

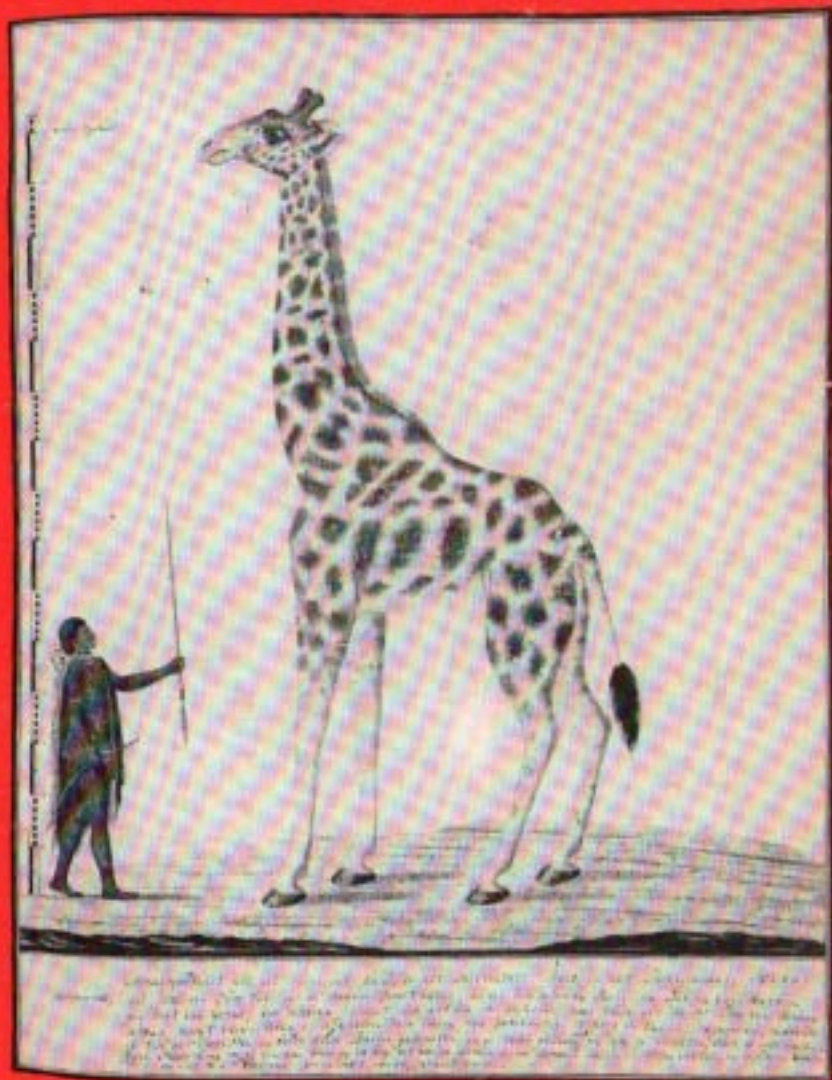
VOLUME/BAND XXXVI/XXXVII — 1981/82—1982/83

JOURNAL



SWA SCIENTIFIC SOCIETY • SWA WISSENSCHAFTLICHE GESELLSCHAFT • SWA WETENSKAPLIKE VERENIGING

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Contents — Inhalt — Inhoud

Organisation der Gesellschaft	3
Die Autoren des Heftes	6
Martin, M.: Der Große Bukkaros. 1 Foto	7
Phillips, J.A.S.: The Pomonas Story based on the Dr. Georg Wunderlich Collection. 2 Photos ..	11
Schmidt, S.: Hochzeitsbräuche im Nama- und Damaraland	45
Rookmaaker, L.C.: The observations of Robert Jacob Gordon (1743—1795) on giraffes (<i>Giraffa camelopardalis</i>) found in Namaqualand. 9 Figures	71
Cruz-Urbe, K. & R.G. Klein: Faunal remains from some Middle and Later Stone Age archaeological sites in South West Africa. 1 Figure	91
Veröffentlichungen der SWA Wissenschaftlichen Gesellschaft (Periodica, Bücher, Karten)	115
Index on the Advertisers and Donators	127

L. C. ROOKMAAKER

The observations of Robert Jacob Gordon (1743-1795) on giraffes (*Giraffa camelopardalis*) found in Namaqualand

(9 Figures)

1. Introduction

Robert Jacob Gordon, born in Doesburg (Holland) in 1743, began his life-long military career at an early age in his father's regiment of the Scotch Brigade. In 1773-1774 he stayed some months at the Cape of Good Hope. Some years later, on 1 June 1777, he again arrived in Cape Town to become a captain in the Dutch garrison. He never returned to Holland. On 26 March 1782, Gordon was promoted to colonel succeeding Hendrik van Prehn as commander of the Cape troops. Shortly after the surrender of South Africa to England, his body was found on 25 October 1795 in his home Schoondersigt on the lower slopes of Table Mountain.

Between 1777 and 1786, Gordon undertook four extensive expeditions into the interior covering much of the area of the western Cape Province, to the east about as far as Port Elizabeth, and to the north just across the Orange River (Forbes 1965: 93-116). His activities during these travels were never published, but two major collections of his material are known to exist (Rookmaaker 1980). The "Gordon Atlas" in the Rijksmuseum in Amsterdam contains some 15 maps and 440 drawings made by Gordon with the help of his draughtsman Johannes Schumacher and possibly others. The drawings illustrate the topography, ethnology, zoology and botany of southern Africa (Forbes 1965: 60, Rookmaaker 1981). Secondly, there is a collection of manuscripts in the Brenthurst Library, Johannesburg, containing Gordon's expedition diaries and various notes on different subjects including zoology. Quotations from Gordon's unpublished Journals are here translated from the original Dutch.

Gordon visited the regions along the lower course of the Orange River (Namaqualand) for the first time during his third expedition lasting from 27 June 1779 until 13 January 1780. Two giraffes, *Giraffa camelopardalis* (Linnaeus, 1758), were shot on this trip and both are interesting for different reasons. Some ten years ago, the former occurrence of the giraffe in the north-western Cape Province was still debated (Roberts 1951: 270, Dagg 1971: fig. 3, Krumbiegel 1971: 117), but it is usually accepted nowadays (e. g. Dagg & Foster 1976: 6). Usually just one record can be quoted as evidence. On 28 November 1663, the expedition party led by Jonas de la Guerre sighted two

"camels" at a place at least as far south as the Spoeg River, some 190 km below the Orange at about 30°30'S (Molsbergen 1916, I: 118, Mossop 1947: viii, Bigalke 1951).

Gordon's first giraffe was killed on the south bank of the Orange River on 12 October 1779. It is certainly the latest, and an almost unique, record of this animal in the N. W. Cape Province. Some of his contemporaries also encountered giraffes in Namaqualand, but invariably this occurred after crossing the Orange River into southern Namibia. Their reports will be reviewed in section 2 in order to allow a comparison with Gordon's efforts.

The second giraffe of Gordon's expedition was killed near Warmbad in S. Namibia on 10 December 1779 and claims our attention for another reason. Gordon preserved its hide and skeleton and sent those to Holland, together with some notes and drawings. Part of this material was discussed in some publications in the 1780's (section 5) contributing to the rather scanty knowledge about the giraffe by the 18th century European scientists.

2. Encounters with the giraffe (1750-1800)

The information about the giraffes encountered by 18th century travellers in Namaqualand is very scattered although it has been briefly discussed recently (Forbes 1965: 123, 1977a: 34-35, Spinage 1968: 86-90, A. H. Smith 1978: 29-32). I shall review these events paying particular attention to the communication of the new results to Europe.

Jacobus Coetsé Jansz., the first European to cross the Orange River (in 1760), found giraffes in the country of the Great Amacquas, besides lions and rhinoceroses. He shot two females and brought to Cape Town the skin of a young animal which had died after he had fed it for two weeks (Molsbergen 1916, II: 18-22, Mossop 1935: 286-287).

When Coetsé's adventures became known at the Cape, governor Ryk Tulbagh (1699-1771) decided to send an official expedition to Namaqualand. Lasting from June 1761 until April 1762, it was led by captain Hendrik Hop and its official journal was kept by Carel Frederik Brink (published in 1778, see Mossop 1947). On 5 October 1761, the party killed a female giraffe of 17 feet height near the present Warmbad and caught an accompanying calf which died five days later. A giraffe bull was shot on 16 October in the same region (Brink 1778: 25-28, Mossop 1947: 32-37). Hop preserved the skin of the young animal and later sent it to the collection of the University of Leiden (Brink 1778: 27, Carteret 1770) supervised by J. N. S. Allamand (1713-1787). It was the first giraffe specimen to arrive in Europe and it received special attention for that reason. Allamand (1770) first published a short description and a drawing of the skin. This note was copied by Buffon (1776) illustrated by a different plate of the Leiden skin and by a drawing probably made by Brink and brought to France by Bougainville (1772: 360). The plate of the skin again appeared in the official published journal of Hop's expedition (Brink 1778). At the Cape, some giraffe drawings made by a member of the expedition, possibly Brink, must have been in circulation. At present one such sketch is found on the main map prepared during the journey (Smith 1978, pl. 4), but the others seem to be lost. One drawing of the young skin was copied by Philip Carteret who

called at the Cape at the end of 1768. Carteret sent his giraffe drawing and a short note about Hop's travels to the Royal Society of London, where they were published in 1770 (Carteret 1770, reprinted in Wallis 1965: 454-456 and Spinage 1968: 87-88, pl. 17a).

Georg Forster (1754-1794) who accompanied his father Johann Reinhold Forster (1729-1798) as draughtsman on Cook's second voyage around the world, visited the Cape twice, in 1772 and in 1775 (Forster 1784: 91). On one of these occasions, he copied a "painting" of a giraffe in the home of governor Van Plettenberg (1739-1793). This drawing is now in the British Museum (Natural History), London (Whitehead 1978: 36, no. 15). Forster inscribed it: "Hanc figuram factum ad amussim picturae/apud Generos. Baron de Plettenberg, Gub. Capens./ emendavi in respectu capitis ex capite exsiccato" (or: 'This figure made accurately after a painting in the possession of Baron Van Plettenberg, I have improved in respect of its head after a dried specimen'). The original drawing is unknown but it may have been one of the results of Hop's expedition. The origin of the dried head is equally unclear (Forbes 1977a: 184 note) but could have been brought to the Cape by Coetsé or Hop. Based on the activities of Hop and Brink, recently Dagg (1971) and Dagg & Foster (1976: 47) selected Warmbad as the type-locality of the southern subspecies *Giraffa camelopardalis giraffa* (Schreber, 1784) (see Section 6).

The Swede Hendrik Jacob Wikar lived several years near the Orange River after he had deserted from the service of the East India Company in 1775. When he returned to the Cape in 1779, he took along the skin of a female giraffe of some 18 feet height (Mossop 1935: 184-187). Another Swedish traveller, Anders Sparrman (1748-1820) journeyed through the southern and eastern Cape Province in 1772 and 1773-1775 (Forbes 1965: 46-58). Although he never saw a giraffe alive, he examined a dried head (Forbes 1977b: 184), probably the same as the one mentioned by Georg Forster.

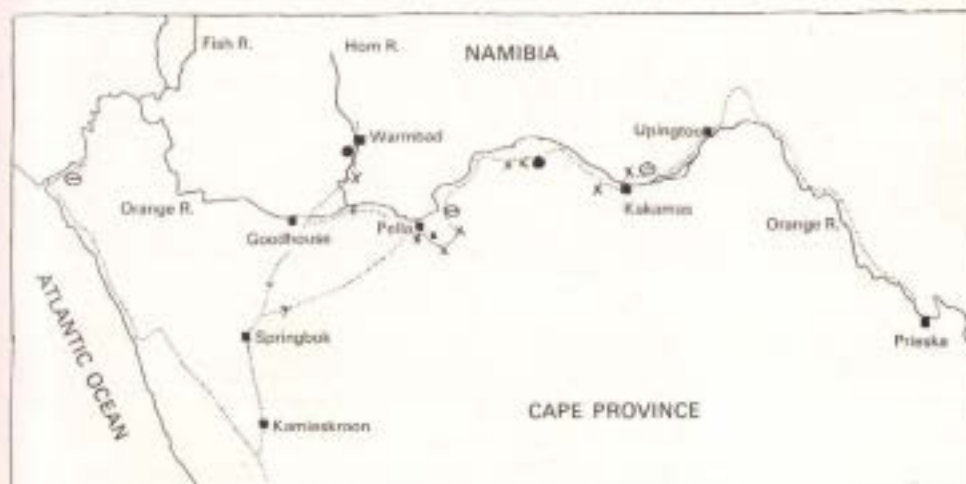


Fig. 1 Sketchmap of the N. W. Cape Province and S. Namibia showing places mentioned in the text. It presents Gordon's probable route in 1779 (---). The places where he encountered giraffes (X), where he shot them (●) or recorded their absence (⊕).

William Paterson (1755-1810) made four trips in southern Africa between 1777 and 1779, exactly simultaneously with Gordon's main travels (Forbes 1965: 83-91). This Scot crossed the Orange River on two separate occasions in 1778 and 1779 with his companion Sebastiaan Van Reenen. In 1778, they encountered giraffes in southern Namibia and Van Reenen shot one specimen. A second (male) giraffe was killed by Van Reenen during Paterson's fourth expedition in the same region in October 1779. Paterson described and drew this last specimen and he preserved its hide and skeleton (Paterson 1789: 64, 126-127, see Forbes & Rourke 1980: 107,164). Its likeness was included in his Narrative (Paterson 1789, facing p. 125, see Spinage 1968, pl. 17b). The skin, skull and some bones were taken to England where they were presented to John Hunter (1728-1793) in London. This collection was transferred to the Royal College of Surgeons of England in London after Hunter's death. The Hunterian Museum still possesses many of the bones, together with a coloured drawing which had belonged to Paterson (Dobson 1959, 1971: 208, fig. 16). In 1834, the skin was transferred to the British Museum where it was disposed of at an unknown date (Laufer 1928: 90).

François Le Vaillant (1753-1824), who travelled to the Orange River in 1783-1784, published the popular accounts of his journeys in 1790 and in 1794-1795. His collection of drawings, rediscovered in 1963, proves that he spent a few weeks north of the Orange River (Forbes 1965: 127, 1973: 86-87). In 1783, Le Vaillant or one of his companions shot a giraffe and its skin was taken to the Cape. The collection of drawings contains four figures of the giraffe possibly depicting this specimen (Meester 1973: 10-12, pls. 86-90), while an engraving showing its hunt appeared in one of Le Vaillant's books (1795). Le Vaillant took the skin to Europe, it was stuffed and went to the Muséum National d'Histoire Naturelle in Paris (Dagg & Foster 1976: 49). It was studied by Geoffroy St. Hilaire (1827) and probably still exists today.

Finally, I want to mention a specimen about which Gordon wrote a short manuscript note in English. This giraffe was killed in 1790 "on the 28° south latitude in the longitude of Cape Town by Jan Visage a lad thirteen years old." Gordon saw the skeleton and verified its height of 16 feet 2¼ inches Rijnlands (509 cm), "thus should this Cameleopard be 10 inches and a ¼ of an inch taller than my second cameleopard and a foot taller than my first of which the dimensions are in my journal." The incident must have taken place in the vicinity of Warmbad. Possibly, this Jan Visage was a son of Guiliam Visage who in 1792 lived at a farm called Modderfontein, the present Keetmanshoop (Mossop 1935: 306, 1947: 113).

3. Gordon's observations in 1779

When Gordon left Cape Town on 27 June 1779, he must have heard about the occurrence of the giraffe in the regions he intended to visit. As this expedition is not described in detail, I shall follow his route rather extensively according to the entries in his Journal (Fig. 1). On 26 July 1779, Gordon happened to meet Wikar, the Swede who returned to the Cape after being pardoned for his desertion (Mossop 1935: 198-201). This "Vicar, a Swede claiming to be the nephew of merchant Hasselgreen in Amsterdam ... had in his possession a female camelopardalis hide" (Journal, 26 July 1779).



Fig. 2 Gordon Atlas 149. Sketch of the giraffe in upright position.
Handwriting by Gordon (Rijksmuseum, Amsterdam).

After this meeting, Gordon travelled northwards to the mouth of the river which he had named the Orange in 1777 during an earlier expedition in another part of Africa. The people living near the sea knew nothing of giraffes living in this region where Gordon remained from 17 to 28 August 1779 (Journal, 25 August 1779). He then retraced his steps southwards to Ellenboogfontein, the farm owned by Hermanus Engelbregt, a little west of the present Kamieskroon (Forbes 1965: 89). Gordon recorded in his Journal of 13 September 1779: "I had got a young male camelopardalis hide from the *drift*" ("ik had een camelopardalis jonge bul vel gekregen van de drift"). Probably, "drift" referred to Compagnies Drift or Ramans Drift, at that time the usual ford across the Orange River, just east of Goodhouse. It is not stated who shot this giraffe and brought it to Ellenboogfontein. Gordon examined its head and "put it into water to soak" (Journal, 13 September 1779). The skin is not mentioned again in Gordon's notebooks.

From Ellenboogfontein Gordon went north-east until he reached the Orange near Pella on 28 September 1779 (Forbes 1965, map 18). He then travelled to the east, following the south bank of that river at some distance. On 30 September, he saw his first spoor of giraffe, made by a female (smaller than that of a male, according to him). Giraffe tracks were seen again on the three subsequent days. When Gordon saw the river again on 5 October near Koboop, he noted the absence of giraffes because, he said, they did not live near the river in these parts. It was 12 October 1779 when Gordon's companion Pieter Pienaar alone shot a male giraffe. This undoubtedly occurred in the place which Gordon, on his major map of southern Africa (Gordon Atlas, map 3), named "Camelopardalis doodt, 2360 voet boven de zee" (about 19°40'E, just south of the Orange River). The next day was entirely devoted to an examination of the animal which was 15 feet 2 inches (Rijnlands) high. It was described, measured and drawn; the resulting sketch had "a perfect likeness" (Journal, 14 October 1779). Gordon then slaughtered the animal further in order to clean and preserve the skeleton, which he buried to be taken on the return journey. No attempt seems to have been made to take the hide.

On 23 October 1779, some two weeks after this first giraffe, captain James Lind (1736-1812) wrote from Cape Town to Joseph Banks in London that Gordon "in Lat. 30° ... shot a Cameloparadalis twenty two feet high" (Forbes 1952: 85). It seems unlikely that Lind could have referred to the giraffe killed on 12 October, because twelve days is too short to travel from the Orange to the Cape and because the exaggerated height is unlike Gordon's usual honesty in these matters. Maybe Lind had heard about Wikar's specimen or about the animal which Gordon had examined in the neighbourhood of Ellenboogfontein, which is shown in about 30°S on Gordon's map.

On 15 October 1779, Gordon saw six giraffes at close range and alive, "at last, having desired this for such a long time" (Journal, 15 October 1779). He continued his trek to the east, crossed the Orange at Kakamas and followed its northern bank to a place near the present Koegas (A.B. Smith 1981). On 23 October, just after he had forded the river, he again observed some giraffes, but those were the last for some time: "it seems that elephants and cameleopard: do not continue, but they are in the briqualand" (Journal, 30 October 1779). The Briquas or Tlhaping lived north of Upington around Kuruman and they were first described by William Somerville (Bradlow & Bradlow

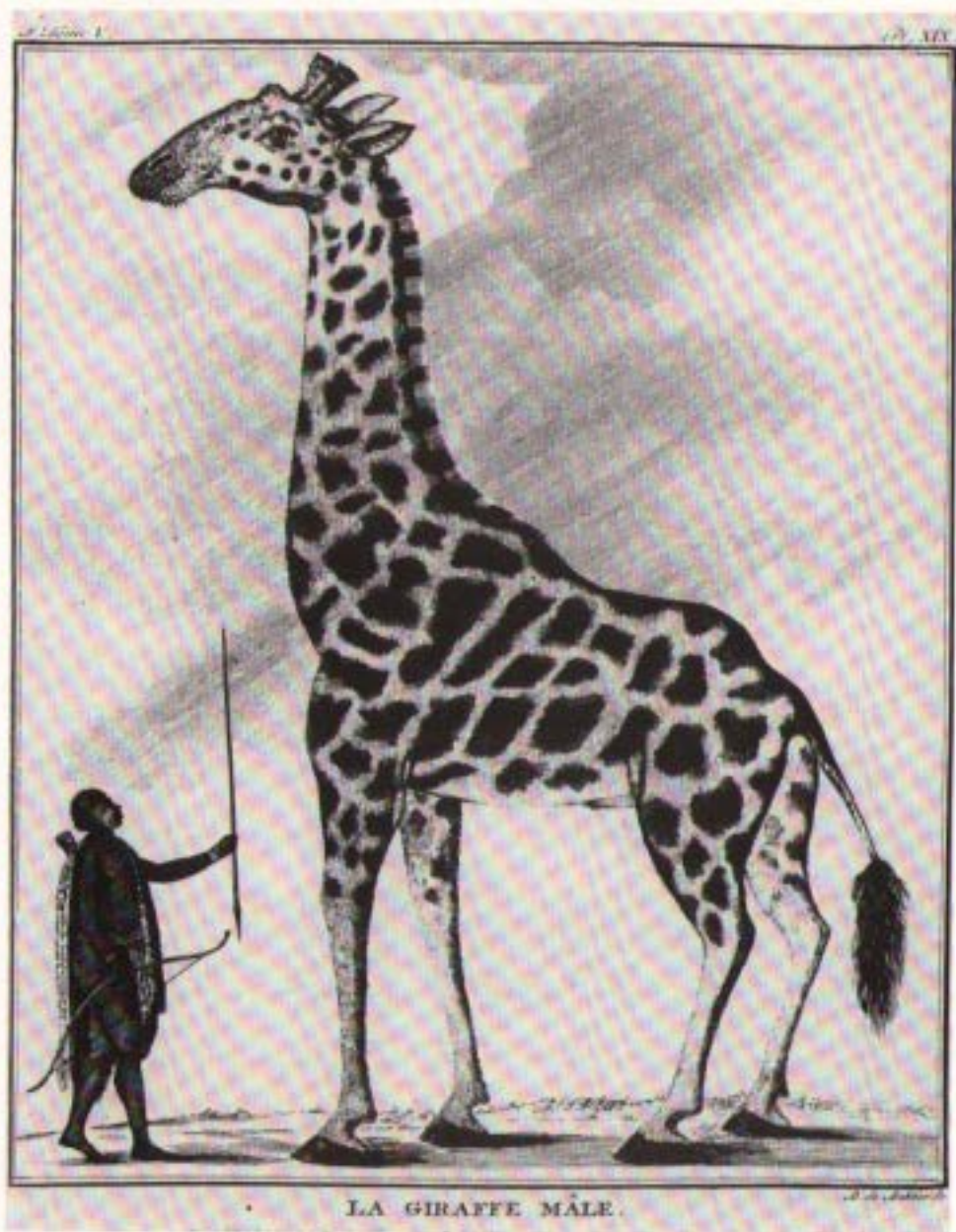


Fig. 3 Plate XIX in Allamand (1781). The position of the head and neck as in Fig. 2.

1979). Gordon never visited the region where they lived although it had been one of his goals at the start of the expedition (Paterson 1789: 121). Gordon went back along the same route and on 16 November 1779 he again crossed the Orange at Kakamas, now to the south bank. Four days later he reached the spot where he had buried the giraffe skeleton. "Much to my displeasure", he wrote, "the wolves and other animals had unearthed the bones and mutilated them. ... However, [I] took some of the best pieces" (Journal, 20 November 1779). After this disappointment, giraffes were seen in the distance on 20 and 21 November, but they proved too elusive to be killed.

Before returning to the Cape, Gordon crossed the Orange once again, this time at Compagnies Drift (mentioned above), probably because he did not want to return to the Cape without a giraffe. During this short excursion in southern Namibia, Gordon followed the route shown on Map 3 in the Gordon Atlas (redrawn in Forbes 1965, map 21), which resembled the path taken by Hop's expedition. Roughly, Gordon went along the Leeuwenrivier (Hom River) to Warmbad. His diary recorded the following places: Compagnies Drift, Modderfontein (8 December), Verse Drift, Ababees Fontein (9 December), Vogels Fontein (10 December), Warmbad (11 December), return at an indefinite place just north of Warmbad (13 December), Ababees Fontein (14 December), and back across the Orange River to Compagnies Drift (15 December). All along the way, living giraffes or their spoor were spotted. Gordon obtained his second giraffe on 10 December 1779, a few hours walk south of Warmbad. "We continued our way northwards [from Vogels Fontein] to the Bad, but while we were crossing a stony ridge, Afrikaander [an accompanying Hottentot] came to tell me that he had shot a large giraffe bull and broken its fore-leg, a quarter of an hour from there. He had stalked it in the thickets of the river" (Journal, 10 December 1779). The animal was still alive when Gordon reached it and he cut its throat. It was again a full-grown male specimen of 15 feet 4 inches (Rijnlands) height, or maybe a quarter of an inch less. Gordon removed its intestines to keep it from rotting. He spent the night with the carcass "greatly inconvenienced by the ticks from the giraffe." Early the next day, he skinned the animal, salted the hide and began the long process of drying it. Gordon then decided to return to the Cape. He "attended to my giraffe skin and its bones" after his last crossing of the Orange River on 15 December 1779. It took two full days to dry the hide and prepare it for transport. Gordon returned in Cape Town during the second week of January 1780.

4. Immediate results of the expedition

As we have seen, Gordon collected during this expedition to Namaqualand some loose bones of the first giraffe, a male of 15'2" height, shot on 12 October 1779; and the hide and complete skeleton of a second male giraffe, 15'4" high, shot on 10 December 1779.

There are also some notes and drawings pertaining to these animals among the extant collections of Gordon's material. The Gordon Atlas contains ten drawings of the giraffe (Fig. 2, 5, 6, 7, 9), all but one the direct responsibility of Gordon. Some of them are annotated following Gordon's custom. One of the topographical drawings (no. 64) shows Gordon and company shooting into a herd of eight giraffes (Forbes 1965, fig.

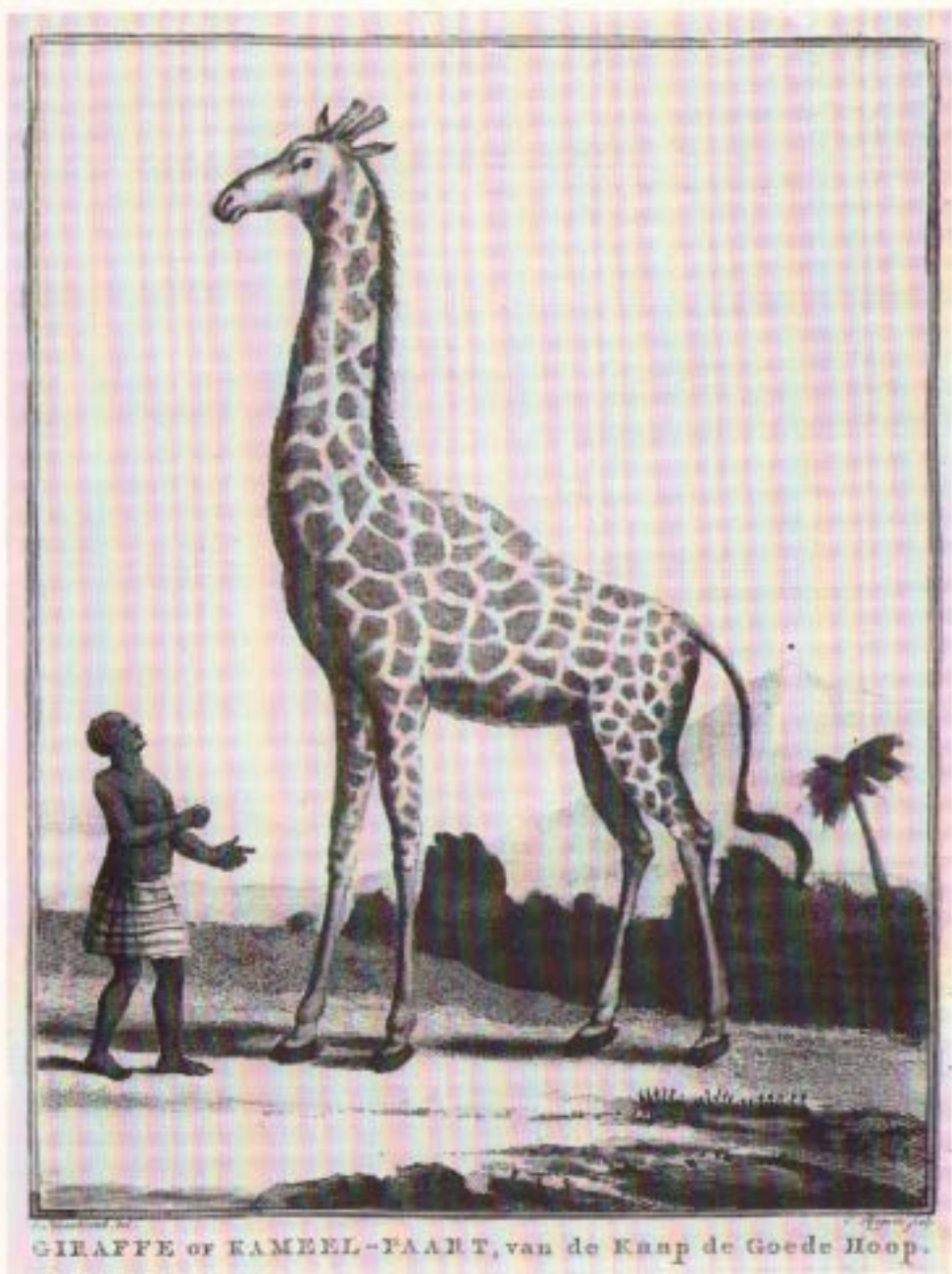


Fig. 4 Plate XIX(a) in Vosmaer (1787), an independent copy of one of Gordon's drawings.

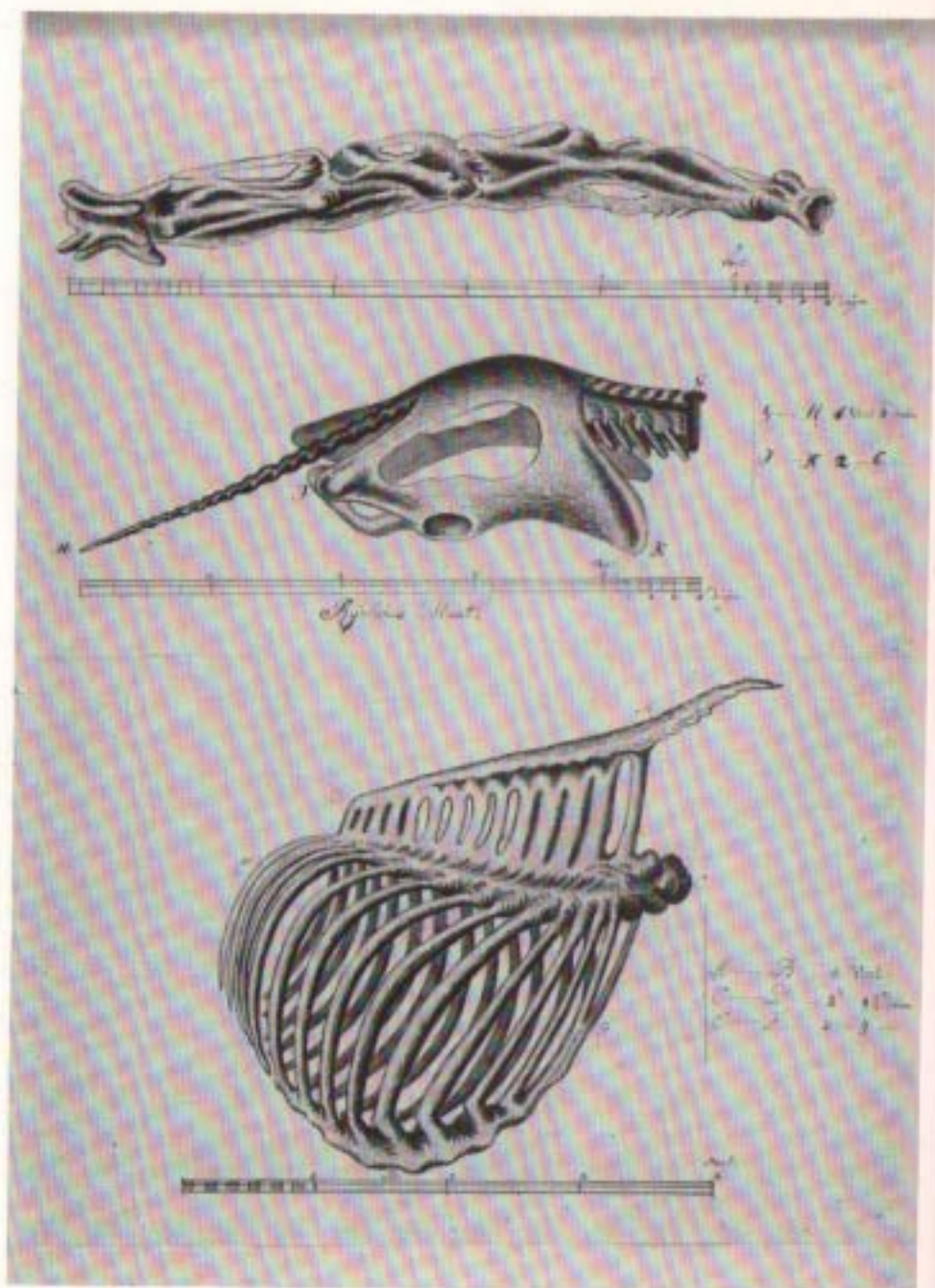


Fig. 5 Gordon Atlas 155. Parts of the skeleton of Gordon's first giraffe. Drawing 154 (not illustrated) is almost identical (Rijksmuseum, Amsterdam).

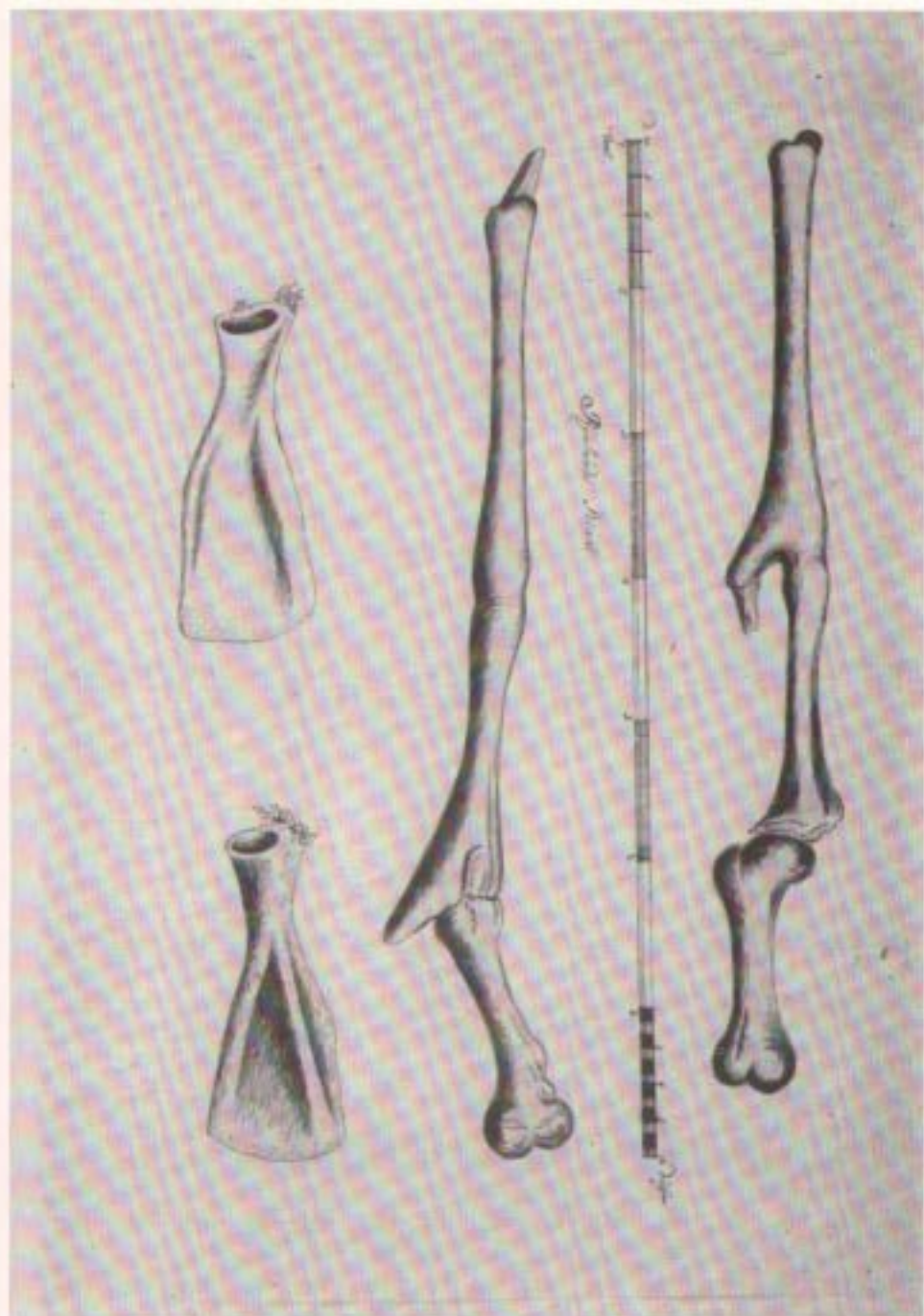


Fig. 6 Gordon Atlas 156. Parts of the legs of Gordon's first giraffe (Rijksmuseum, Amsterdam).

42). There are three lateral views of the (stuffed?) skin (nos. 148-150) of unequal artistic quality, one of which (no. 149) is stated to depict the second specimen. Two different sketches (nos. 152, 153) show a complete skeleton and three smaller drawings (nos. 154-156) illustrate some individual bones. Finally, the Atlas has an engraving of a skeleton made by Johann Heinrich Merck in 1784 (see below; no. 151).

The collection of Gordon's manuscripts in the Benthurst Library contains some long descriptions of the giraffes illustrating his usual methods. First, the Journal entry of 13 October 1779 recorded no less than 78 different external measurements of the "fully grown bull giraffe", all in Rijnlandse feet, inches and lines. Gordon then continued with a meticulous description, again including many measurements, of the head, eyes, horns, ears, colour, hoofs, legs, tail and body. He mentioned the entrails ("generally like those of an eland") and the presence of a small gall-bladder. The Journal does not include a similar description of the second giraffe.

Among the other manuscripts there are a few items concerning the giraffe, which show Gordon's particular interest in this species which is only equalled by his treatments of the hippopotamus and rhinoceros. First, there are two large sheets of notes copied from Buffon (1770) in his own Dutch translation on the older literature about the giraffe. Secondly, there is a single sheet (2 pages) with a "Description of a camelopard killed at the night of the 12th October 1779", in English and in an unknown handwriting, with 62 external measurements. This list obviously was copied from the entry in the Journal because the measurements are given in the same order (deleting some and miscopying at least 3 times). Finally, there is a short unarranged and unrevised list of 26 measurements, probably pertaining to the second giraffe.

5. Gordon's giraffes in Europe

Gordon sent some of his more interesting information and specimens to friends in Holland. There is no contemporary list of the contents of Gordon's shipments, but they included zoologically interesting items like animal skins, bones, drawings and notes with animal descriptions (Rookmaaker 1980: 10-15). Two people in Holland eagerly awaited this new material from the Cape. J. N. S. Allamand, the Swiss-born professor of natural history at the University of Leiden, received the largest part to be added to the collections of that University. A smaller share went to Aernout Vosmaer (1720-1799) in his capacity of director of the Cabinet of Stadholder Willem V in The Hague.

On 22 April 1780, Gordon was granted permission to send in the ship *'t Zeepaard* the remains of "camelopard" packed in two cases, "to be given by professor Allamand to his serene Highness the Stadholder" (Jeffreys 1928: 45, 318). These cases certainly contained the skeleton and hide of Gordon's second giraffe, the loose bones belonging to his first specimen, and possibly a description with measurements and several drawings. The skin and skeleton went to the Stadholder's collection in The Hague. Both Allamand and Vosmaer seem to have had the opportunity to examine this material. At that time, Allamand edited a new edition of Buffon's *Histoire Naturelle* published in Amsterdam (J. H. Schneider) in French, essentially a reorganised reprint of the earlier

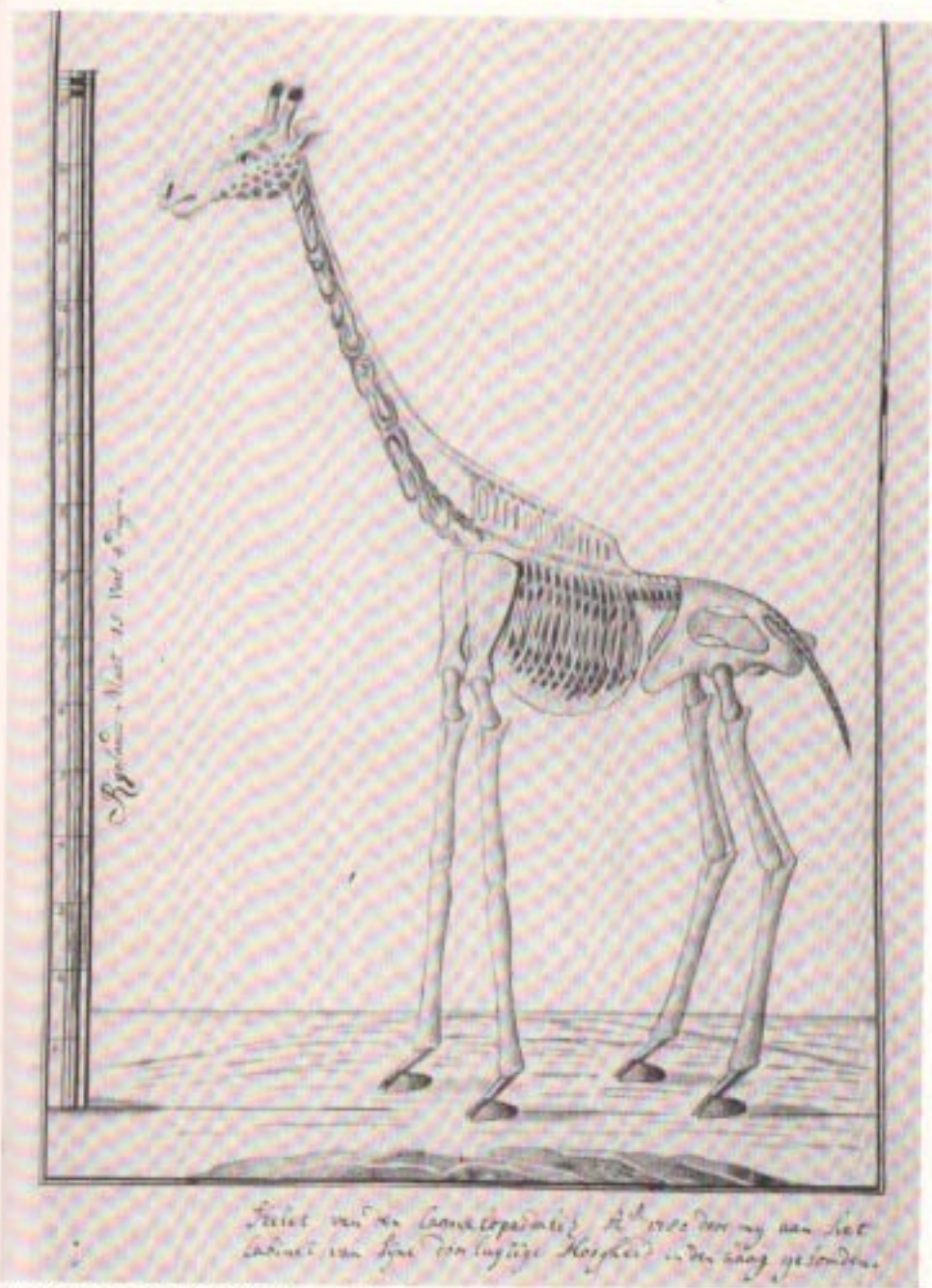


Fig. 7 Gordon Atlas 153: "Skeleton of a Camelopardalis, sent by me in 1780 to the Cabinet of his serene Highness in The Hague." Gordon Atlas 152 (not illustrated) is similar but the neck is in a more upright position and there is no annotation below the drawing (Rijksmuseum, Amsterdam).

Paris edition with the addition of some new articles mainly written by Allamand. In the fifth supplementary volume of this *Nouvelle édition* published in 1781 (but dated 1785, see Rookmaaker 1780: 17), Allamand presented a new description of the giraffe confessing his debt to Gordon's generosity (Allamand 1781). In this paper, he acknowledged receipt of the following items sent by Gordon: "tous les os d'une des jambes de devant, & d'une des jambes de derrière", "un dessin exacte", "ses lettres" and "la figure du squelette" (Allamand 1781, resp. pp. 51, 49, 49, 57). Although not mentioned specifically, he may also have received a sketch of the bones of the first giraffe. Gordon's "lettres" must have included a short account of the expedition, some field observations on the giraffe and a full morphological description including the measurements of the first giraffe. Such a finished account is not present among the known Gordon manuscripts, but he may have written it especially to send to Holland.

Allamand (1781) described the hide and skeleton extensively adding short remarks about the animal's behaviour and distribution. At the end, he presented a list of 22 new measurements of the bones belonging to the skeleton in The Hague. Allamand confused the two giraffes. He used the description of the first specimen (height 15'2") and repeated 49 of its measurements communicated by Gordon. He assumed, incorrectly as we have seen, that the skin and drawing also belonged to that animal (Allamand 1781: 58). The paper was illustrated by two plates engraved by B. de Bakker after drawings sent by Gordon (Allamand 1781: 49, 57). Plate 19 of "La giraffe mâle" (Fig. 3) resembles one of the drawings presently in the Gordon Atlas (no. 149, Fig. 2). Plate 20 of the skeleton (Fig. 8) differs from Gordon's sketches (Fig. 7) which were only intended to give a general idea of its construction. Allamand (1781: 58) had tried "de la rectifier en quelques endroits, d'après ceux des os de Giraffe que j'ai" referring to the skeleton in The Hague which was still being mounted when he wrote his paper.

Many papers which Allamand added to the *Histoire Naturelle* in the *Nouvelle édition* later appeared in the supplements to the Paris edition of that work. Buffon's reprint of Allamand's notes on the giraffe was published in 1789 (Buffon 1789). The plates 81 and 82 are mirror-image copies of Allamand's plates 19 and 20 (Figs. 3, 8) with the addition of a landscape. The plate depicting the skeleton (Buffon 1789, pl. 82) shows an additional large structure in front of the shoulderblade. This modified picture is the direct source of the drawing depicting the giraffe skeleton in the collection of Le Vaillant (discussed by Meester 1973: 11, pl. 89).

Vosmaer (1787) too wrote a small booklet about the giraffe appearing in both Dutch and French (Pieters 1980). He stated that the Stadholder had received a hide and skeleton (of Gordon's second giraffe) "presented by Van Plettenberg." The hide received no further attention and it is unknown if it was ever stuffed. The skeleton was mounted by Onymos, a "savant anatomiste" according to Allamand (1781: 58, see Vosmaer 1787: 32). Vosmaer mentioned Gordon in passing but he did not give a detailed description of the material which he received. His account is illustrated by two plates. His plate 21a shows a lateral view of a standing giraffe engraved by C. Bogerts (Fig. 4) differing in small details from the still extant original drawing by G. Haasbroek (Tuijn & Van der Feen 1979: 77, fig. 17). It resembles Allamand's plate 19 and

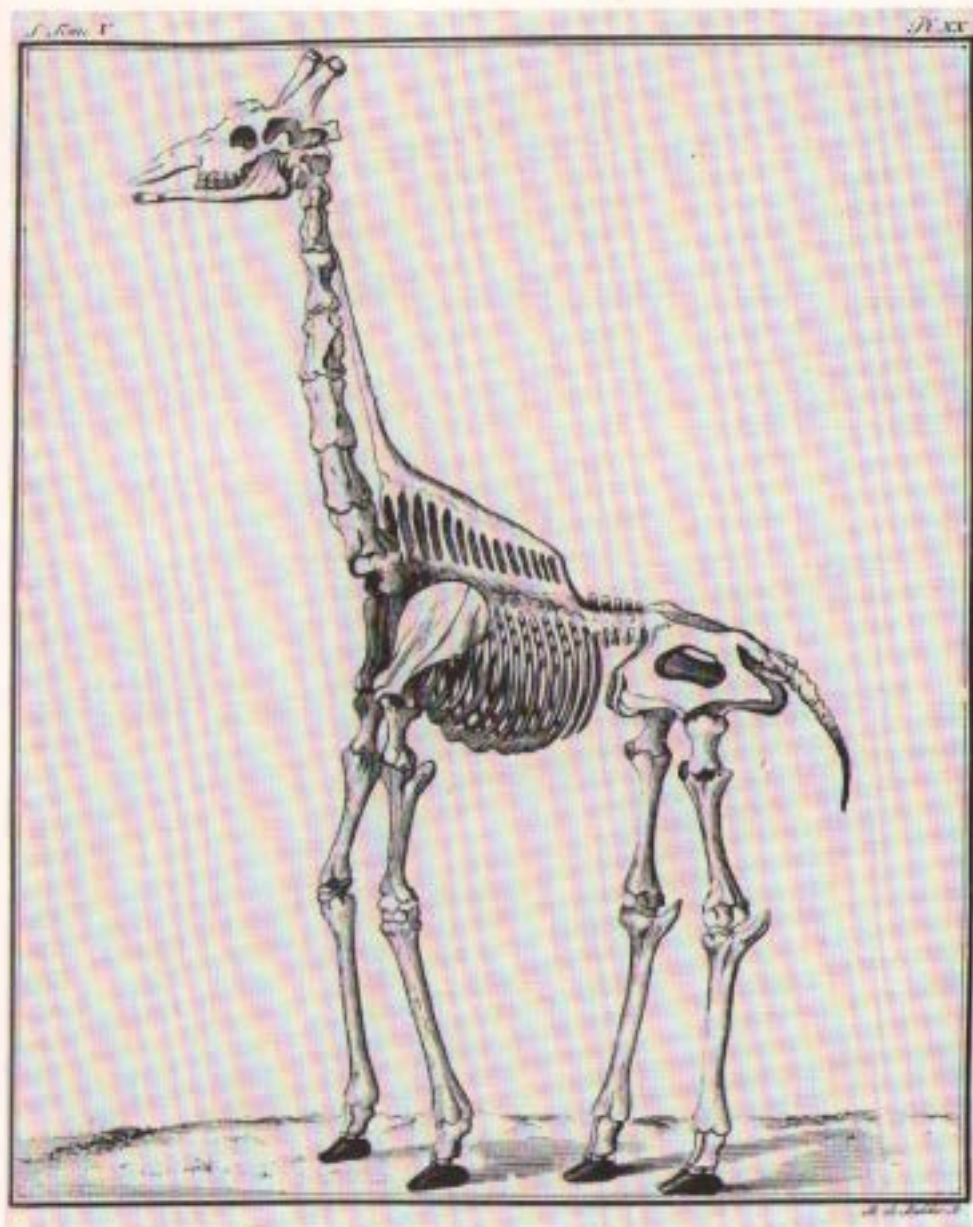


Fig. 8 Plate XX in Allamand (1781), a modified copy of the drawing in Fig. 7 (see text). Note the skull and the hoofs.

Gordon's drawing 149, but its proportions are better, the mane lacks stripes and the tail is tuftless. Vosmaer's second plate (variably numbered 21b or 22) was engraved by J. F. Grout after a drawing made by Merck in 1784. Merck's involvement is mentioned in Vosmaer's text (1787: 21) and on the copy of the engraving in the Gordon Atlas (handwritten by Gordon), but not on the published plate itself. Possibly this was more than mere coincidence because Vosmaer resented that Merck had sent the figure to England before Vosmaer had the chance to publish it. I have not been able to trace its publication in England, but Gordon's copy might have come from that source (Fig. 9). The plate gave reason to Gordon to remark that the giraffe skeleton "is badly mounted being much too low behind, and it has bends in its neck where the animal has none." Unlike the engraving in the Gordon Atlas, Vosmaer's plate included a rule of ten feet and some letters. These were used in the "Observations on the skeleton of the *Camelopardalis*" written by Petrus Camper on 4 August 1786 and appended by Vosmaer to his own notes (Camper 1787). When Vosmaer died in 1799, he owned three sheets of paper showing at least two drawings and some notes on the giraffe attributed to Gordon (Vosmaer 1800: 267, quoted in Rookmaaker 1980: 11). These may have been identical to the material mentioned by Allamand.

Due to its size, the giraffe skeleton was stored in the attic of the building which housed the Stadholder's collection in The Hague. Georg Forster (1868: 70) saw it there in 1791. After the French invasion of the Dutch provinces, André Thouin inspected the museum and reported on the presence of "the skeleton of a giraffe which is 15 feet high" (Boyer 1971: 393, after a letter dated 22 February 1795). It probably was transported to Paris along with much of the collection and it should still be in the natural history museum of Paris.

6. Distribution of the giraffe

Today the giraffe occurs nowhere near the lower course of the Orange River. As detailed in section 2, almost all travellers who visited Namaqualand before 1800 first crossed the Orange before they saw giraffes. We may accept the summary of Le Vaillant (1795: 276) who concluded on the basis of information provided by Pienaar (spelled Pinard) that "dans cette partie méridionale de l'Afrique, le canton où vivent les giraffes est une bande d'environ 4 degrés, c'est-à-dire, l'intervalle qui sépare les deux fleuves des Poissons et de l'Orange", i. e. between the Fish and Orange Rivers in southern Namibia. The selected type-locality (Warmbad) of *Giraffa camelopardalis giraffa* (Schreber 1784), the southern subspecies of the giraffe, lies within this region (Dagg 1971). This restriction was based on the account by Brink (1778) and is entirely justified. The plate in von Schreber (1784, pl. 255) depicting a "*Camelopardalis Giraffa*" (De Seve del. - I. Nussbiegel sc.) is a close copy of the plate in Buffon (1776, pl. 64), one of the results of Hop's and Brink's expedition. Allen (1939) called this taxon *G. c. capensis*, a name proposed by Lesson (1842) on the basis of the account by Le Vaillant (1795) which provided its typical locality as the Gamma- or Leeuwen River in south Namibia (about 27°S, 18°E) according to Harper (1940). Of course, Gordon's second giraffe was found in the same general region and could be regarded as a topotypical specimen of this subspecies.

Gordon's first giraffe, however, was shot south of the Orange River. Besides the uncertain Spoeg River record, this is the only direct evidence of a giraffe in the N. W. Cape Province. His Journal discussed in section 3 leaves the impression that the giraffes were very localised and not particularly abundant. South of the Orange, Gordon met giraffes only in the region roughly between Pella and Kakamas (Fig. 1). Possibly, this explains why his contemporaries failed to record them in the Cape Province. They all crossed the river at Compagnies Drift near Goodhouse, which must have been some distance west of the southwestern limit of the giraffe's range at that time.

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Summary

R. J. Gordon obtained two giraffes during his expedition to the lower course of the Orange River in 1779. The first was shot just south of that river and constitutes the last record from the N. W. Cape Province. Gordon described its appearance in his diary and took some bones to the Cape. The second giraffe was killed near Warmbad in south Namibia. Its hide and skeleton were sent to Holland, together with the bones of the first specimen, some drawings and field notes. This material was discussed in two publications appearing in 1781 and 1787. The restricted distribution of the giraffe south of the Orange River is discussed. The results of other encounters with the giraffe in Namaqualand during the second half of the 18th century are reviewed.

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KATHRYN CRUZ-URIBE AND RICHARD G. KLEIN

Faunal remains from some Middle and Later Stone Age archaeological sites in South West Africa

(17 tables, 1 figure)

Contents

1. Introduction
2. Analytic Method
3. The Surface Coll
4. The Excavated S
5. Discussion and C
6. Acknowledgments
7. Tables
8. References Cited

1. Introduction

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Nonetheless, some foss ing in southern Africa much of the Middle a minations show that M from sometime before supplanted by Later St the past few centuries.

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Later Stone Age one dated to approximately 14,000 years ago (Thackeray 1979).

9.9.83
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Thank you, best
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