißnasige Affe, *Simia petaurista*) based his name on this article by Allamand. The identity of Mr. Butini is not clear and we may assume that he was a sailor.

4. *Phacochoerus aethiopicus* (Pallas, 1766)

(Warthog)
"Le Sanglier d'Afrique"

Amsterdam, *Hist. nat.*, XV (1771): 45–49, pl. I.
Paris, *Hist. nat.*, Sup. 3 (1776): 86–91, pl. XI.
Amsterdam, *Nat. Hist.*, V (1775): 100–105, pl. XXIV*.

This note is the first in a section of "Additions de l'éditeur de Hollande" comprising notes 4 to 12.

Summary of contents. – Allamand knew three specimens of the Warthog: (1) a skin sent from the Cape of Good Hope in 1757, of which only the head was preserved; (2) a young specimen sent alive from the Cape of Good Hope by Tulbagh in 1770 and still alive in the menagerie of Willem V; and (3) another sent from the Cape by Tulbagh in 1765. The last one was caught some 200 miles from the Cape. It lived for about one year in the menagerie of Willem V. The specimen of 1765 was described with 13 measurements in a separate section "Description du Sanglier d'Afrique" (pp. 48–49).

Remarks. – The first Warthog shipped from the Cape of Good Hope in 1757 may have been sent by governor Ryk Tulbagh. For some reason it must have been impossible to preserve it in its entirety. Probably, the head was placed in the museum of the Prince of Orange, but the depository is not identified either in this note by Allamand or in a letter on this subject written by P.S. Pallas to Thomas Pennant on 18 January 1766: "I have had the pleasure

to find in a Cabinet the prepared skin of the head of a Boar, with very large tusks, send from the Cape of g.H. by the name of Hard loper, of which I shall give a sketch also" (Urness, 1967: 12).

The young specimen in the menagerie of Willem V that lived from 1770 until at least 1771 is not further described. It is unknown if it was preserved.

The third Warthog mentioned by Allamand was kept in the menagerie of Willem V in 1765–1766. While alive, it was drawn by Aert Schouman (Tuijn & Van der Feen, 1969: 70, fig. 1). All known published plates of this specimen were based on Schouman's drawing, which is preserved in the Artis Library, University of Amsterdam. According to Pallas (1766: 84), the animal injured its keeper in the menagerie, after which it was transferred to the menagerie of Blauw Jan in Amsterdam. Its remains probably went to the prince's museum at The Hague.

5. *Alces alces* (Linnaeus, 1758) and *Rangifer tarandus* (Linnaeus, 1758)

(Elk and Reindeer)
"L'Elan, le Caribou & le Renne"

Amsterdam, *Hist. nat.*, XV (1771): 50–53, pls. II–IV.
Paris, *Hist. nat.*, Sup. 3 (1776): 133–138 [no plates].
Amsterdam, *Nat. Hist.*, XV (1784): 112–115, pls. XII–XIV.

This is the second note in the section with "Additions de l'éditeur de Hollande" (see no. 4).

Summary of contents. – Allamand published three plates illustrating three different species of deer: the Elk, the Caribou, and the Reindeer. Plate II showed the Elk. Buffon (Paris, 1764, XII: 79 ff.) had stated that the European Elk and the American "Orignal" were identical, only differing in size. Dudley (1721) described the "Orignal" as being over ten feet high, while the Elk would be smaller. A female "Orignal" had been sent to the Duke of Richmond by General Carleton, Governor of Canada, in 1766. It was then about one year old, five feet high; it lived about nine or ten months on Richmond's estate at "Goedvoed". The Duke ordered a drawing to be made, which he sent to Allamand who published it on plate II. From another [unidentified] source in Canada, Allamand received the head of an adult "Orignal", of which he recorded four measurements.

Plate III illustrated the American Caribou. This drawing too was provided by the Duke of Richmond, in whose estate the animal lived for several years. This showed that the Caribou and the Reindeer were rather different species.

Plate IV showed a Reindeer seen in 1769 at a fair in Amsterdam. According to its keepers, Captain Bré of Schiedam had seen four of them swimming in the North Sea, some 50 miles off the Dutch coast. He caught two young ones, but one died before arrival in Holland. The surviving animal died four months later while on exhibit in Groningen, The Netherlands. This animal provided the "Description du Renne" (XV: 52–53) with 13 measurements. Petrus Camper (1771, XV: 53–56) described another Reindeer which arrived alive in Groningen on 21 June 1771, but it died some 24 hours later.

Remarks. – Today, the European Elk and the American "Orignal" or Moose are referred to the same species, *Alces alces* (Linnaeus, 1758). Like his predecessor, the third Duke of Richmond (1735–1806) maintained a menagerie on his estate at Goodwood House, Sussex (Keeling, 1985: 61–62). With the help of Sir Guy Charleton, Lord Dorchester (1724–1808), Governor General of Canada from 1766 to 1778 (and again 1786–1796), the Duke was able to import a number of Moose. The first two specimens arrived in 1766 and died in 1767 and 1768. A drawing of one of these was evidently sent to Allamand. A third Moose came to London in September 1770 where it was painted by George Stubbs and described by William Hunter in an unpublished manuscript (Rolfe, 1983).

The American Caribou and the European Reindeer are now considered conspecific, *Rangifer tarandus* (Linnaeus, 1758). The Reindeer shown in Holland in 1769 made the species better known in Europe. Petrus Camper (1722–1789), professor of anatomy at the University of Groningen, saw and drew it just before it expired on 13 February 1770. The Reindeer described by Camper in the "Observations sur le Renne, faites à Groningue" was

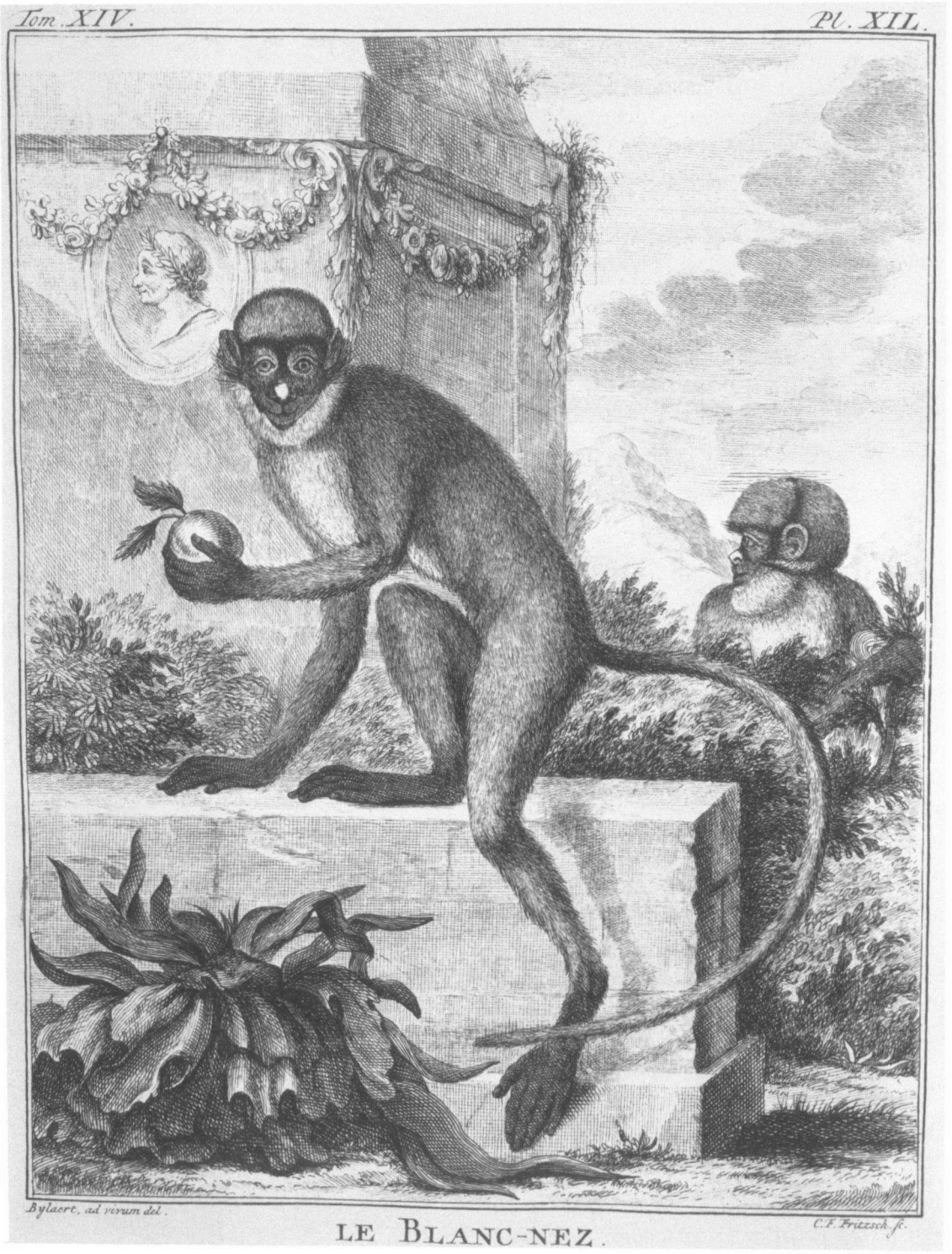

Fig. 2. The "Blanc-nez" (Lesser white-nosed guenon, note 3), type-specimen of *Simia petaurista* Schreber, 1774. Reproduction of pl. XIL in *Histoire naturelle*, Amsterdam, 14, 1770; actual size: 18.8 × 14.3 cm; photo: Louis A. van der Laan, Zoological Museum Amsterdam.

based on a living specimen sent to him by the Ovens brothers of Frederikstad (cf. Visser, 1985: 45, with further analysis of Camper's contributions to the study of the Reindeer). Allamand's plate IV of "Le Renne" was signed in the lower left corner "P.C. ad viv. del.", in which P.C. must stand for Petrus Camper.

6. *Antilope cervicapra* Linnaeus, 1758

(Blackbuck)
"L'Antilope"

Amsterdam, *Hist. nat.*, XV (1771): 57–59, pl. V.
Paris, *Hist. nat.*, [absent].
Amsterdam, *Nat. Hist.*, XV (1784): 178–181, pl. XLVII.

This is the third note in the section with "Additions de l'éditeur de Hollande" (see note 4).

Summary of contents. – As Buffon (Paris, 1764, XII: 102) had only figured the horns of this species from a skeleton in the Cabinet du Roi, Allamand published a plate made after a living specimen seen in Amsterdam. Another pair, from Bengal, had been exhibited in the menagerie of Prince Willem V for some ten years; they had also reproduced. All three animals were described in a separate section "Description de l'Antilope", with 31 external measurements (pp. 58–59).

Remarks. – A pair of Blackbucks was imported into Holland from Bengal in 1755 or 1756 as witnessed by Pallas (1766). These two animals were exhibited in Willem V's menagerie in a paddock shared with a group of Fallow deer. They bred several times, the last young being born in 1765. The male died in 1766, the female several years later (its death is not recorded by Allamand). Plate V is rather poor and does not show the characteristic colours of the head. Buffon (Paris, 1782, Sup. 6, pls. XVIII–XIX) later added some remarks on the species based primarily on the text in Pallas (1766), but strangely he did not refer to Allamand's note discussed here. Buffon's article was repeated in the Amsterdam edition (French, 1785, Sup. 5: 116–118, pls. XXVII–XXVIII; Dutch, 1785, XVI: 93–95), but again there was no reference to Allamand's addition published just a little earlier.

7. *Sylvicapra grimmia* (Linnaeus, 1758)

(Common duiker)
"La Grimme"

Amsterdam, *Hist. nat.*, XV (1771): 60–61, pl. VI.
Paris, *Hist. nat.*, [absent].
Amsterdam, *Nat. Hist.*, [absent].

This is the fourth note in the section with "Additions de l'éditeur de Hollande" (see no. 4).

Summary of contents. – Allamand reported that a number of these antelopes had been shipped to Holland, but only two males arrived safely. One of these lived for a long time in the menagerie of Willem V. It came from the "côtes d'Afrique" [West Africa]. The animal was described and seven external measurements were included. The same specimen had been depicted by Vosmaer (1766) and Pallas (1766, pl. I).

Remarks. – Plate VI of the Common duiker provided by Allamand had been drawn by "I.S. ad viv. del." and engraved by "C.F. Fritsch sc." As noted by Tuijn & Van der Feen (1969: 71), who discussed a number of plates after the specimens in the menagerie of Willem V, "I.S." is a curious mistake, as the artist obviously was Aert Schouman. Allamand's plate differs from those published by Vosmaer and Pallas. Originals by Schouman include a watercolour of 1765 in the Rijksmuseum, Amsterdam, and an indian ink drawing in the Artis Library, University of Amsterdam (see Tuijn & Van der Feen, 1969: 71, fig. 2).

8. **Jaculus jaculus** (Linnaeus, 1758)

(Desert jerboa)
"Le Gerbo"

Amsterdam, *Hist. nat.*, XV (1771): 62–64, pl. VII.
Paris, *Hist. nat.*, Sup. 6 (1782): 262–267, pls. XXXIX, XL.
Amsterdam, *Nat. Hist.*, XV (1784): 181–184, pl. XLVIII.

Fig. 3. The "Grison" (Huron, note 9), type-specimen of *Viverra vittata* Schreber, 1776. Reproduction of pl. VIII in *Histoire naturelle*, Amsterdam, 15, 1771; actual size: 18.8 × 14.9 cm; photo: Louis A. van der Laan, Zoological Museum Amsterdam.

This is the fifth note in the section with "Additions de l'éditeur de Hollande" (see no. 4).

Summary of contents. – Dr. Klöckner of Amsterdam received a living specimen in a shipment from Tunis. Allamand gave an account of its habits in captivity. He had another female skin in the collection of the University of Leiden, of which he took 13 external measurements. The animal was similar, but not identical, to the "Alactaga" described by Gmelin.

Allamand remarked on two much larger "Gerbos", with which Banks and Solander returned from their first voyage of discovery. The results of that journey would only be published much later: "Quant à leurs observations & à leurs découvertes sur l'histoire naturelle, ces savans voyageurs ne les publieront qu'après leur retour d'un second voyage, qu'ils entreprendront au mois de mars prochain."

Remarks. – The identity of this animal is not quite certain. It appears that J.C. Klöckner kept the animal in his own house. It probably was still alive when Allamand wrote his article. No further information about the animals brought home by Banks and Solander is provided here, but see note 14 below.

9. *Galictis vittata* (Schreber, 1776)

(Grison or Huron) (Fig. 3)
"Le Grison"

Amsterdam, *Hist. nat.*, XV (1771): 65–66, pl. VIII.
Paris, *Hist. nat.*, Sup. 3 (1776): 169–171, pl. XXV.
Amsterdam, *Nat. Hist.*, XV (1784): 188–189, pl. L.

This is the sixth note in the section with "Additions de l'éditeur de Hollande" (see no. 4).

Summary of contents. – Allamand only knew one specimen which he received from Surinam. It was described including 22 external measurements.

Remarks. – Allamand's description and plate VIII of the Grison (Fig. 3) were copied by Von Schreber in 1776 (III: 447, 588, pl. CXXIV: Der Grison, *Viverra vittata*) while providing the species with its first scientific name. The specimen shown on the plate is the type-specimen, and "Surinam" is the type-locality (Husson, 1978: 290). Bell (1841) later named a similar animal *Galictis Allamandi*, identical, he wrote, to the "Grison" of Allamand, first published in the 5th [!] volume of the Dutch edition of Buffon. As Allamand's specimen is the type of *Galictis vittata* (Schreber, 1776), *G. allamandi* should be regarded as a synonym of *G. vittata* (cf. Husson, 1978: 295).

10. *Tapirus terrestris* (Linnaeus, 1758)

(Brazilian tapir)
"Le Tapir"

Amsterdam, *Hist. nat.*, XV (1771): 67–70, pls. IX–X.
Paris, *Hist. nat.*, Sup. 6 (1782): 17–23, pl. I.

Amsterdam, *Nat. Hist.*, XI (1779): 259–263, pls. XLIV–XLV.

This is the seventh note in the section with "Additions de l'éditeur de Hollande" (see no. 4).

Summary of contents. – Captive tapirs were rare. One was known to have been exhibited in Amsterdam in 1704, as "Cheval marin", of which a few drawings were known. In 1771, "depuis quelques semaines", two specimens came to Holland from South America. The male was placed in the menagerie of Willem V. It was depicted on plate IX and described including 11 measurements. The female was exhibited by a travelling menagerie in a number of towns. Its likeness was given on plate X. Allamand did not see the female, but nevertheless he gave a description with 23 measurements provided by "une personne qui s'intéresse à toute ce qui peut contribuer à la perfection de notre édition."

Remarks. – The identity of the person who provided details about the female specimen in the travelling menagerie is unknown. It could have been J.C. Klöckner, but one wonders why he remained anonymous in this instance.

11. *Pongo pygmaeus* (Linnaeus, 1760) and *Mandrillus sphinx* (Linnaeus, 1758)

(Orang-utan and Mandrill)
"Les Orangs-Outangs"

Amsterdam, *Hist. nat.*, XV (1771): 71–76, pls. XI–XII.
Paris, *Hist. nat.*, Sup. 7 (1789): 6–14 [no plate].
Amsterdam, *Nat. Hist.*, XIV (1783): 39–46, pl. I/3.

This is the eighth note in the section with "Additions de l'éditeur de Hollande" (see no. 4).

Summary of contents. – Allamand supposed that Buffon (Paris, 1766, XIV: 23) had not yet discussed all existing kinds of large monkeys, because Allamand possessed the head and leg of a supposedly unknown species, the face of which was covered with long black hairs. Dr. Vink of Amsterdam received the hand of a "red man" from Batavia, Java. This specimen was described and illustrated (pl. XII). It could belong to the "Orang outang" known from travellers like Bontius. Allamand had written to Mr. Relian in Batavia to obtain a complete specimen of this monkey. He received a reply on 15 January 1770 which included some observations on two animals which had been taken alive to Europe in 1759 by Mr. Pallavicini. Allamand doubted that they arrived safely in Europe, certainly they never passed through Holland.

Did similar apes exist in Africa? Allamand quoted some observations communicated by Mr. May, "capitaine de haut bord au service de la Province de Hollande." One of his sailors, while visiting "les côtes de Guinée", bought a young monkey without a tail, about one foot high, supposedly caught in Benin. Later, Mr. May saw a similar animal in Paramaribo, Surinam. This monkey had been caught in West Africa, but had been kept in captivity in Surinam for about 20 years before it died that year [1770?]. He provided the following description:

> "Il n'avoit point de queue; son corps étoit couvert d'un poil brun, mais qui étoit assez peu touffu sur la poitrine pour laisser voir la peau, qui étoit bleuâtre. Il n'avoit point de poil à la face; son nez étoit extrèmement large & plat, & d'un très beau bleu; ses joues étoient sillonées de rouge sur un fond noirâtre: ses oreilles ressembloient à celles de l'homme; ses fesses étoient nues & sans callosités; c'étoit un mâle, & il avoit les parties de la génération d'un rouge éclatant" (p. 74).

Allamand suggested that this description could apply to the Mandrill of Buffon (Paris, 1766, XIV: 73) except for the absence of the tail.

Another monkey without a tail was sent by Mr. Relian (from Java) which was illustrated in plate XI. It was a male covered with red hair of two inches length, but the hairs on the hands, feet, and lower lip were shorter, and the buttock and face were nude. Although his correspondent named it "orang-outang", it appeared to differ from monkeys with that name discussed by Tulpius and Buffon.

Remarks. – Allamand's article reflected the confusion about the different species of apes living in Africa and Asia. It is likely that his specimens sent from Java belonged to the Orang-utan (*Pongo pygmaeus*). He mentioned the following material:

Fig. 4. The "Palatine" (Diana monkey, note 12), type-specimen of *Simia roloway* Schreber, 1774. Reproduction of pl. XIII in *Histoire naturelle*, Amsterdam, 15, 1771; actual size: 18.8 × 15.0 cm; photo: Louis A. van der Laan, Zoological Museum Amsterdam.

1. The head and leg of a monkey, probably preserved in the collection of the University of Leiden. Allamand did not inform us about its provenance or how he thought it fitted into the existing classification.

2. A hand sent from Java to Dr. Vink (i.e., Hendrik Vink, 1740–1805), since 1763 lecturer of anatomy and surgery at Rotterdam (Smit et al., 1986: 289). It may be assumed that this object was preserved in Vink's private collection. It was shown on Allamand's plate XII. Some comments on this hand described by Allamand were provided by Petrus Camper (1782: 91–103) in an appendix entitled "Aanhangzel over de hand, welke de Hoog Gel. Heer Allamand gevoegd heeft bij de Amsterdamsche uitgaave van de Natuurlijke Historie van de Graave de Buffon" (Appendix about the hand which Prof. Allamand added to the Amsterdam edition of the Natural History by the Count of Buffon).

3. A complete monkey in alcohol sent from Java by Mr. Relian. It was depicted on Allamand's plate XI. The length and colour of the hair, as well as the provenance, would indicate the Orang-utan. The specimen probably was kept in the collection of the University of Leiden. I am unable to trace the identity of Mr. Relian stationed in Java.

4. Two animals taken alive to Europe in 1759 by Pallavicini, another unknown name. We can share Allamand's doubt about their safe arrival in Europe, as no more is heard about them.

The West African monkey described from a specimen kept in captivity in Surinam belongs to the Mandrill, *Mandrillus sphinx* (Linnaeus, 1758).

12. *Cercopithecus diana* Linnaeus, 1758

(Diana monkey) (Fig. 4)
"La Palatine, ou le Roloway"

Amsterdam, *Hist. nat.*, XV (1771): 77, pl. XIII.
Paris, *Hist. nat.*, Sup. 7 (1789): 77–79, pl. XX.
Amsterdam, *Nat. Hist.*, XIV (1783): 185–186, pl. XL*.

This is the ninth and last note in the section with "Additions de l'éditeur de Hollande" (see no. 4).

Summary of contents. – A specimen of the "Roloway" was sent from "des côtes de Guinée" [West Africa] and exhibited alive in the menagerie of Mr. Bergmeijer. A second one was received a little later at the same place. They were described and one was illustrated on pl. XIII.

Remarks. – These specimens were kept in the menagerie Blauw Jan in Amsterdam. This description by Allamand was used by Von Schreber (1774, I: 186, pl. XXV) in his description of *Simia roloway*, now still recognized as the eastern subspecies of the Diana monkey, *Cercopithecus diana roloway* (Schreber, 1774).

13. *Connochaetes gnou* (Zimmerman, 1780)

(White-tailed gnou or Black wildebeest)
"Le Gnou"

Amsterdam, *Hist. nat.*, XV, part 2 (1776): 113–116, pl. XIV.
Paris, *Hist. nat.*, Sup. 6 (1782): 93–99, pl. IX.
Amsterdam, *Nat. Hist.*, XV (1784): 190–195, pl. LI.

The author is mentioned in a footnote on p. 113: "par Mr. le Professeur Allamand," and also identified on the title-page of this part of the volume.

Summary of contents. – Allamand received a drawing of this animal from the Cape of Good Hope, engraved as pl. XIV. He earlier doubted the animal's reality, but its existence was confirmed by Capt. Gordon who travelled in the Cape interior. Gordon brought the skins of two heads to Holland, one of which was preserved in the collection of the University of Leiden. About the same time, one such animal was received alive in the menagerie of Willem V. The name "Gnou" was taken from the Hottentot language as communicated by Gordon. The species was described with measurements taken from the one in the menagerie.

Remarks. – R.J. Gordon returned with this information and the two wildebeest specimens from his first journey to South Africa in 1774. The wildebeest in the menagerie of Willem V probably was the first one ever to come to Europe alive; it was received in June 1774 and described by Vosmaer in 1784 (Tuijn & Van der Feen, 1969: 75; Rookmaaker, 1989: 293).

14. *Macropus giganteus* (Erxleben, 1777) and *Pedetes capensis* (Forster, 1778)

(Eastern grey kangaroo and Springhare)
"Addition à l'histoire des gerboises"

Amsterdam, *Hist. nat.*, XV, part 2 (1776): 117–119, pl. XV.
Paris, *Hist. nat.*, Sup. 6 (1782): 267–271 [no plates].
Amsterdam, *Nat. Hist.*, XV (1784): 185–188, pl. XLIX.

The author is not identified explicitly in the text, but Allamand's name appears on the (sometimes absent) title-page of this part of the work (illustrated by Rookmaaker, 1989: fig. 79).

Summary of contents. – In an earlier article [no. 8], the return of Mr. Banks with two larger gerbos had been mentioned. More could now be added because a depiction of the animal appeared in the official account of Cook's first voyage, and because Allamand saw the skin: "Cet animal, dont Mr. Banks a eu la bonté de me faire voir la dépouille" (p. 117). The main difference from other kinds of gerbo was in the number of toes, as stated by Parkinson (1773: 145–146), this one having five front toes and four hind toes. Allamand gave the following short description:

> "Comme c'étoit un jeune, qui n'étoit pas encore parvenu à toute sa grandeur, il ne pesoit que trente huit livres. Sa tête, son cou & ses épaules étoient fort petites en comparaison des autres parties de son corps: ses jambes de devant avoient huit pouces de longueur, & celles de derrière en avoient vingt-deux ... Tout son corps étoit couvert d'un poil gris de souris foncé, excepté à la tête & aux oreilles, qui avoient quelques ressemblance à celles d'un lièvre" (p. 117).

Secondly, Allamand described another kind of "Gerbo" brought from the Cape of Good Hope by Mr. Holst, as communicated by Klöckner. The animal was caught on the Sneeuwbergen. The Dutch called it "aardmannetje" or "springende haas". It was then given to the menagerie of the Prince. This species was described with ten external measurements and illustrated on pl. XV.

Remarks. – It is interesting that Allamand apparently had been able to study Banks' kangaroo in person. There is no actual evidence that Allamand ever visited England. The animal's weight (38 lbs.) was also recorded in the journal kept by Banks during the voyage for one of the smaller specimens. However, his description does not add much to the complicated arguments concerning the identity of the kangaroos seen and collected by Banks on Cook's first journey on 14 July 1770 at the Endeavour River, Queensland. The (inconclusive) evidence has been discussed by Carr (1983) and Wheeler (1986: 33–35). For purposes of nomenclature, Banks' kangaroo was identified as the Eastern grey kangaroo, *Macropus giganteus* (Erxleben, 1777).

The South African "Gerbo" clearly was a Springhare, *Pedetes capensis*. The specimen imported in 1775 and exhibited in the menagerie of Willem V probably was the first that became known, and Allamand's description is the first ever

printed (Rookmaaker, 1989: 303). Forster's first description, however, was based on a different specimen (Rookmaaker, 1985: 210).

15. *Hippopotamus amphibius* Linnaeus, 1758

(Hippopotamus)
"Addition à l'histoire de l'Hippopotame"

Amsterdam, *Hist. nat.*, XV, part 2 (1776): 120–126, pl. [XVI].
Paris, *Hist. nat.* [absent].
Amsterdam, *Nat. Hist.*, [absent].

As in note 14, the author is only identified on the title-page of this part of the work.

Summary of contents. – Allamand received two Hippopotamus skins from the Cape of Good Hope, an adult and a young. They were mounted by Klöckner and preserved in the natural history museum of Willem V. The animals had been killed near the Sneeuwbergen by Charles Marais, "un paisan, François d'origine". The skin and dentition were described, and six measurements of the teeth and hairs were included. To this were added some general remarks by Gordon on the habits and the distribution of the Hippopotamus in the southern part of Africa.

Remarks. – Gordon's observations should relate to his first visit to South Africa in 1773–1774. Charles Marais was a Dutch farmer who in 1774 was living near the Sneeuwbergen (Raper & Boucher, 1988: 108). It is not clear who was responsible for sending the specimens to Holland.

Allamand's plate was criticized by Sparrman (1783: 694–695) who probably referred to this plate. Gordon's remarks about this passage were given in a footnote by Sparrman (1977: 213).

16. *Crocuta crocuta* (Erxleben, 1777)

(Spotted hyena)
"Addition à l'article précédent" [= Addition à l'article de l'Hyène, de la Civette & de la Genette].

Amsterdam, *Hist. nat.*, Sup. 4 (1778): 102, pl. XLIV.
Paris, *Hist. nat.* [absent].
Amsterdam, *Nat. Hist.*, XV (1784): 156–157, pl. XXXVIII.

Allamand is identified as the author in a footnote.

Summary of contents. – Instead of the plate given by Buffon, Allamand included one of a hyena exhibited in Holland. The animal was greyish with black spots. It was quite tame and allowed children to play with it. Gordon had informed Allamand that hyenas were common around the Cape of Good Hope; he killed 150 of them in the course of four years.

Remarks. – Allamand did not mention where the tame hyena was kept, so it may have been in the menagerie Blauw Jan in Amsterdam or in a travelling menagerie. The plate shows a Spotted hyena and must have been drawn after the living animal.

17. *Equus zebra* Linnaeus, 1758

(Mountain zebra)
"Addition à l'article du Zèbre"

Amsterdam, *Hist. nat.*, Sup. 4 (1778): 140–141.
Paris, *Hist. nat.* [absent].
Amsterdam, *Nat. Hist.*, XII (1781): 26.

The author of this and the following notes (17–25) is identified in a footnote on p. 140: "Cette addition & les suivantes sont de Mr. le Professeur Allamand."

Summary of contents. – Mylord Clive brought a female zebra from the Cape of Good Hope to England. He attempted to cross it with a donkey, which only succeeded after he painted the zebra to resemble a donkey. The foal looked like the mother. This provided proof that zebras belonged to the donkeys ("l'espèce de l'âne"). Allamand added that Buffon erroneously asserted that the chariot of the Prince of Orange was drawn by zebras. The menagerie never possessed a number of zebras simultaneously and had none at the present time. Gordon provided the information that in South Africa zebras lived in herds far in the Cape interior. He once saw 50 together, but was unable to shoot one.

Remarks. – The identity of the zebras mentioned by Allamand is uncertain, as the text does not provide any clues. The present identification is based on the plate LIX of "Le Zèbre femelle". This note is not found in the same form in the Paris edition of the *Histoire naturelle*, although Buffon (Paris, 1782, Sup. 6: 40–41) recorded the same information according to a letter by Allamand to Daubenton dated "Leyde, 21 mars 1777". Buffon added (following a letter from Mr. Pitt) that Clive kept the female zebra at his countryhouse in "Clennom"; it died in 1778.

18. ***Antidorcas marsupialis*** (Zimmermann, 1780)

(Springbuck) (Figs. 5, 6)
"Addition à l'article des Gazelles . . .: La Gazelle à bourse sur le dos."

Amsterdam, *Hist. nat.*, Sup. 4 (1778): 142–143, pl. LX.
Paris, *Hist. nat.*, Sup. 6 (1782): 180–182, pl. XXI.
Amsterdam, *Nat. Hist.*, XV (1784): 195–196, pl. LII.

This is the second note in this volume by Allamand (see note 17).

Summary of contents. – Captain Gordon returned to the Cape of Good Hope in the previous year [1777] and he promised to send his observations on natural history. Returning from his last visit [in 1774], he donated to the menagerie of Willem V a living example of a new kind of antelope, "la seule qui fut restée en vie d'une douzaine qu'il avoit amenée avec lui." It died a few months after arrival. It was described and illustrated on a plate, which was commissioned by "Mr. J. Temminck, receveur de la Compagnie des Indes."

Remarks. – R.J. Gordon returned to South Africa in June 1777. On 30 July 1774 he had given a Springbuck to the menagerie of Willem V. It is curious that Allamand asserted that it survived only for a few months, as other sources indicated its death as late as 1777 (Rookmaaker, 1989: 61). This was the first Springbuck ever seen in Europe and Allamand was the first to notice the species in print. Zimmermann's name *Antilope marsupialis* was based solely on this article by Allamand. Plate LX "La Gazelle à bourse sur le dos" evidently was first made for Jacob Temminck (1748–1822), treasurer of the Dutch East India Co., who had a large private museum of birds and other animals.

19. ***Tragelaphus strepsiceros*** (Pallas, 1766)

(Greater kudu)
"Addition à l'histoire du Condoma ou du Coedoe"

Amsterdam, *Hist. nat.*, Sup. 4 (1778): 143–146, pl. LXI.
Paris, *Hist. nat.*, Sup. 6 (1782): 127–133 [no plate].
Amsterdam, *Nat. Hist.*, XV (1784): 197–201, pl. LIII.

This is the third note in this volume by Allamand (see note 17).

Summary of contents. – One living kudu had been brought to Holland in 1776. It was first shown in Amsterdam, where a drawing was commissioned by Mr. Schneider and where Klöckner observed it. Then it was kept in the menagerie of the Prince of Orange, where Allamand often saw it, but it died before he could make a good description. The animal was described including eleven external measurements. Klöckner had also seen several other skins "diverses peaux", differing in the length of the stripes on the body and in the absence or presence of a beard. The latter could constitute a specific difference, although Klöckner supposed that it was caused in the process of mounting the specimens.

Remarks. – The kudu in the prince's menagerie was sent from the Cape of Good Hope by its Governor, J. van Plettenberg, arriving on 22 September 1776; it died three months later (Vosmaer, 1783). The beard is present in males, absent in females. Mr. Schneider in Amsterdam probably was J.H. Schneider, the publisher of the Holland editions of Buffon's work. The plate LXI was copied from the drawing which he commissioned while the animal was awaiting transport in Amsterdam.

20. ***Oryx gazella*** Linnaeus, 1758

(Gemsbok or Oryx)
"Addition à l'article du Pasan"

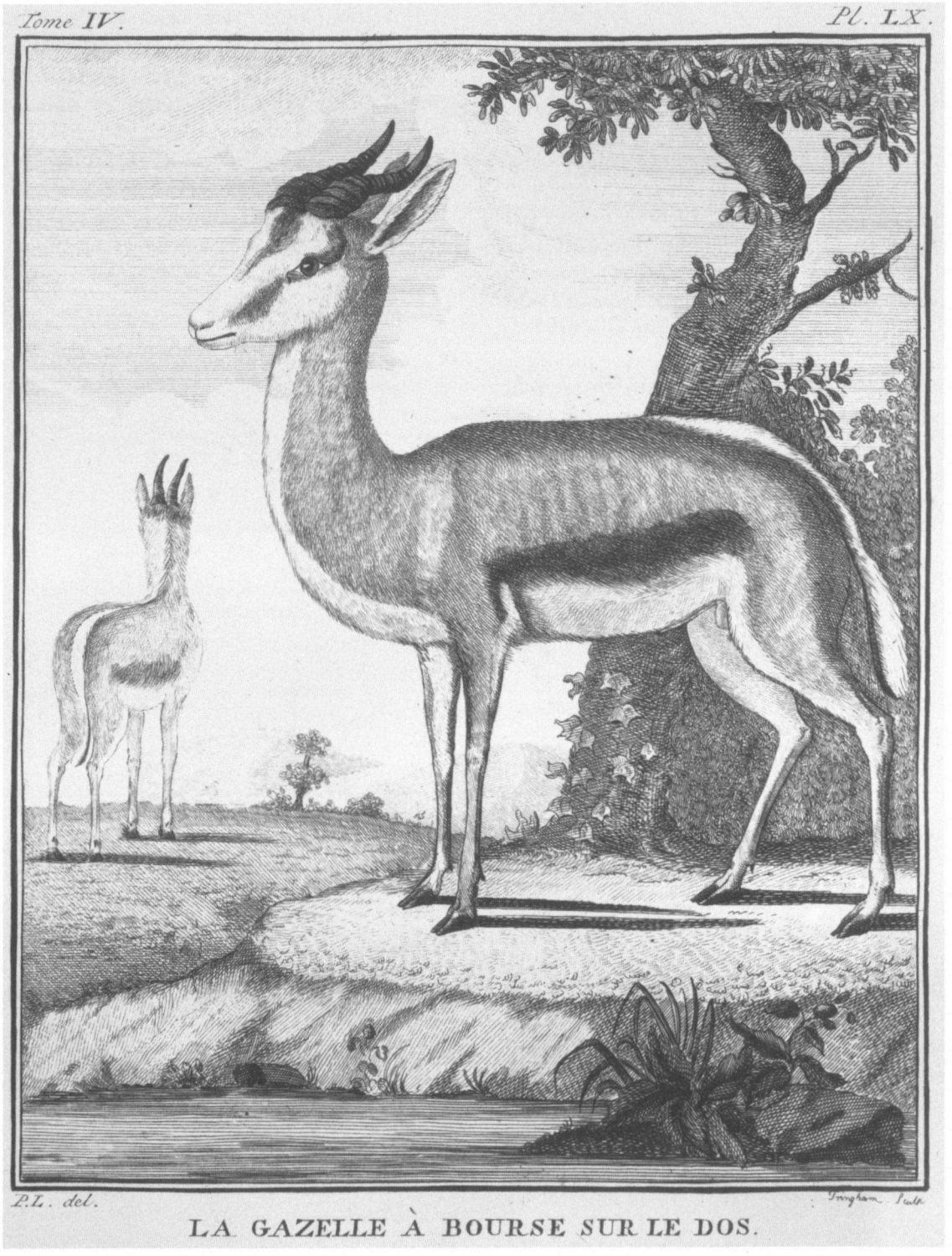

Fig. 5. The "Gazelle à bourse sur le dos" (Springbuck, note 18), type-specimen of *Antilope marsupialis* Zimmermann, 1780. Reproduction of pl. LX in *Histoire naturelle*, Amsterdam, Sup. 4, 1778; actual size: 18.6×14.7 cm; photo: Louis A. van der Laan, Zoological Museum Amsterdam.

Amsterdam, *Hist. nat.*, Sup. 4 (1778): 147–150, pl. LXII.
Paris, *Hist. nat.*, Sup. 6 (1782): 157–163, pl. XVII.
Amsterdam, *Nat. Hist.*, XV (1784): 201–205, pl. LIV.

This is the fourth note in this volume by Allamand (see note 17).

Summary of contents. – Allamand reviewed older sources about the horns of the "Pasan" present in various European collections. There were many discrepancies in these descriptions. Klöckner had bought a complete skin of this species, which he mounted. It had been sent from the Cape of Good Hope. The same animal had also been seen by Gordon, a few of whose observations were included. Klöckner's skin was described, with 16 external measurements. The plate was made from this skin.

Remarks. – Plate LXII of the Gemsbok was drawn after the skin bought by Klöckner. It is not stated where Klöckner kept the specimen, so we may assume that it was in his own private collection.

21. *Hippotragus leucophaeus* (Pallas, 1766)

(Blue antelope or Blaauwbok)
"Addition à l'article du Tzeiran"

Amsterdam, *Hist. nat.*, Sup. 4 (1778): 151–153, pl. LXIII.
Paris, *Hist. nat.*, Sup. 6 (1782): 169–173, pl. XX.
Amsterdam, *Nat. Hist.*, XV (1784): 206–208, pl. LV.

This is the fifth note in this volume by Allamand (see note 17).

Summary of contents. – Klöckner found the skin "dans la boutique d'un marchand". He mounted it and had it drawn, after which it became part of the "riche Cabinet d'Histoire naturelle, que feu Mr. J.C. Sylvius van Lennep, Conseiller & Echevin de la ville de Harlem, a laissé par Testament à la Société hollandoise des Sciences, établie dans la dite ville" (p. 152). The specimen probably came from the Cape of Good Hope. It was described with 15 external measurements.

Remarks. – The skin described here was selected the lectotype of the extinct Blaauwbok, *Hippotragus leucophaeus* by Husson & Holthuis (1969). The collection of J.C. Sylvius van Lennep (1746–1776) in Haarlem, Holland was bequeathed to the Hollandsche Maatschappij der Wetenschappen in Haarlem in December 1776 (cf. Rookmaaker, in press). On 15 April 1842 a number of museum specimens were auctioned, at which time the Blaauwbok skin was bought by H. Schlegel for the Rijksmuseum van Natuurlijke Historie, Leiden, where it still is kept (Husson & Holthuis, 1975). The plate LXIII of "Le Tzeiran" shows the same specimen.

22. *Boselaphus tragocamelus* (Pallas, 1766)

(Nilgai)
"Le Nyl-Ghau"

Amsterdam, *Hist. nat.*, Sup. 4 (1778): 153–157, pl. LXIV.
Paris, *Hist. nat.*, [absent].
Amsterdam, *Nat. Hist.*, XV (1784): 209–213, pl. LVI.

This is the sixth note in this volume by Allamand (see note 17).

Summary of contents. – The first specimens of this animal were sent from Bombay to Mylord Clive in England in 1767; these reproduced each year. Another two were given to the Queen of England who gave permission to Mr. Hunter to study them at home. Allamand never saw this antelope alive and he based his article on the description provided by Hunter. He gave details about the external characteristics, and about some of its habits in captivity, closing the paper with a list of eleven measurements. The species would inhabit the northern part of India, "près du pays de Cachemire" [Kashmir in N.W. India]. The Persian name Nyl-ghau means "blue ox".

Remarks. – Without personal knowledge of the Nilgai, Allamand based his description solely on the paper by William Hunter (1772) on two "nyl-ghau" transported from India by a Mr. Sullivan and then presented to the English Queen. Neither Hunter nor Allamand realized that a male Nilgai brought from "Bengal" in the early 1740's had been mentioned and illustrated by James Parsons (1745). The latter paper was the source for the first name of the species, *Antilope Trago Camelus*,

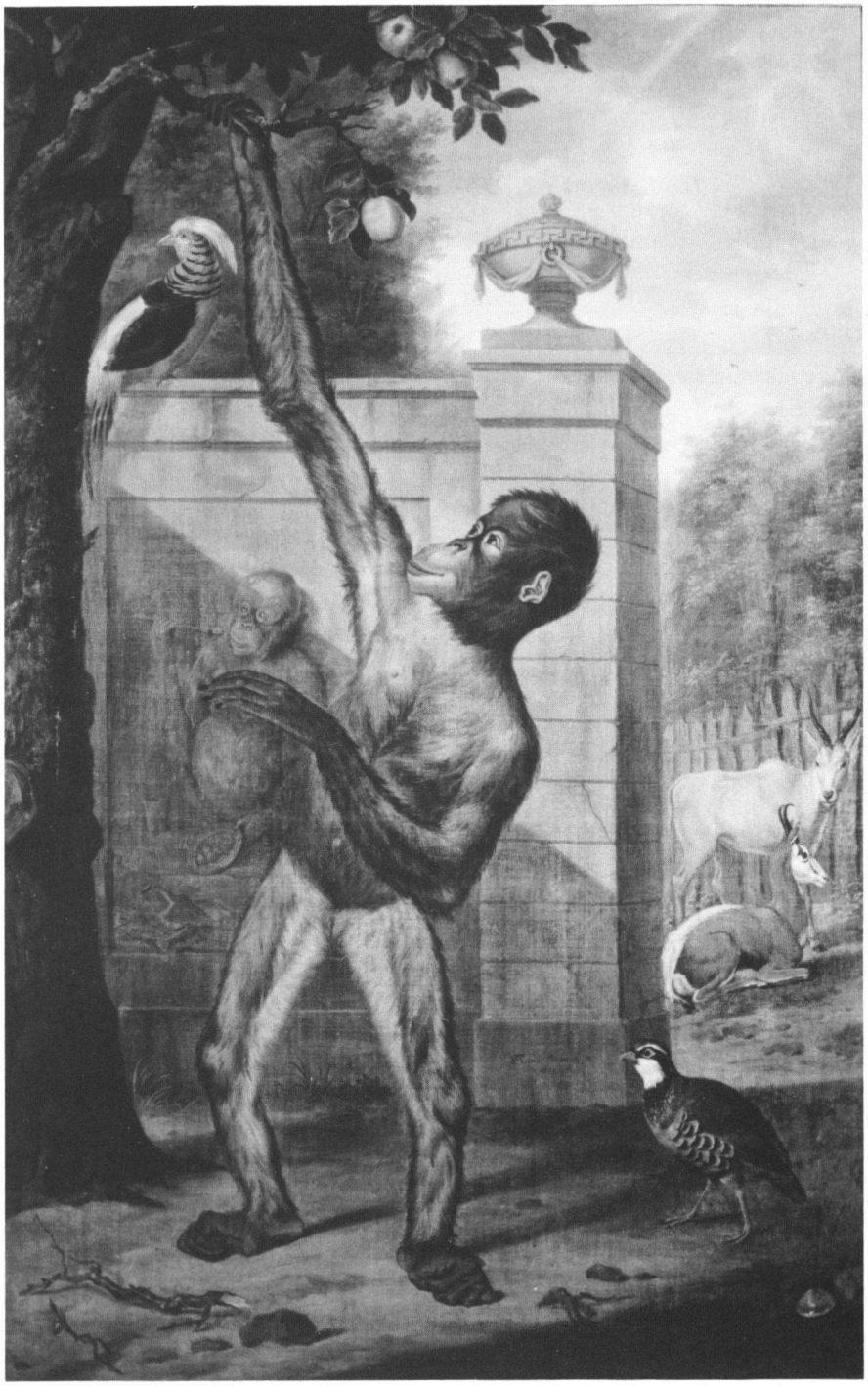

Fig. 6. Painting by Tethart Philipp Christian Haag of an Orang-utan and Springbuck in the menagerie of Willem V in 1777 (Rijksmuseum Paleis Het Loo, Apeldoorn, on semi-permanent loan from Koninklijk Kabinet van Schilderijen (Mauritshuis), The Hague; actual canvas size: 174 × 110.5 cm; photo: Arnold Meine Jansen, Baarn).

provided by Pallas (1766: 5). Plate LXIV of the "Nyl-ghau male" was signed only by the engraver Tringham. Hunter's paper was illustrated by a similar plate drawn by George Stubbs and engraved by James Basire.

23. *Procavia capensis* (Pallas, 1766)

(Cape hyrax or Rock dassie)
"Le Klip-Das"

Amsterdam, *Hist. nat.*, Sup. 4 (1778): 157–160, pl. LXV.
Paris, *Hist. nat.*, Sup. 6 (1782): 278–282, pl. XLII.
Amsterdam, *Nat. Hist.*, XV (1784): 213–216, pl. LVII.

This is the seventh note in this volume by Allamand (see note 17).

Summary of contents. – A specimen was seen alive in the menagerie Blauw Jan. This was the second "Klip-das" seen there. It came from the Cape of Good Hope. It was described following observations made by Klöckner.

Remarks. – According to the caption, plate LXV of the "Klipdas" was drawn by Bergmeijer, the owner of the menagerie Blauw Jan in Amsterdam.

24. *Potos flavus* (Schreber, 1774)

(Kinkajou)
"Addition à l'article du Kinkajou, ou le Poto"

Amsterdam, *Hist. nat.*, Sup. 4 (1778): 160–164, pl. LXVI.
Paris, *Hist. nat.* [absent].
Amsterdam, *Nat. Hist.*, XV (1784): 163–171, pls. XLII, XLIII.

This is the eighth note in this volume by Allamand (see note 17).

Summary of contents. – A living specimen had been kept for more than two years by Klöckner in his house. It had come from "la colonie des Berbices" [in present Guyana]. It was described and 22 external measurements were added.

Remarks. – The Kinkajou had earlier been described and illustrated after a specimen in the menagerie of Willem V by Vosmaer in 1771 (see

Fig. 7. The "Lérot à queue dorée" (White-crested spiny rat, note 25), type-specimen of *Myoxus chrysurus* Zimmermann, 1780. Reproduction of pl. LXVII in *Histoire naturelle*, Amsterdam, Sup. 4, 1778; actual size: 18.7 × 14.2 cm; photo: Louis A. van der Laan, Zoological Museum Amsterdam.

Tuijn & Van der Feen, 1969: 73; Husson, 1978: 285).

25. *Echimys chrysurus* (Zimmermann, 1780)

(White-crested spiny rat) (Fig. 7)
"Le Lérot à queue dorée"

Amsterdam, *Hist. nat.*, Sup. 4 (1778): 164–166, pl. LXVII.
Paris, *Hist. nat.*, Sup. 7 (1789): 283–288, pl. LXXII.
Amsterdam, *Nat. Hist.*, X (1778): 246–248, pl. LVIII.

This is the ninth (and last) note in this volume by Allamand (see note 17). In the Dutch edition (vol. X: 246), this note is accredited to Allamand and Klöckner together.

Summary of contents. – A female spiny rat had been sent from Surinam to Klöckner, "sans aucune notice ni du nom qu'on lui donne dans le pays, ni

des lieux où il habite." It was described and 13 measurements were given.

Remarks. – This was the first description of this rare species (Husson, 1978: 440). Zimmermann's name, *Myoxus chrysurus*, published in 1780 must have been based on this article by Allamand. It is unknown what happened to Klöckner's specimen, which is the type-specimen of the species. It was illustrated on plate LXVII as "Le Lérot à queue dorée" (Fig. 7).

26. *Hippopotamus amphibius* Linnaeus, 1758

(Hippopotamus)
"Addition aux articles de l'Hippopotame"

Amsterdam, *Hist. nat.*, Sup. 5 (1781): 1–8, pls. I–IV.
Paris, *Hist. nat.*, Sup. 6 (1782): 68–77, Pls. IV–V.
Amsterdam, *Nat. Hist.*, XII (1781): 45–53, pls. III/1, III/2, III/3, III/4.

This is the first note in the 5th Supplement to the French edition published in Amsterdam. In the "Table de ce qui est contenu dans ce Volume" it is indicated that the articles on pp. 1–60 were authored by "M. Le Professeur Allamand", while the rest is attributed to "Mr. Le Comte de Buffon."

Summary of contents. – Allamand wrote this third article on the Hippopotamus because he had received new information from Gordon. Early in 1780, Gordon communicated two drawings of a male and female Hippopotamus; these were engraved as plates I and II. Gordon observed that they were still common in the South African interior. He shot 21 of them together with governor J. van Plettenberg. The appearance and habits were described. The Hippo also occurred in salty water, as it was seen in the mouth of the Gamtoos River and in St. Helena Bay. Gordon studied the stomach of a young specimen, of which the exterior and interior were illustrated in plates III and IV; this showed that the stomach was undivided. The size of a male was given in 29 measurements, that of a female shot on 22 January 1778 in the Gamtoos River in another ten measurements. Allamand compared these with a male skin from the Cape of Good Hope which the Prince of Orange had given to the collection of the University of Leiden, and which was mounted following Gordon's drawings.

Remarks. – Many of Gordon's observations on the Hippopotamus are also found in the Gordon Atlas (Rookmaaker, 1989: 126–127). Drawings similar to the plates are also found there, as Gordon Atlas no. 197 (= pl. I), no. 198 (= pl. II), and no. 209a (both drawings of the stomach engraved on pls. III and IV). The Dutch text was also part of a separately printed pamphlet issued with a separate title-page in 1775 (Buffon, 1775: 18–24).

27. *Diceros bicornis* (Linnaeus, 1758)

(Black rhinoceros)
"Addition aux articles du Rhinocéros"

Amsterdam, *Hist. nat.*, Sup. 5 (1781): 9–13, pl. V.
Paris, *Hist. nat.*, Sup. 6 (1782): 78–84, pl. VI.
Amsterdam, *Nat. Hist.*, XVI (1785): 1–7, pl. I.

This is Allamand's second note in Supplement 5.

Summary of contents. – Gordon sent a drawing and notes about the rhinoceros found at the Cape of Good Hope. These showed that the animal lacks the skin folds exhibited in Buffon's plate of the rhinoceros. All rhinoceroses seen by Gordon had two horns, therefore Allamand acknowledged that he had made a mistake in writing to Daubenton (published in Buffon, Paris 1764, XI: 116) that Asian rhinos have two horns and African rhinos only one. Allamand tried to discover whether the horns could show the presence of poison in wine, but his experiment had no success. He gave a long description based on Gordon's notes of a specimen killed near the source of the Gamka River, supplemented by 36 measurements.

Remarks. – Gordon was one of the first to send a detailed description of the African Black rhinoceros to Europe. The Gordon Atlas includes six drawings of the Black rhinoceros accompanied by a long description (Cave & Rookmaaker, 1977; Rookmaaker, 1989: 96–97). Most of Allamand's statements are also found in the Gordon Atlas. In this period,

there was considerable discussion among European scientists about the number of rhinoceros species. Gordon helped to solve this puzzle by stating that all African rhinoceroses around the Cape, both male and females, had two horns and smooth skins.

28. *Equus quagga* Boddaert, 1785

(Quagga) (Fig. 8)
"Le Kwagga"

Amsterdam, *Hist. nat.*, Sup. 5 (1781): 14–15, pl. VI.
Paris, *Hist. nat.*, Sup. 6 (1782): 85–88, pl. VII.
Amsterdam, *Nat. Hist.*, XII (1781): 27–29, pl. III*.

This is Allamand's third note in Supplement 5.

Summary of contents. – In the account of the expedition by Hop (1778: 41), an animal named "quachas" had been mentioned. Gordon clarified that this is a kind of zebra called "Kwagga" by the Hottentots in South Africa. Gordon sent a description and a drawing of a young foal. His observations were copied.

Remarks. – This was the first good description of the quagga, on which Boddaert (1785: 160) based the name *Equus quagga*. The plate of the young Quagga resembles a drawing in the Gordon Atlas (no. 190). This drawing on the reverse has a long note about the morphology of the Quagga, part of the text of which is also found in Allamand's article (Tuijn, 1966).

29. *Taurotragus oryx* (Pallas, 1766)

(Eland)
"Le Canna"

Amsterdam, *Hist. nat.*, Sup. 5 (1781): 16–18, pl. VII.
Paris, *Hist. nat.*, Sup. 6 (1782): 116–121, pl. XII.
Amsterdam, *Nat. Hist.*, XVI (1785): 7–10, pl. II.

This is Allamand's fourth note in Supplement 5.

Summary of contents. – Gordon had sent a drawing and a description from the Cape of Good Hope. The Hottentots called this animal "Canna", the Kaffers "Impoof". The appearance of the body and the horns was discussed following Gordon's remarks. He did not find it near the Cape. Pallas differentiated this species as *Antilope oryx* after seeing a skeleton in the Museum of the Prince of Orange.

Remarks. – The main part of Allamand's text is based on a note by Gordon, also found in the Gordon Atlas, no. 163.

30. *Alcelaphus buselaphus* (Pallas, 1766)

(Red hartebeest)
"Addition à l'histoire naturelle du Bubale"

Amsterdam, *Hist. nat.*, Sup. 5 (1781): 19–21, pl. VIII.
Paris, *Hist. nat.*, Sup. 6 (1782): 135–139, pl. XV.
Amsterdam, *Nat. Hist.*, XVI (1785): 10–13, pl. III.

This is Allamand's fifth note in Supplement 5.

Summary of contents. – The "Bubale" occurred both in southern and in northern parts of Africa. Allamand received a drawing of a male specimen and the skin of a female from Gordon. The latter he had mounted and placed in the Cabinet of the University of Leiden. Following Gordon's notes, Allamand described the colour and the horns of this species.

Remarks. – The remarks attributed to Gordon are also found in the Gordon Atlas, no. 158. The plate is reversed in comparison to that drawing.

31. *Georychus capensis* (Pallas, 1779)

(Cape mole-rat)
"Addition à l'article de la Taupe du Cap de Bonne Espérance"

Amsterdam, *Hist. nat.*, Sup. 5 (1781): 22–23, pl. IX.
Paris, *Hist. nat.*, Sup. 6 (1782): 251–254, pl. XXXVI.
Amsterdam, *Nat. Hist.*, XVI (1785): 13–15, pl. IV.

This is Allamand's sixth note in Supplement 5.

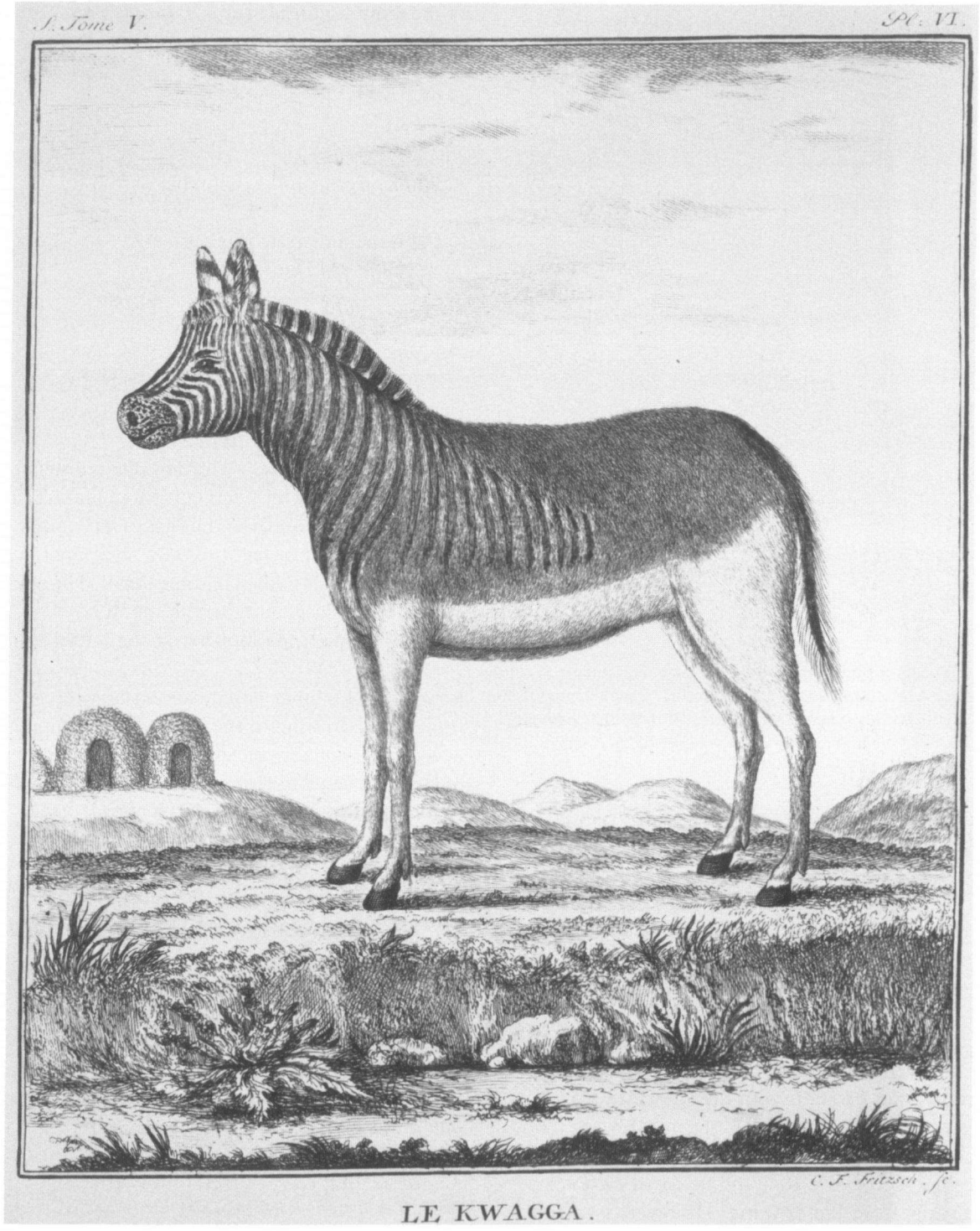

Fig. 8. The "Kwagga" (Quagga, note 28), type-specimen of *Equus quagga* Boddaert, 1785. Reproduction of pl. VI in *Histoire naturelle*, Amsterdam, Sup. 5, 1781; actual size: 18.1 × 15.1 cm; photo: Louis A. van der Laan, Zoological Museum Amsterdam.

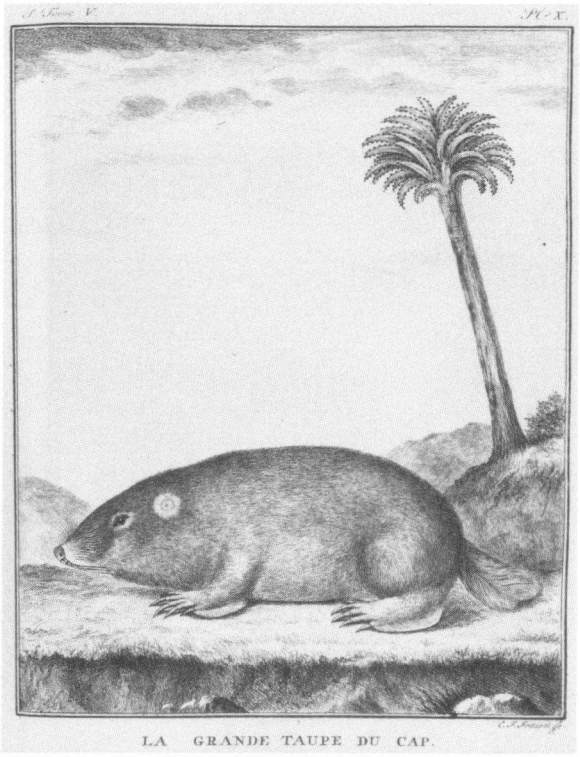

Fig. 9. The "Taupe des dunes" (Cape dune mole-rat, note 32), type-specimen of *Mus suillus* Schreber, 1783. Reproduction of pl. X in *Histoire naturelle*, Amsterdam, Sup. 5, 1781; actual size: 18.5 × 15.1 cm; photo: Louis A. van der Laan, Zoological Museum Amsterdam.

Summary of contents. – Allamand received a drawing from Gordon, copied on the plate. The animal was described in detail. The animals lived like the European moles as they dug long tunnels in the ground. Gordon also saw a second species further into the interior, being smaller and having the colour of steel.

Remarks. – The plate resembles Gordon Atlas no. 226 in reverse. Gordon's own notes are found in Gordon Atlas no. 227 (with the animal in a different position from the one in Gordon Atlas no. 226). Allamand did not mention that he received a description from Gordon and he could have taken his details from the drawing. However, it is quite likely that he based himself on Gordon's communication. The second species mentioned probably was the "Camdebo mole" found on 16 October 1778, illustrated in Gordon Atlas no. 223 and identified as the Common mole-rat, *Cryptomys hottentotus* (Lesson, 1826). The remark by Allamand on this species did not lead to a new name (Rookmaaker, 1989).

32. *Bathyergus suillus* (Schreber, 1782)

(Cape dune mole-rat) (Fig. 9)
"La Taupe des Dunes"

Amsterdam, *Hist. nat.*, Sup. 5 (1781): 24–25, pl. X.
Paris, *Hist. nat.*, Sup. 6 (1782): 256–258, pl. XXXVIII.
Amsterdam, *Nat. Hist.*, XVI (1785): 15–16, pl. V.

This is Allamand's seventh note in Supplement 5.

Summary of contents. – Gordon sent a drawing of a male specimen which was copied on plate X. The species was previously unknown. The Hottentots called it "Kauw-howba" (literally "hippopotamus-mole"). It was described in some detail. The animal was found in large numbers in the dunes near the sea around the Cape, but not in the interior.

Remarks. – Similar comments on this species are found on a drawing in the Gordon Atlas (no. 216) which was probably included with Gordon's letter to Hendrik Fagel in Holland dated 13 May 1779 (in Algemeen Rijksarchief, 's-Gravenhage: Fagel Archief, no. 2533; see Rookmaaker, 1989: 118). However, that drawing differs from the plate (Fig. 9). The name given by Von Schreber (1782, IV: 715 *Mus suillus*) was based on Allamand's description.

33. *Orycteropus afer* (Pallas, 1766)

(Aardvark, Antbear, or Earth pig)
"Additions aux articles du Tamanoir, du Tamandua et du Fourmillier"

Amsterdam, *Hist. nat.*, Sup. 5 (1781): 26–29, pl. XI.
Paris, *Hist. nat.*, Sup. 6 (1782): 230–235, pl. XXXI.
Amsterdam, *Nat. Hist.*, XVI (1785): 17–20, pl. VI.

This is Allamand's eighth note in Supplement 5.

Summary of contents. – Buffon distinguished

three species of anteaters, asserting that they were particular to the Americas and absent from the Old World. However, Gordon sent a skin of an ant-eating animal from the Cape of Good Hope to Allamand. The skin was mounted and used to illustrate the species on the plate. It resembled the American species of anteaters by its lack of teeth and its long tongue, but differed in several other respects. The skin was described and 20 measurements were given. The animal was called "Cochon de terre" [same meaning as "Aardvark"].

Remarks. – It is likely that Gordon did not collect this specimen, but that it was given to him to be forwarded to Holland. Otherwise it is strange that he did not include his personal observations. The drawings of the Aardvark in the Gordon Atlas (nos. 215, 234, 235, 236) all date from 1783 and even these may have been contributed by an unknown correspondent (Rookmaaker, 1989: 288). Allamand deposited the mounted skin in the museum of the University of Leiden.

34. Bovidae (Antelopes)

"Addition à l'article des Gazelles"

Amsterdam, *Hist. nat.*, Sup. 5 (1781): 30–32.
Paris, *Hist. nat.* [absent].
Amsterdam, *Nat. Hist.*, XVI (1785): 21–24.

This is Allamand's ninth note in Supplement 5.

Summary of contents. – Buffon's contribution to the classification of the gazelles (antelopes) was immensely valuable, but even he agreed that more needed to be done. Gordon observed many species in the southern part of Africa which could not be found in the exposition by Buffon. Allamand repeated some of Gordon's remarks about distinguishing characters like the preorbital glands, teats, number and sexual differences in the horns, hair, gall-bladder, social behaviour (groups), and migration. The Springbuck [*Antidorcas marsupialis*] migrates in times of drought. All gazelles are good to eat, they are easy to tame, and all have 8 incisors and 24 molars in the lower mandible.

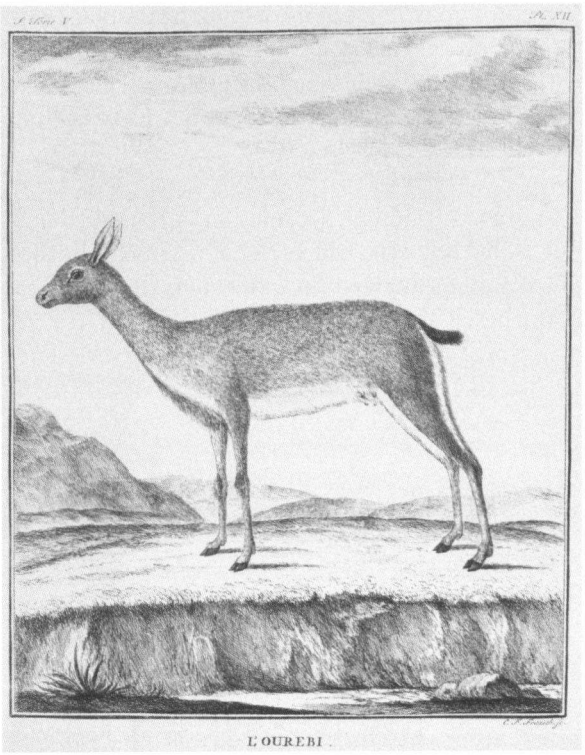

Fig. 10. The "Ourebi" (Oribi, note 35), type-specimen of *Antilope ourebi* Zimmermann, 1780. Reproduction of pl. XII in *Histoire naturelle*, Amsterdam, Sup. 5, 1781; actual size: 18.6 × 15.1 cm; photo: Louis A. van der Laan, Zoological Museum Amsterdam.

Remarks. – Similar remarks by Gordon are found in Gordon Atlas no. 167 verso (Rookmaaker, 1989: 86–87). Gordon made a brave attempt to classify the species of antelopes, but even his observations still needed much refinement.

35. *Ourebia ourebi* (Zimmermann, 1783)

(Oribi) (Fig. 10)
"L'Ourebi"

Amsterdam, *Hist. nat.*, Sup. 5 (1781): 33, pl. XII.
Paris, *Hist. nat.* [absent].
Amsterdam, *Nat. Hist.*, XVI (1785): 24, pl. VII.

This is Allamand's tenth note in Supplement 5.

Summary of contents. – Ourebi is the Hottentot name of this animal from the Cape of Good Hope.

Gordon could not obtain a male specimen (with horns), but he sent the skin of a female together with a drawing made when it was alive. The animal was described and some notes about its behaviour were added.

Remarks. – Similar information is found in Gordon Atlas no. 170, which resembles the published plate. In the Dutch edition, the name of the animal in the title is spelled both "Ourebi" and "Oerebi". This note by Allamand contained the first description of this antelope and Zimmermann's *Antilope ourebi* was entirely based on it.

36. *Redunca arundinum* (Boddaert, 1785)

(Southern reedbuck)
"Le Ritbok"

Amsterdam, *Hist. nat.*, Sup. 5 (1781): 34–36, pls. XIII, XIV.
Paris, *Hist. nat.*, Sup. 6 (1782): 187–191, pls. XXIII, XXIV.
Amsterdam, *Nat. Hist.*, XVI (1785): 25–27, pls. VIII, IX.

This is Allamand's eleventh note in Supplement 5.

Summary of contents. – At the Cape of Good Hope, this animal was known as "rietbok" [reedbuck]. Gordon forwarded a drawing and a skin. The species was common near rivers in the interior, far from the Cape, and lived in pairs or small groups. Its appearance was described with the addition of 12 measurements of a male and 5 of a female. Females were like the males, but smaller and without horns. Gordon also sent a second similar skin with a dark reddish colour.

Remarks. – Gordon sent Allamand some notes on the Southern reedbuck, besides the skin of a female and a drawing of a male, or possibly one showing both sexes. The two plates published by Allamand resemble drawings in the Gordon Atlas: plate XIII of the male is like Gordon Atlas no. 167, plate XIV of the female is like Gordon Atlas no. 168. Allamand's remark about the second, differently coloured skin, short as it was, formed the sole basis of the distinction of the Mountain reedbuck, *Antilope* [= *Redunca*] *fulvorufula* by Afzelius (1815: 250). Boddaert's first description of *Antilope arundinum*, however, was not based on Allamand's description. Probably both skins were deposited in the collection of the University of Leiden.

37. *Tragelaphus scriptus sylvaticus*
(Sparrman, 1780)

(Bushbuck)
"Le Bosbok"

Amsterdam, *Hist. nat.*, Sup. 5 (1781): 37, pl. XV.
Paris, *Hist. nat.*, Sup. 6 (1782): 192–193, pl. XXV.
Amsterdam, *Nat. Hist.*, XII (1781): 184, pl. XXXVI*.

This is Allamand's twelfth note in Supplement 5.

Summary of contents. – Gordon presented a drawing and a skin of a female. This species lived in forests not less than 60 miles distant from the Cape of Good Hope. Its appearance was described and seven measurements were added.

Remarks. – Allamand may have prepared the description from the skin. The plate resembles Gordon's drawing in Gordon Atlas no. 165. In the Dutch edition, this note is found out of sequence in volume XII (see remarks to note 38, below).

38. *Damaliscus dorcas* (Pallas, 1766)

(Bontebok)
"Le Bontebok"

Amsterdam, *Hist. nat.*, Sup. 5 (1781): 38–40, pl. XVI.
Paris, *Hist. nat.* [absent].
Amsterdam, *Nat. Hist.*, XVI (1785): 28–30, pl. X.

This is Allamand's thirteenth note in Supplement 5.

Summary of contents. – Kolb's list of antelopes [Kolb, 1719] was such a confusing mess that one was at a loss to know which species he tried to describe. Therefore, that book could not be used to increase the number of known antelopes. Three new species were already described in the notes by Allamand, while a fourth one was added here. Gor-

don sent a skin from the Cape of Good Hope, which was mounted after arrival. This animal was called "bontebok" by the Dutch. It was described with nine measurements. It lived as near as 25 miles from the Cape, as well as further into the interior.

Remarks. – The skin was probably placed in the collection of the University of Leiden. The description and plate published by Allamand may have been based on this skin only. Gordon's drawing in Gordon Atlas no. 164 differs from the plate. In a footnote, Allamand mentioned that Gordon had also given him skins of a "Pasan" (*Oryx gazella*) and a "Tzeiran" (*Hippotragus leucophaeus*).

The four new species mentioned by Allamand were the Oribi (no. 35), Reedbuck (no. 36), Bushbuck (no. 37) and Bontebok (no. 38). In the Dutch edition, the note on the Bushbuck was published out of sequence in volume XII rather than volume XVI with the others, which supports my contention that Allamand's notes were first presented in the French edition published in Amsterdam.

39. *Muntiacus muntjak* (Zimmermann, 1780)

(Indian muntjac)
"Le Chevreuil des Indes"

Amsterdam, *Hist. nat.*, Sup. 5 (1781): 41–44, pl. XVII.
Paris, *Hist. nat.*, Sup. 6 (1782): 195–200, pl. XXVI.
Amsterdam, *Nat. Hist.*, XII (1781): 208–211, pl. XLIV*.

This is Allamand's fourteenth note in Supplement 5.

Summary of contents. – In 1778, one of these animals was sent from Bengal to the late Mr. Van der Stel, commissary of Amsterdam. It lived in the garden of his house until the winter of 1779. It was described from the living animal, with the addition of 24 measurements.

Remarks. – Allamand probably saw the animal in Amsterdam when it was still alive. It is not known if or where its remains were preserved. The owner called Van der Stel is unidentified (not listed by Smit et al., 1986), but evidently he had a paddock near his house where he used to keep some deer or other living animals.

40. *Pongo pygmaeus* (Linnaeus, 1760) and *Hylobates hoolock* (Harlan, 1834)

(Orang-utan and White-browed gibbon or Hoolock)
"Addition à l'article des Orangs-Outangs"

Amsterdam, *Hist. nat.*, Sup. 5 (1781): 45–48, pl. XVIII.
Paris, *Hist. nat.*, Sup. 7 (1789): 15–29 [no plate].
Amsterdam, *Nat. Hist.*, XIV (1783): 47–50, pl. I/2.

This is Allamand's fifteenth note in Supplement 5.

Summary of contents. – In July 1776, the Prince of Orange received a female ape from the Cape of Good Hope, illustrated on the plate. Allamand went to see it in the Prince's menagerie. It was kept with a heavy chain around the neck. The hairs were reddish and all of approximately equal length. Its general appearance and size were described. The animal came from Borneo; it was kept one year in Batavia before being shipped to Holland. It died in January 1777. Some comments about its behaviour in captivity were given.

Another kind of ape was drawn by Gordon at Cape Town. This animal had been given alive by the king of Asham to Mr. Harwood, president of the provincial council of Dinagipal. Harwood's brother carried it home with him, but after reaching the Cape, it only survived another 24 hours, because it had attracted scurvy on board. It was a female. The animal was called "Voulok" in its place of origin. Some short notes about its appearance were given.

Remarks. – The ape from Borneo was an Orang-utan (*Pongo pygmaeus*). It was the first ever recorded in captivity in Europe and it lived in the menagerie of Prince Willem V at the Kleine Loo from 29 June 1776 to 22 January 1777 (Mazel, 1909; see also Fig. 6). The other monkey from India must have been a different species. Allamand only saw Gordon's sketch, which is not known today. Considering its provenance ("Asham" should be Assam) and the local name ("Voulok"), it probably was a Gibbon, *Hylobates hoolock*. I have been unable to find further particulars about Mr. Harwood or his house in Dinagipal.

41. *Giraffa camelopardalis* (Linnaeus, 1758)

(Giraffe)
"Addition aux articles de la Giraffe"

Amsterdam, *Hist. nat.*, Sup. 5 (1781): 49–60, pls. XIX, XX.
Paris, *Hist. nat.*, Sup. 7 (1789): 345–357, pls. LXXXI, LXXXII.
Amsterdam, *Nat. Hist.*, XIII (1782): 13–24, pls. I/4, I/5.

This is Allamand's sixteenth note in Supplement 5.

Summary of contents. – Gordon explored the country where Giraffes are found. He saw several of them and even killed a number. He sent to Allamand a drawing engraved in plate XIX and some of his observations in a letter. The animal was described in detail. Some of Gordon's remarks on its occurrence and behaviour were given. Allamand included a list of 49 measurements of a Giraffe killed by Gordon with a height of 15 feet 2 inches [476.8 cm]. Gordon also sent a drawing of the skeleton, rather poorly made, reproduced in plate XX. The bones which he also forwarded were mounted by Onymos and placed in the Museum of Prince Willem V. Another series of 74 measurements taken from the skeleton were added.

Remarks. – Gordon saw living Giraffes for the first time when he travelled in the region of the lower course of the Orange River during his fourth expedition (1779–1780). He shot two of them: the first on 12 October 1779 just south of the river, the second on 10 December 1779 near Warmbad. He could only preserve a few bones of the first specimen, but he saved the skin and skeleton of the second (Rookmaaker, 1983; 1989: 119). Although Allamand recorded that the skin was received in Holland and mounted for the museum of the Prince, it is not known what happened to it later. The skeleton was included in the shipment of the Prince's collection to Paris in 1795 (and even the skin might have been taken at that time; see Rookmaaker, 1989: 293). The plate of the skeleton in the Paris edition (pl. LXXXII) added a bony structure in front of the shoulder blade, absent in the engraving given by Allamand.

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As a regular visitor to the Artis Library, University of Amsterdam, since the early 1970's, I have had the privilege to browse through the large number of editions of Buffon's *Histoire naturelle* present there: surely an almost unique collection. I am most grateful to the staff of the library for their continued assistance, especially to Drs. Florence F.J.M. Pieters, who through the years has given much encouragement, valuable advice, and practical help.

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