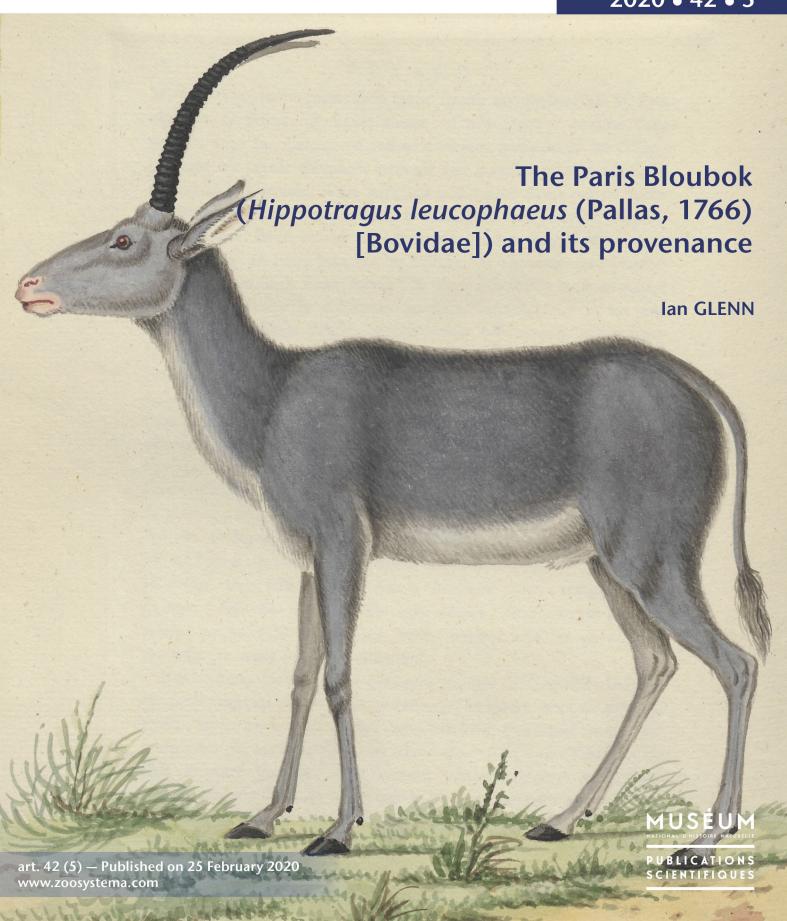
# zoosystema

2020 • 42 • 5



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Les Publications scientifiques du Muséum publient aussi / The Museum Science Press also publish:

Adansonia, Geodiversitas, Anthropozoologica, European Journal of Taxonomy, Naturae, Cryptogamie sous-sections Algologie, Bryologie, Mycologie.

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## The Paris Bloubok (*Hippotragus leucophaeus* (Pallas, 1766) [Bovidae]) and its provenance

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Submitted on 22 October 2018 | Accepted on 19 June 2019 | Published on 25 February 2020

urn:lsid:zoobank.org:pub:E008FF99-9E67-4E91-BC5F-497E24432CFC

Glenn I. 2020. — The Paris Bloubok (*Hippotragus leucophaeus* (Pallas, 1766) [Bovidae]) and its provenance. *Zoosystema* 42 (5): 77-84. https://doi.org/10.5252/zoosystema2020v42a5. http://zoosystema.com/42/5

#### **ABSTRACT**

KEY WORDS Bloubok, Levaillant, Gordon, taxidermy, Delegorgue. What is the provenance of the specimen of the *Hippotragus leucophaeus* (Pallas, 1766) (Bloubok, Bluebuck, Blue Antelope) in the Muséum national d'Histoire naturelle in Paris? This article argues that new archival evidence, an examination of the specimen, and a critical re-examination of claims by Mohr suggest that the specimen came from the French traveller and ornithologist François Levaillant (also written Le Vaillant) and not from a specimen supplied by Gordon that Mohr and Rookmaaker speculated was taken from the Stadholder of Holland's collection in 1795.

#### RÉSUMÉ

L'Antilope bleue (Hippotragus leucophaeus (Pallas, 1766) [Bovidae]) de Paris et sa provenance. D'où vient le spécimen d'Hippotragus leucophaeus (Pallas, 1766) (Bloubok, Bluebuck, antilope bleue) présent au Muséum national d'Histoire naturelle de Paris? De nouvelles données d'archive, l'examen du spécimen, et une ré-analyse critique des arguments de Mohr suggèrent que le spécimen a été rapporté par un voyageur et ornithologue français François Levaillant (également écrit Le Vaillant) et ne correspond pas au spécimen livré par Gordon que Mohr et Rookmaaker pensaient prélevé de la collection du Stadholder of Holland en 1795.

MOTS CLÉS Bloubok, Levaillant, Gordon, taxidermy, Delegorgue.

#### INTRODUCTION

The Bloubok *Hippotragus leucophaeus* (Pallas, 1766) has enjoyed a special status as the first African mammal we know went extinct, probably around 1800. The animal formed part of the *Hippotragus* Sundevall, 1846 or horse or grazing antelope genus, along with the Roan antelope *Hippotragus equinus* (Geoffroy Saint-Hilaire, 1803) and Sable antelope *Hippotragus niger* (Harris, 1838). Various DNA studies have differed in describing the relationship between these three species (Robinson *et al.* 1996; Espregueira Themudo & Campos 2017) with the most recent study concluding that the "phylogeny based on the full mitogenomes places the blue antelope as a sister taxon to the sable antelopes, with the roan antelope as outgroup of this clade" (Espregueira Themudo & Campos 2017: 231).

At present, the Muséum national d'Histoire naturelle specimen (Fig. 1) does not seem to have been used for any DNA sampling. The museum label does not give any provenance for this specimen, one of only four complete specimens left. The other mounted skins are in the Naturalis Biodiversity Centre in Leiden, the Vienna Museum of Natural History, and the Zoological Museum of Stockholm. For much of the twentieth century, however, the Museum's own label on the specimen attributed the specimen to Adulphe Delegorgue (1814-1850), a French hunter and naturalist who only returned to France after 1840, by which time the specimen was already in place and had been commented on by Smith, Harris and others (Mohr 1967; Rookmaaker 1989). It is not clear, however, when this faulty attribution emerged, as Jean Dorst, writing in 1952, said that the specimen was 'Sans provenance' (Dorst 1952).

#### THE DELEGORGUE ERROR

Given Dorst's own prominent later role in the museum, it seems likely that he must either have decided on or approved the later attribution to Delegorgue. What reasons led him to this decision? Why did Delegorgue even come into the picture? There are two plausible sources for the error. The first is that a passage in his writing may have led to the confusion. He described how his hunter Henning shot a Roan Antelope. Delegorgue himself then confuses two species by lumping Roan with the Bloubok, citing Levaillant's account of the Bloubok and claiming they are the same: "Bon pensais-je, c'est une antilope du même genre, excessivement rare aussi, c'est l'Aigoceros equina que les boers désignent du nom de bastaard-guyms-book, et quelquefois de celui de bastaard-Eland, le groot-blaauw-book des anciens colons de Swellendam qu'obtint Levaillant, celle-là même qu'il appelle grande antilope bleue, décrite par Buffon sous le nom de tzeiran d'après un individu provenant d'Abyssinie" (Delegorgue 1847). [Good, I thought, it is an antelope of the same type, also exceedingly rare. It's the l'Aigoceros equina that the boers give the name of bastard gemsbok, and sometimes that of bastard Eland, the large bluebuck of the former colonists of Swellendam that Levaillant obtained, the same that he called the great blue antelope, described by Buffon under the name of *tzeiran* after a specimen from Abyssinia.]

Delegorgue states that he sold his Roan specimen to the Tournai museum in Belgium; so that skin could not have been the source of error.

What may have happened is that Dorst, or some other museum worker, may have found a note by an earlier worker referring to this passage, intending it to point to Levaillant, but misunderstood the note and thought it referred to Delegorgue as the hunter.

Another plausible source of the confusion may have arisen because Delegorgue supplied the museum with three Sable Antelope skins in the 1840s. Delegorgue wrote to Georges Louis Duvernoy in 1848 from Arras, explaining that: "L'antilope aigoceros noire, décrite en 1840 par Harris, de la taille d'un petit cheval, manquait au musée de Paris, le quel en possède trois individus que je rapportais de pressent [sic] en france" (Delegorgue 1848). [The sable antelope, described by Harris in 1840, of the size of a small horse, wasn't held by the Paris museum which now has three specimens that I just brought to France.] It may be that later confusion arose between one of these skins and the Bloubok skin.

#### LEVAILLANT OR GORDON?

For much of the nineteenth and twentieth centuries, most French observers assumed that the specimen came from Levaillant, the French explorer and ornithologist, whose travel writing about his explorations of South Africa had been widely read and translated (Glenn 2018). In 1959, for example, Jacques Berlioz wrote that: "Sauf ses publications, il ne reste malheureusement au Muséum de Paris que fort peu de souvenirs de Levaillant (sans doute pourtant le spécimen naturalisé 'd'Antilope bleue' en est-il un)" (Berlioz 1959).

Cornwallis Harris, writing in 1840, started a different hypothesis when he wrote of the Paris specimen that "it was supposed to have been brought from the collection of the Stadtholder of Holland" but without giving any source (Harris 1840). In Mohr's 1967 monograph *Der Blaubock* she accepts Harris's suggestion, going further to argue that Colonel Robert Gordon's illustration of a Bloubok bore a striking resemblance to the Paris specimen, though she had no evidence of any other proof of provenance. (Mohr 1967: 37-39). When Rookmaaker later found that Gordon had sent a Bloubok specimen to Allamand in Holland and speculated that this was the one that ended up in Paris, the consensus view became that the French animal had been one of the treasures confiscated by the French from the Dutch (Rookmaaker 1992b).

One problem with the claim that the Bloubok was one of the animals appropriated from the Stadtholder's collection is that Rookmaaker does not account for how the animal could have got from Allamand's collection, which was donated at his death to the University of Leiden (Rookmaaker 1992a, b) to the Stadtholder's collection – which was the only collection the French seized in the Netherlands out of respect for a country they wished to regard as a sister revolutionary state. There is no record of any Bloubok being taken from the Leiden University collection or History museum to the Stadtholder's collection.



Fig. 1. — Photograph of the Paris specimen of Hippotragus leucophaeus (Pallas, 1766). Photo: © MNHN - C. Lemzaouda / P. Lafaite.

None of the many accounts of the animals taken from the Netherlands by the French lists the Bloubok and the archival evidence here again is lacking (Boyer 1971, 1973; Lacour 2009; Lipkowitz 2014). Though absence of evidence is not evidence of absence, the Levaillant provenance by contrast does have a strong archival paper trail.

If we accept that there is no evidence that the Bloubok that Gordon sent to Allamand either went to the Stadtholder's collection or thence to France, then we have a potential solution for another problem Rookmaaker raises – the mysterious appearance of a Bloubok skull in the Amsterdam Zoological Museum (Rookmaaker 1992b: 136). Surely it is more likely that this is either the remains of the animal Gordon sent to Allamand or, given that the number of annulations does not match those of Gordon's illustration, the animal Levaillant himself saw in Amsterdam and that had been there for 15 years already (Le Vaillant et al. 2007: 64).

#### NEW EVIDENCE FOR LEVAILLANT

Levaillant left the only detailed description of a hunt of the Bloubok in his travels and describes the skin carefully. His description of the hunt and subsequent skinning on his first major expedition from 1781-1783 have more importance than later critics have recognised. The successful hunt is carried out in early 1782 in the Soetmelks River Valley, between the cur-

rent Genadendal and Riviersonderend, by a Khoïkhoïs or Khoï (formerly Hottentot, a term now regarded as derogatory) newcomer from the region who has just joined the expedition. He stalks and shoots the animal and Levaillant admires "at length the rarest and most beautiful of African antelopes". The account of the skinning of the animal is crucial. He gives the man several gifts, including one of his best knives and describes what follows: "Il se servit de ce dernier meuble, & se mit à dépecer l'animal avec la même adresse qu'il l'avoit tiré. J'en conservai soigneusement la peau." (Le Vaillant 1790: 82). [He used the last object and set to dis-membering the animal with the same skill with which he had shot it. I kept the skin very carefully.]

Here the use of the word 'dépecer' meaning to chop up or divide into pieces (rather than dépouiller or écorcher meaning to skin) suggests that the shooter's attitude towards the skinning was primarily that of a hunter used to skinning for meat rather than preserving the skin as trophy.

Levaillant describes the coat as "light, rather greyish, blue; the belly and the whole inside of the legs are white as snow. The head especially is beautifully spotted with white." (Le Vaillant et al. 2007: 64).

For obvious reasons, many observers assumed that the Paris Museum specimen came from him, but both Mohr and Rookmaaker in arguing for the Stadtholder provenance could argue that there was no evidence of any sale of Levaillant's collection to the museum. The subsequent discovery in the Paris Archives nationales (F/17/1241, carton 4, dossier De-



Fig. 2. — Photo of cut marks on the Paris specimen (Photo Ian Glenn, courtesy MNHN).

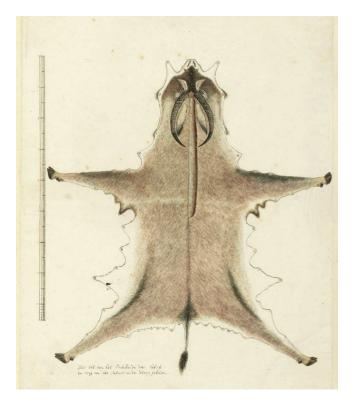


Fig. 3. — Gordon illustration of a Roan antelope skin sent to The Hague in 1779. Courtesy of the Rijksmuseum. https://www.robertjacobgordon.nl/drawings/rp-t-1914-17-161

noor) that Levaillant's collection of animals, birds, insects and cultural objects had indeed been sold to the Muséum national d'Histoire naturelle in exchange for goods confiscated from aristocrats fleeing France now gives a clear provenance for a Bloubok skin and also a possible explanation of why the provenance was lost over time (Rookmaaker *et al.* 2004: Ch. 6).

In the list of mammals sold, in the base of the cupboard in the second room, the list includes 'une grande gazelle non décrite' or large gazelle not (previously) described or classified. (Rookmaaker *et al.* 2004: 451). This description fits Levail-

lant's account of the hunting of the animal perfectly where he talks of the (male) animal as 'La gazelle' and uses gazelle repeatedly rather than 'antilope'. And it might have made commercial sense for him to claim that this was a previously undescribed species as this would have helped raise the price for the specimen. Had he listed it as a Tzeiran (the word he used in captions of the two illustrations after Buffon's name for a related Asian species), it might have seemed simply to be another skin of a known species.

If this was his tactic, it failed fairly miserably, for the price paid for the Bloubok and ten other mammals, including, he claimed, a previously undescribed water rat, was a relatively meagre amount (450 Francs). Levaillant was very aware of how rare his Bloubok specimen was, so why did he not demand more for it and point out its rarity?

It seems likely that he had put in the description of 'previously unknown' to heighten the value of the object as a new acquisition but lost control of the process of evaluation. He had estimated the value of his whole collection at 60 000 Francs some years earlier and received goods only valued at 41 790 Francs. Furthermore, he seems to have been kept out of the valuation process though he and his wife were able to nominate one of the two evaluators, Nicolas Toussaint. His wife alone signed the final deed of sale and it passed into the museum under her name. It may also be that the flood of specimens from the confiscated Stadtholder's collection would have lessened the value of a collection largely drawn from Dutch colonies, particularly the Cape of Good Hope and Suriname.

But the description of the hunt may suggest another reason the skin did not fetch a better price. Renshaw pointed out long ago that the hunter skinning the animal may have been clumsier than Levaillant admitted as there was a bad gash on the skin (Renshaw 1901). Neither Renshaw nor Mohr was able, I suggest, to examine the specimen when it was properly cleaned with the cut marks evident (Fig. 2). Mohr describes the coat as dust-drenched and uniformly grey, which is not the impression a current examination gives. A recent examination of the specimen in Paris in September 2018 shows that it was skinned in a way that is quite different from the meticulous preparation and presentation evident in, for example, Gordon's flat Roan Antelope skin that he sent to the Hague in the 1770s (Fig. 3). Given that Gordon knew the rarity of the Bloubok and how to prepare specimens for mounting, any specimen from Gordon would surely have been prepared with the same care.

A local taxidermy expert comments that the Gordon way of preparing animals is still very close to the way mounts are prepared now, whereas the Paris Bloubok was skinned in a way he has never seen as the stitch marks would be very obvious in any mounted specimen (Verwey, pers. comm.).

Levaillant's account of the hunt and skinning of the animal may help explain why the Paris specimen was skinned in such an unusual fashion. Why would Levaillant have handed over the task of skinning this rare antelope to a stranger, given that he knew its rarity? And here we should remember that Levaillant may have been the leading taxidermy expert of his time when it came to birds, but that the laws of his time forbade the hunting of deer and birds of prey by non-aristocrats in

Fig. 4. — Gordon illustration of the Bloubok. Courtesy of the Rijksmuseum. https://www.robertjacobgordon.nl/drawings/rp-t-1914-17-159

France – something he comments on angrily in his description of shooting a wounded eagle on the Plain of Gennevilliers near his home in Asnières (Levaillant 1802: 7-8). The Bloubok was one of the first antelope he shot for purposes other than meat and it seems he simply did not have the knowledge to skin it for mounting himself or supervise the hunter who, presumably, cut up the animal in ways that would have produced meat and perhaps pieces of skin for traditional Khoi usage.

Péquignot points out that the Paris specimen was mounted using a mannequin (Péquignot 2006) and it may be that further examination would clear up the extent to which it was treated using arsenic soap – the preservative method Levaillant sold to the museum along with his collection (Rookmaaker *et al.* 2006) – or if there is any other evidence of how and when the completed specimen dealt with the unusually prepared skin.

Further evidence for Levaillant's role in supplying the Bloubok came in an inventory prepared by Geoffroy Saint-Hilaire in 1809 when he was asked to justify what the museum had been doing since it had been established as a revolutionary establishment. In the version of this archive document printed in the *Annales du Muséum d'Histoire naturelle*, he noted that 295 new birds and three new mammals had come from "Un cabinet acquis de madame Chénié" (Geoffroy Saint-Hilaire 1809). This was in fact Levaillant's collection in which his divorced wife Marguerite Suzanne, born Denoor, who remarried in 1798 Pierre Paul Chénié, had half a share as part of their divorce settlement. As she had negotiated the sale to the museum, they took it under her name, throwing later scholars off the scent and leading many to conclude that Levaillant's collection had never been sold to the museum.

The three mammals were almost certainly the giraffe, well-known as the first specimen brought to France, the Bloubok and, if the catalogue of items is to be believed, a water rat of

some kind (perhaps a Cane rat) or a wart-hog, as these were the mammals listed in the inventory as 'non décrit' or not previously described.

### COMPARISON OF ILLUSTRATIONS WITH THE SPECIMEN

As Mohr points out, only two naturalists illustrated and commented on Bloubok they had seen dead and alive: Gordon and Levaillant (Mohr 1967: 74). Mohr did use a photo of the Parliamentary volume illustration of the Bloubok but did not compare it to the Paris specimen. She did not know of the University of Leiden illustrations that Rookmaaker uncovered (Rookmaaker 1989) where the Bloubok is significantly different in horn details, nor of the Bloubok pictured grazing peacefully in the map De Laborde produced for Louis XVI based on Levaillant's travels (De Laborde 1790; Glenn 2007).

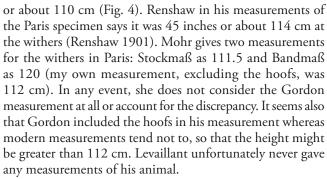
Mohr claimed, twice, that the Gordon illustration was very similar to the Paris specimen and to a large extent based her claim on this impression (Mohr 1967). This impressionistic claim is undermined to a large extent by her own detailed analysis and by a close comparative analysis of proportions and details of the actual specimen and of Gordon's and Levaillant's illustrations.

#### PHYSICAL DETAILS

Two pieces of objective evidence go against Mohr if we accept the assertion of both naturalists that their illustrations were made carefully. Gordon includes, in his original illustration, a measuring rod to give scale at the right of his illustration, giving the height at the withers as 3 Rhenish feet and 6 inches,



 $\label{eq:Fig.5.} Fig. 5. - Illustration of Levaillant's Bloubok. Library of Parliament, South Africa. Courtesy of the Library of Parliament.$ 



The other piece of evidence is to be found in the horns and particularly in the number of annulations or rings in the horns. On the Gordon illustration, where the horns are swept back sharply, there seem to be about 23 on the left horn and 25 on the right. In Levaillant's case, where the horns are much more upright, the Parliamentary and Leiden illustrations differ (Figs 5, 6). The Parliamentary illustration shows about 23 annulations, while the Leiden University illustration has 27 or 28. The Paris museum specimen has 28. If we take the latter illustration as the more accurate depiction, Levaillant has a crucial detail matching.

#### Proportions

If we assume that the artists considered proportions carefully, Levaillant's illustration is closer to the actual specimen than Gordon's in several significant areas.



Fig. 6. — Illustration of Levaillant's Bloubok. University of Leiden Library. Courtesy of the Library.

First, the proportion of head and ears to horns differs quite sharply in Levaillant's favour. In the Paris specimen itself and in the Levaillant illustrations, the length of head and ears together is almost exactly the same as that of the horns measured in a direct line from base to tip. In the Gordon illustration, the horns are significantly longer. A second impression is that the neck in the Gordon illustration is too long proportionately and measuring the proportions bears this out. If one compares 1) the length of the body from the base of the tail to where the neck starts rising to 2) the length of the neck, it is almost exactly twice as long in both Levaillant illustrations and in the Paris specimen. In the Gordon illustration, however, the distance from the base of the tail to where the neck starts rising is only about 60% bigger than the neck length.

In two cases, all the illustrations seem inaccurate compared to the specimen. Both have too much of the body in front of the withers or where the neck starts rising. If one measures from the base of the tail to the tip of the nose, the withers are about half way in both illustrations, whereas in the actual specimen, the distance from tail to withers is about 25% greater than the distance from withers to nose tip. Another detail that is puzzlingly incorrect in both sketches is the position of the eyes relative to the horns. Both depictions show the eyes well forward of the horns, while the specimen has the eyes more or less directly below the horns, which seems right if one looks at Sable or Roan antelope heads.

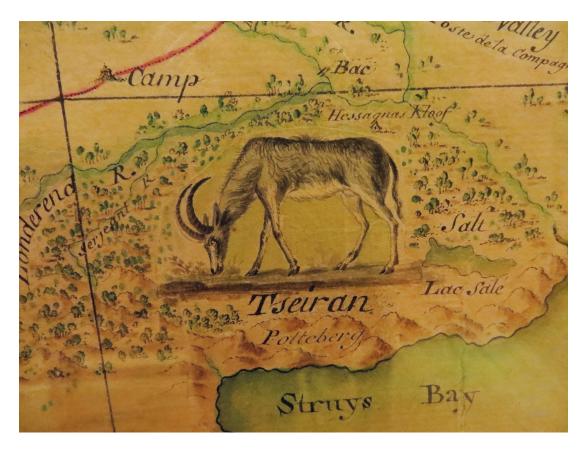


Fig. 7. — Detail from the De Laborde map showing the Bloubok. Courtesy of the Bibliothèque nationale de France.

What of the grazing Bloubok depicted in one of the very small 'papillons' or inset illustrations on the King's Map? (De Laborde 1790; Fig. 7). Did the artist here, known to be Willem van Leen, base this reconstruction of the animal on Levaillant's description or a specimen? The proportions are very similar to those in Levaillant's other illustrations and in the Paris specimen. The head and ears are slightly longer than the horns, while the distance from withers to tip of nose is nearly as long as the distance from withers to base of tail.

#### OTHER DETAILS

There are other minor details which suggest that if Gordon and Levaillant sketched their specimens, that of Levaillant is most likely to be based on that of the museum. The tail hairs, for example, are bushy and prominent in Gordon's illustration, and skimpy at best in Levaillant's and the museum specimen. Another is that the prominent coils and swirls in the hair pattern of Gordon's illustration are not nearly as close to the actual texture of the hide as it is now as Levaillant's illustrations.

Given the importance Mohr accorded the Gordon illustration, it has to be concluded that it simply does not support the weight she puts on it. In every crucial element, the Levaillant illustrations are objectively closer to the actual specimen than Gordon's.

#### **CONCLUSION**

New archival and physical evidence and a close examination of illustrations suggest not only that the Delegorgue provenance once attributed to the Bloubok was an error but that the claimed Gordon to Stadtholder to Paris provenance is equally faulty.

The preponderance of evidence is surely overwhelming: there is no evidence for the Gordon provenance; there is evidence of the sale of Levaillant's collection to the Museum and St Hilaire's recognition of the three new mammal specimens from his collection; the eccentric skinning of the specimen is explained by Levaillant's account and is very different from Gordon's own practice; and the physical characteristics of the specimen match Levaillant's illustrations more closely than Gordon's. As the French say, "pourquoi chercher midi à quatorze heures?" After nearly two centuries of confusion about the provenance, we have a simple solution – the Paris Bloubok is indeed Levaillant's.

#### Acknowledgements

I am grateful to Josephine Lesur and Jacques Cuisin of the MNHN for giving me access to the Bloubok specimen in September 2018 and for many helpful comments. I am also grateful to Joe Verwey for comments on taxidermy prac-

tices. The National Research Foundation of South Africa, grant no. 108838, and the University of the Free State have provided research funding. I acknowledge Roger Bour and an anonymous reviewer for their constructive comments on the manuscript.

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Submitted on 22 October 2018; accepted on 19 June 2019; published on 25 February 2020.