**SUMMARY**

This contribution reconsiders a chair carved from a single piece of wood (Af1979,01.2800), which is held by the Department of Africa, Oceania and the Americas (AOA) at the British Museum (BM). Formerly broken and having no known history or documentation, it was previously thought to originate from south east Africa, but research and conservation work have figuratively and literally reinstated the object ahead of the move of the AOA collections to new storage at the Museum’s Bloomsbury site.

Research suggests that the chair can be provenanced to a Zulu-speaking carver by the name of Unobadula, who lived in the former British colony of Natal (now part of KwaZulu-Natal province, South Africa). Unobadula’s chair was exhibited at Natal’s display for the 1862 International Exhibition in London where it evidently caught the eye of Henry Christy (1810–1865), whose collection forms a significant contribution to the BM.

Stylistically, the chair relates to another chair from nineteenth-century colonial Natal, as well as to two wooden vessels exhibited at the 1862 International Exhibition that are now in the BM. The vessels (Af.4875 and Af.4876) may also have been made by Unobadula and are of a type said to have been made in Natal for non-indigenous patrons. Chairs, on the other hand, were carved for an indigenous and non-indigenous clientele alike. Scientific analysis of the wood of the chair, which is white ironwood (Vepris lanceolata), supports the attribution. To the north east of the colony across the Thukela (Tugela) River, within the independent Zulu kingdom, ironwood and chairs were the preserve of the king, but no such restrictions evidently applied in Natal, which saw the emergence of new patrons and ready access to metal and other tools.

Its construction and inherent fragility make the chair more like a sculpture than an item of furniture, and it was probably commissioned as a showpiece for the exhibition, which also helps to explain why it appears to be a hybrid object, displaying elements informed by both indigenous and British taste.

In bringing together perspectives on the maker, his materials and his method, this study of the chair documents a collaborative, cross-disciplinary museum project that has allowed this rare object—unusually, can arguably be attributed to a known carver—to be considered more closely.

**Introduction**

This contribution centres around a single object from the British Museum (BM) collection—an African chair carved from a single piece of wood (Af1979,01.2800), Figure 1. Housed offsite along with most of the reserve collection of the Department of Africa, Oceania and the Americas (AOA) and having no known history or documentation, the chair required conservation and invited closer consideration.

The research and conservation work presented here aim to reinstate the chair, figuratively and literally, ahead of the move of AOA’s collection to new storage on the BM’s Bloomsbury site. Using an interdisciplinary approach, this study seeks to provenance the chair and two associated wooden vessels more precisely, as the same hand may have made all three. Until now broadly designated as ‘south east African’, the chair, it is argued, can be traced to South Africa and more specifically to the former British colony of Natal (now the southern part of KwaZulu-Natal province, a region encompassing both Natal and the Zulu kingdom) and to a known Zulu-speaking carver. Bringing together the various strands of collaborative endeavour offers new insights into
Figure 1. *Isihlalo* (chair) carved out of a single piece of darkened wood; height 93.5 × width 49 × depth 49.5 cm (AF1979,01.2800). Image: Mike Row
Figure 2. Etched and engraved print showing the façade of the International Exhibition of 1862 building (1913,0331.155), which was erected beside the gardens of the Royal Horticultural Society in South Kensington on a site now occupied by the Natural History Museum.

a remarkable object – a hybrid object that speaks about its original as well as its intended context.

Object journey: the chair’s changing contexts

The chair was recently reassessed when one of the authors (CE) was researching objects from KwaZulu-Natal in the BM. The BM’s Christy Collection includes material that the London-based industrialist, banker, philanthropist, archaeologist, pioneer of anthropology and collector Henry Christy had procured from the London 1862 International Exhibition, Figure 2. Christy probably acquired most, if not all, the indigenously made objects exhibited in the Natal Court (the colony’s contribution to the exhibition) as evidenced by the number of Natal Court objects that came to the BM via Christy. However, conspicuous by its ostensible absence from the Christy Collection was a chair that was described in both versions of the unillustrated catalogue, published as guides to the Natal Court of 1862 [1, 2].

The International Exhibition of 1862 and “the flourishing colony of Natal” [3]

Following the precedent set by London’s Great Exhibition of 1851, the ‘International Exhibition of the industrial arts and manufactures, and the fine arts, of all nations’ also aimed to showcase the industry of various countries and colonies. Intended to demonstrate the capabilities and resources of Natal primarily to the would-be investor, trader and emigrating public, this particular colony’s contribution was said to be “one of the most picturesque and romantic Courts” and also “remarkable for the range of its products” [4], Figure 3. The exhibits were grouped according to predefined categories and ranged from plant and animal materials to colonial and so-called ‘Kafir’ manufactures, minerals, natural history specimens and also two-dimensional items, such as charts, paintings and photographs.

These exhibits were itemized in the abridged and descriptive versions of the exhibition catalogue, both written by Dr Robert James Mann (1817–1886). A Norwich-born physician, Mann resided in Natal for nine years from 1857, seven of which he spent as the Superintendent for Education working among the colonists and the “native population” [5]. As honorary secretary of the Colonial Exhibition Commission and one of the commissioners for Natal, Mann had also voluntarily coordinated, arranged and labelled the colony’s contribution to the exhibition.

As Mann does not give many specific attributions, the exhibits included under the heading “Kafir manufactures … illustrating native industry and domestic economy” can be assumed for the most part to have been made in Natal by Zulu-speaking people, although there were some exceptions [1; p. 6].

Henry Christy’s collection

The indigenously made objects in the 1862 International Exhibition’s Natal Court were generally fairly small-scale items made by hand mainly from a variety of natural...
The selection was broad and the range included domestic utensils such as wooden spoons and vessels, basketry implements and containers, and articles of dress and adornment. Many were ostensibly items of everyday use but few if any show signs of wear. This is perhaps unsurprising as it was stipulated that the exhibits must have been “produced since 1850” [6]. Many were probably made in response to Mann’s call for objects of specific types, which was published by the colonial newspaper the Natal Witness in July 1861 [6]. These objects had to be submitted no later than the end of March 1862 to allow sufficient time for their passage to the exhibition where, according to another condition of entry, they could be priced and sold.

Christy amassed a sizeable corpus of objects from Natal, a large portion of which he evidently acquired from the Natal Court at the end of the exhibition. The exact circumstances surrounding the acquisition are currently unknown, but Christy intended to establish his own ethnographical museum [7]. He is said to have begun acquiring ethnographic material after encountering it at the previous South Kensington extravaganza, the Great Exhibition of 1851 [8].

British Museum

Following his untimely death, Christy’s collection made a highly significant and substantial contribution to the BM. The Natal Court objects, along with most of his extensive and varied collection, passed to four trustees, one of whom was the BM’s Augustus Wollaston (A.W. Franks) (1826–1897). Christy’s trustees, in turn, entrusted the collection to the Museum.

The process of formally listing and registering the Christy Collection, as it continues to be known today, started almost immediately and took years to complete. Objects selected for registration, from which the chair could have been omitted, were given numerical accession numbers (now prefixed with the letters ‘Af.’ in the case of the African material) and a separate registration slip, complete with a description and usually a sketch. In the case of the Natal Court objects, many descriptions seem to be drawn from 1862 International Exhibition labels (which are still physically attached to some items) and/or the two catalogues for the Natal contribution. A number of slips make reference to the exhibition and some cite the Natal Court catalogue number assigned to a particular item.

The Christy Collection remained in Christy’s house at 103 Victoria Street, Westminster only moving to the BM site once space became available following the departure of the natural history collections to South Kensington in the 1880s.

Maker: his chair and other chairs from nineteenth-century KwaZulu-Natal

Mann did not attribute the indigenously made objects displayed at the exhibition to specific makers, bar the work of one individual, “a renowned artizan, named Unobadula” [2; p. 18]. According to Mann’s catalogues, five woodcarvings by Unobadula were exhibited: a chair, a pillow (headrest) and three pots. The last four objects can reasonably be accounted for at the BM, but there appears to be no Christy Collection or other Museum documentation for the chair, which was described as “carved out of one block of wood” [1; p. 7].

Two of Unobadula’s pots were said to have pedestals and BM objects Af.4875 and Af.4876 (Figure 4), whose accession slips document that they were exhibited at the 1862 International Exhibition, seem to correspond to the descriptions in Mann’s catalogue entries. As with the chair, Mann underscores their importance, pointing to the fact that “[g]reat potentates … have their beer brought to them in Wooden Pots of some such dimension and fashion [as Unobadula’s vessels]” [2; p. 18]. He goes on to describe how the drinker would be helped to lift the heavy vessel to his mouth in order to imbibe.

Mainly due to their lack of visible signs of use, there is some uncertainty as to whether or not this genre of vessel, referred to inconsistently in early sources (Mann included) as milk pots and also as beer pots, has any pre-colonial precedent or function. Nettleton has pointed out that these (usually lidded) vessels, possibly based on the form of smaller snuff containers for indigenous use, are now generally thought to have originated in mid-nineteenth-century Natal, where they
Figure 6. A chair that allegedly belonged to King Cetshwayo kaMpande. The object is more likely to be the work of a carver living in the colony of Natal than in the Zulu kingdom. Image: courtesy of KwaZulu-Natal Museum (No. 2749)
would have been made as increasingly elaborate, decorative objects intended for non-indigenous patrons [9–11]. Believed to have been inspired by European examples, chairs on the other hand were, at least within the colony of Natal, evidently being made for an indigenous and non-indigenous clientele alike. The Portuguese are thought to have introduced the chair to the area now known as KwaZulu-Natal well before the arrival of the British [12; p. 58], with successive Zulu kings recorded as having owned chairs, sometimes referred to as thrones, of either European or African manufacture. Described as “a signifier of power” elsewhere in Africa [13], the chair was reserved for the king within the independent Zulu kingdom [12; p. 51], which lay beyond the Thukela River to the north east of the colony of Natal. Unobadula’s reputation as a carver of standing is linked, it would seem, to the prestige associated with these kinds of objects and the skill involved in making them.

Unobadula

Not much is currently known about Unobadula himself; even his name is uncertain, as Mann apparently rendered it in an older or perhaps inaccurate orthographic form. Mann’s descriptive catalogue indicated that the carver “live[d] upon the Ixeku river, a tributary of the Umgeni” [2; p. 18]. The ‘Ixeku’ is “very probably the Mqeku, which rises near Noodsberg and runs south through the Valley of a Thousand Hills to join the Mngeni east of Pietermaritzburg” [14], thus situating Unobadula firmly within the colony of Natal. At this time, Ngoza kaLudaba (c.1810s–1869), the government-appointed (rather than hereditary) chief and head induna (advisor/chief) to the Diplomatic Agent to the Native Tribes, Theophilus Shepstone (1817–1893) [15], was building his chiefdom in the area around Noodsberg. Ngoza, then a prominent leader in colonial Natal, may have patronized, and indeed recommended, Unobadula for his carving. According to one mid-nineteenth-century account, some chiefs in what is now KwaZulu-Natal were “fond of having a black carpenter or chair-maker attached to their ‘court’” [16; p. 124]. Nettleton notes that in Natal, at least from the mid-nineteenth century onwards, renowned carvers were patronized by local chiefs and Europeans alike and argues that although their objects were not intended for indigenous use, but rather carved with a new market in mind, they are no less ‘authentic’ [17].

Included in the Natal Court exhibit were two photographs of Ngoza and one of Unobadula, Figure 5. In an age when artisans were typically unacknowledged, especially if they were considered ‘tribal’ [18], Unobadula was identified in the catalogued photograph (many other sitters were not) and works were ascribed to him by name. He can be seen wearing a thick greatcoat, suggesting that the photograph was taken in a centre such as Pietermaritzburg where the wearing of Western-style clothing was mandatory [19] (in Natal the greatcoat was “standard wear” all year round in town in order “to cover nakedness” [20]). A clue to Unobadula’s identity lies in his isicoco (headring), indicative of his status as a married man. It also suggests that he is not likely to have lived at a mission station, since amakhulu (believers, i.e. converts to Christianity) were encouraged to cast off the isicoco. His precise descent, as a post-nyce cane African, and whether he was born in Natal or in the Zulu kingdom, is currently unknown, beyond that he appears to have been a Zulu-speaking resident of Natal. Like Ngoza, Unobadula may have left the Zulu kingdom and settled in the colony.

Other chairs

At least two other related indigenously made chairs from nineteenth-century KwaZulu-Natal survive and both have reputed connections to the Zulu kings, while a third, three-legged example is almost certainly not indigenously carved [21], and is not considered here. The first and oldest chair is said to have belonged to the second Zulu king, Dingane kaSenzangakhona (1795–1840), and two of his successors, and is now housed in the Voortrekkers/Msunduzi Museum, Pietermaritzburg (No. 665). The second chair, said to have belonged to Cetshwayo kaMpende (1826–1884), the fourth and last Zulu king of the independent kingdom, is now held in the KwaZulu-Natal Museum, Pietermaritzburg (No. 2749), Figure 6. While there is evidence to suggest that ‘Dingane’s chair’ could have belonged to one of his successors rather than to Dingane himself – and indeed it bears a striking resemblance to a chair belonging to Mpende kaSenzangakhona (1798–1872) as depicted by George French Angas (Figure 7) [22; plate XI] – the provenance for ‘Cetshwayo’s chair’ is less certain. Klopper argues that it was probably the work of a “Natal carver” [12; p. 57], and therefore unlikely to have been the property of a Zulu king. Klopper makes this assertion...
based in part on the lack of supporting evidence for the chair’s supposed royal connections and also on stylistic grounds. She argues that it is unlike Mpande’s throne as depicted by Angas and is comparatively modest in that it “lacks both the complexity and monumentality” [12; p. 57].

Chairs, as Klopper points out, were for the sole use of the king, at least before the destruction of the kingdom in 1879 [12; p. 51], whereas in the colony of Natal no such restrictions seemed to be in place. According to a nineteenth-century missionary to Natal, the reverend William C. Holden, indigenously carved chairs could be purchased for a few shillings [23; pp. 252–253]. Although there is no record of the price put on Unobadula’s chair at the 1862 International Exhibition, it is known that it was carved in the colony of Natal. Unobadula, like Mann, was possibly familiar with the authority associated with the ‘chair of state’ and may well have been aware of its highly restricted use in the Zulu kingdom.

Although the BM chair is stylistically closer to ‘Cetshwayo’s chair’, the other chair from Natal, each of the three chairs is distinct. In her analysis of the two chairs housed in South Africa, Klopper points out that it is their difference rather than their similarity that is most striking [12; p. 50]. She suggests that this lack of a “unity of style” points to the lack of a “single or ‘original’ prototype” on which the chairs might be based, in contrast to examples from elsewhere in Africa [12; pp. 58–59].

Nevertheless, all three extant chairs share a number of common features: each is carved from a single block of wood, has straight-back splats and is blackened. Historically, darkened or pokered wood is synonymous with material culture from KwaZulu-Natal. The aesthetic of such surfaces, often rendered glossy, may be intended to appeal to the ancestral spirits, ‘the shades’, who prefer and inhabit dark places [24]. Dark surfaces possibly signify the shades’ ‘liking for darkness and avoidance of brightness’ [25; p. 78].

Klopper suggests that ‘Dingane’s chair’ is carved out of ironwood [12; p. 56], which was one of the hard (i.e. dense and heavy) woods traditionally reserved for royal use within the kingdom before its destruction (and where certain materials and objects were subject to sumptuary laws), but others have suggested different woods [26]. These material identifications were apparently made without reference to sampling, whereas the present study has applied scientific analysis to establish the wood type of the chair and, therefore, the likely provenance of its materials with greater certainty.

Material: wood identification

Standard techniques of identification and terminology laid down by the International Association of Wood Anatomists (IAWA) are conventionally adopted for the identification of modern wood [27, 28]. For each sample the key features are compared with reference collection specimens, wood databases and textual descriptions. This IAWA protocol may be applied to archaeological or historical wood and charcoal, providing it is modified to accommodate the effects of the conditions of preservation [29]. Each sample is prepared to expose transverse, radial longitudinal and tangential longitudinal sections or surfaces for identification (TS, RLS and TLS respectively). For modern and some types of historical wood, thin-sections with an approximate thickness of 12–14 μm are cut on a base-sledge or rotary microtome and mounted on glass microscope slides for examination by transmitted light microscopy.

On account of the extremely small sample sizes permitted, a variation on these standard techniques was applied to the chair and the wooden vessels. In order for wood identification to be carried out successfully, sampling had to take place in unobtrusive (or damaged), undecorated areas of wood that were free from pigments, binding media or any conservation consolidant, so that the fine details of the cellular structure
were not obscured. It was not possible to remove the standard samples, measuring 25 × 25 × 50 mm, which are necessary for modern wood thin-sectioning.

The chair

Nonetheless, samples of the chair showing TS (Figure 8), RLS and TLS could be examined with a Leica Aristomet biological microscope using transmitted and polarized light at magnifications ranging from ×80 to ×400 and then with the scanning electron microscope (SEM: see below). On the basis of the observed anatomical characteristics and their correlation with reference collection specimens and descriptive texts [30], the wood was identified as white ironwood, *Vespris lanceolata* (Lam.) G. Don (Rosaceae family); full details of the identification to taxon can be found in the appendix.

*Vespris lanceolata* may take the form of an evergreen shrub or small tree, but can also attain the height of 20 m in dry forests in South Africa. It has a wide distribution in forest or thicket in the mountains or dunes from the Western Cape through to eastern South Africa [31–33].

The wood of *V. lanceolata* is even-grained, flexible, heavy, durable, strong and hard (hence the name, ironwood); it takes a good polish and has been used for many purposes, including furniture, wheel spokes, handles, roof beams and turned artefacts [32–34]. Its air-dry wood “has a density of (740–)820–900(–1060) kg/m3 at 12% moisture content” [35]. Various parts of the tree have been used for magical and medicinal applications [35].

**Vessels Af.4875 and Af.4876**

Minute wood samples from the vessels were each mounted on an aluminium SEM stub using Leit-C Plast carbon cement, a proprietary brand of conductive material with low off-gassing properties that is suitable for use in the SEM. They were examined, uncoated, using a Hitachi S-3700N variable pressure scanning electron microscope (VP-SEM) to observe the fine detail of the crucial diagnostic anatomical features. An accelerating voltage of 15 kV was used on most occasions, but sometimes this was raised to 20 kV or lowered to 12 kV, depending on the condition of the sample. For optimum viewing of the diagnostic cellular detail, the working distance was varied from 20.5 to 10 mm, as dictated by the individual sample being examined. To eliminate surface charging on non-conducting samples, the chamber pressure was varied, based on the state of preservation of each sample. The 3D mode (rather than Compositional) was selected for maximum visibility of diagnostic features.

On the basis of the observed anatomical characteristics (see appendix) and their correlation with reference collection specimens and descriptive texts, the wood of these vessels was identified as African cherry, *Prunus africana* (Hook. f.) Kalkman (Rosaceae family), which is also known as red stinkwood.

**Wood selection**

*Prunus africana* wood is of commercial importance and is extensively harvested in Africa for its timber but especially for its bark, which has medicinal properties [36]. In consequence, since 1995 it has been included by the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) in the endangered category in Appendix II [37]. *P. africana* is a light-demanding, medium-sized to large tree that inhabits evergreen forests near the coast and also afro-montane forest areas in KwaZulu-Natal, the Eastern Cape and elsewhere in southern Africa [32, 38]. As this tree risks being heavily overexploited for its bark, and to combat illegal trade, it is now protected in KwaZulu-Natal [38, 39], but in the past its close-grained, reddish brown wood was used for furniture, axe or hoe handles [40], containers and mortars [41], as well as fuel wood, but its use is limited as it can be difficult to season and it may split and twist [32].

While not exclusively so, both *V. lanceolata* and *P. africana* are indigenous to KwaZulu-Natal, the first being a hard wood of the type circumscribed within the Zulu kingdom. It seems plausible that Unobadula, working outside the control of the kingdom, employed ironwood for its intrinsic value, implied prestige, established use and possibly also to demonstrate his skill in carving hard, dense wood.

**Method: conserving the chair and understanding its construction**

Customarily, African seats, headrests and an array of other forms are often carved from a single block of wood, obviating the need for joinery. Carving an open-framed object such as a chair from a single block or log of wood is especially difficult and requires great skill. The carver’s laborious task involves the cutting away of a large amount of wood to reveal a framed structure rather than assembling one using pre-prepared component parts. This requires an understanding of form and of sculpting wood in a three-dimensional way, rather than of joint making and assembly. Removing large expanses of material from a block of wood (approximately 1.55 × 0.5 × 0.5 m is needed for a chair) while retaining straight lines requires a very different approach to that of a joiner.

As a material, wood is orthotropic, meaning that it has different properties in different orthogonal directions.
Figure 10. Annotated two-dimensional renderings of the RTI data for: (a) part of the underside of the seat and rear legs of chair Af1979.01.2800; and (b) the underside of vessel Af.4875. Images: Kevin Lovelock


Depending on taxon, hardwoods (angiosperms, of which *Vepris lanceolata* and *Prunus africana* are examples) have different shrinkage rates. From green to oven dry, *Vepris lanceolata* shrinks 5.5% radially (across the grain, pith to bark), 9.3% tangentially (at a right angle to the radial plane) [42], and approximately 0.4–0.7% longitudinally (along the length of the grain) [43]. Carved from a single block, the chair would have shrunk in different directions at different rates, creating internal tensile stresses within the wood, which begin when the outer part of the wood loses moisture at a faster rate than the interior [44].

In most constructed furniture, where the primary function is strength and durability, wood is chosen that will have been seasoned (i.e. air- or kiln-dried to reduce moisture content), enabling the maker to take maximum advantage of the medium’s natural movement and shrinkage. In contrast, the chair is likely to have been carved after only a few days (if any) of seasoning the wood in the shade, thereby allowing the woodworker to carve in the ‘green’ (unseasoned) state. Ideally, *Vepris lanceolata* should be slowly air-dried before being used, but carving in the green is easier than carving denser, seasoned wood. Indeed, carving the chair out of a block of seasoned timber would have been impossible.

Carved from unseasoned timber, the chair would inevitably have become unstable and liable to distortion and movement relatively soon after it was produced. The removal of large amounts of wood for the various continuous elements would result in a piece under stress owing to the differential shrinkage described above. This differential shrinkage of the wood also depends on from which part of the trunk it originates, Figure 9. Fashioned from such a large piece of timber, the chair would be subject to shrinkage deformation in every direction and at different rates. This anisotropic shrinkage will have set up stresses within the chair’s dense wood and its strength is therefore of paramount importance. Due to the loss of material at the breaks at the junction of the leg and the stretcher had been reconstructed previously with an epoxy resin adhesive. Because the wood around the break was friable due to insect activity, the leg remained weak after this repair and it had subsequently failed, resulting in a new break behind the adhesive line. The break edges on the detached leg and stretcher pieces had deteriorated while apart and as a result these surfaces were in poor condition.

When the chair broke, it released stresses set up during carving, causing additional deformation. Consequently, the broken elements no longer fitted seamlessly together and there was a gap between the leg and the stretcher when they were aligned. The break across the seat, when aligned they were aligned. The break across the seat, when aligned approximately, matched well on the proper left only, with an open split remaining on the right side. A former repair to the front proper right corner of the seat appeared to be stable.

**Conservation treatment**

The old epoxy adhesive had to be removed from the leg and stretcher break surfaces to allow reconstruction with a new adhesive. Dichloromethane was applied to soften the old adhesive and once pliable it was removed mechanically with a scalpel. The friable wood was then consolidated with three applications of a 2% solution of Paraloid B72 (ethyl methacrylate copolymer) in xylene, applied with a pipette under fume extraction. Xylene was chosen as a solvent because of its slow evaporation rate, which allowed the consolidant to penetrate deep into the wood and reduced its migration to the surface during solvent evaporation. The leg was then reconstructed with Kremer 63550 cold-setting liquid fish glue. Fish glue is a strong adhesive and was deemed appropriate for this structural repair as the foot supports much of the weight of the chair’s dense wood and its strength is therefore of paramount importance. Due to the loss of material at the old break edges, a fill material comprising fish glue, wood dust and earth pigments was employed as a gap-filling adhesive and applied with a metal spatula. After reconstructing the leg break, the stretcher no longer aligned (the structure

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**Table 1. Tool marks observed on the chair and vessels**

<table>
<thead>
<tr>
<th>Object and wood</th>
<th>Straight-bladed tool (such as an assegai blade)</th>
<th>Adze</th>
<th>V-gouge</th>
<th>Rasp</th>
<th>Spoon/crook knife</th>
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<tbody>
<tr>
<td>Chair (Af1979,01.2800)</td>
<td>X</td>
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<td><em>Vepris lanceolata</em>, white ironwood</td>
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<tr>
<td>Vessel (Af.4875)</td>
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<td><em>Prunus africana</em>, African cherry/red stinkwood</td>
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<tr>
<td>Vessel (Af.4876)</td>
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<td><em>Prunus africana</em>, African cherry/red stinkwood</td>
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**Condition prior to treatment**

The chair came into the conservation studio in three pieces; the darkened colour and wear on the break edges showed that it had been in fragments for quite some time. The seat had broken across its centre, separating the front and back. This typical crack, which is “usually an indicator of rapid drying” [45], is likely to have begun shortly after, if not during, carving. A combination of the short grain and any weight placed on the chair would have contributed to failure and ultimately resulted in breakage. The proper right rear leg was broken in two places, resulting in a separated proper right rear foot. The front stretcher and part of the proper right mid-rail that projects from the backrest were detached and missing, Figure 1. There is also evidence of old wood-boring insect infestation throughout the object, including flight holes (small pore-like surface openings) and friable wood. The chair, particularly the feet and legs, has consequently lost much material and intrinsic strength, which has made it vulnerable to the damage it has evidently suffered.

The two breaks at the junction of the leg and the stretcher had been reconstructed previously with an epoxy resin adhesive. Because the wood around the break was friable due to insect activity, the leg remained weak after this repair and it had subsequently failed, resulting in a new break behind the adhesive line. The break edges on the detached leg and stretcher pieces had deteriorated while apart and as a result these surfaces were in poor condition.

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Figure 11. Details of the vessels: (a) the motif created using a V-gouge on vessel Af.4876; and (b) the V-grooved surface motif and interior spoon knife marks on vessel Af.4875. Images: Mike Row.
having deformed as described above) and required filling to bridge the gap and maximize strength in this area. Small, thin wedges or fillets of balsa wood (Ochroma pyramidale) were cut, shaped and adhered into this gap with fish glue. When set, the wedges were carved to shape and toned with watercolour paint to match the original wood. Balsa was chosen because it is very lightweight but strong relative to its weight [46]. It is, however, far lighter and less dense than the extremely hard, fine-grained ironwood. The weaker balsa wood will, in the event of further damage and deterioration, break before a new fracture is formed in the ironwood.

The seat was reconstructed with fish glue in much the same manner as the stretcher, and balsa fillets were inserted and adhered into the remaining split to maximize the strength of this area. As before, these were carved to shape and toned to match the original wood.

Storage recommendations
Following conservation treatment the chair appears stable, but it is not clear how well the weakened areas below the surface, where the wood has been damaged by boring insects, are consolidated. A mount that follows the shape of the frame and is capable of supporting the weight of the chair from the underside of the seat (ideally also supporting the weight of the legs) has been recommended for future storage. Supported in this way, the object could be lifted using the under-seat mount rather than directly. A box to accommodate the chair and its mounting system is under construction in preparation for the forthcoming collections move to new onsite storage.

Observations of the carver’s style and tool marks
During conservation assessment and treatment, the chair’s construction and tool marks were studied and comparisons made with the two vessels also thought to have been created by Unobadula. These observations were made using various combinations of the naked eye, low magnification and reflectance transformation imaging (RTI). Using a digital surrogate comprising multiple images, RTI allows the surface of an object to be visualized as though lit at different angles, including raking (low angle) light. While best suited to rendering texture on relatively flat surfaces, the technique was useful when comparing the surfaces of the three objects and in capturing detail that might otherwise easily be overlooked, Figure 10 [47].

The vessels are so similar that the same types of tools, if not the same tools, appear to have been used to carve both. However, if the same tools were used to make the chair, no matches or similarities are evident, apart from the use of an adze to form much of the chair and the vessels’ ‘pedestals’. As the vessels are curvilinear in form, while the chair is carved in straight lines, it is possible that the tools were used in diverse ways to shape these very different types of objects, all carved in the green. A summary of the types of tool marks found on the chair and vessels is provided in Table 1.

Commenting in 1866 on “wooden vessels made for general purposes” [23; p. 253], Holden observed that they too were “cut out of a solid piece of wood; the inside being scooped out by a piece of shark iron, or the edge of the assegai [spear or lance]” [23; p. 253]. Holden’s assertion echoes other documented accounts of the types of tools employed for wood carving. Assegais are often said to have been used for carving [22; plate XXI; 2; p. 17; 48; p. 17] and according to a label on a spoon (Af.3154) in the BM, the object was carved with a similar implement, a “piece of iron on a spear”. However, it is evident that the carver of the two vessels used a V-gouge type chisel to form the grooves that pattern the surface of the vessels. Evidence of the use of this tool is visible where one set of parallel decorative lines intersects with another running at a different angle. The carver occasionally loses control of the tool and overruns into the adjacent near-perpendicular grooves, leaving a series of pyramidal marks, Figure 11a. The error is understandable as the tool is difficult to manipulate on a curved surface of dense wood. On the internal surface of the vessels there are long, continuous scooped-out lines where wood was removed during hollowing. These marks resemble those created by a carver’s spoon chisel, but the handle of such a chisel would impede the long, swooping actions required to make these curved cuts when used in the restricted space inside the vessel. It is likely, therefore, that a crook or spoon knife was used, which is pulled or drawn towards the carver rather than pushed, Figure 11b.

A related vessel from Natal (Af.2176), which came to the BM collection from the Royal Botanic Gardens, Kew in the 1860s, is registered with the following description: “Milk bowl cut out of the solid wood, hollowed out with a piece of iron shaped not unlike the paring knife used by shoeing smiths. It stands on straight legs and is carved with lines.” This vessel was collected by Major Robert Jones Garden (1821–1870), a British officer of the 45th Regiment of Foot, Sherwood Foresters, who was based at Fort Napier, Pietermaritzburg in Natal between 1848 and 1853. This observation, most probably by Garden, about the tool is of significance as it offers an insight into the type of implement that might have been used to make the other two vessels.

During his visit to “Zulu country” in the mid-nineteenth century, Angas witnessed a group of blacksmiths at work. He noted that they made “hoes, assagais [sic], and knives for carving spoons and bowls” [22; p. 43]. In the accompanying plate (XXII) he depicts a carver – often found working closely with blacksmiths, with whom they shared a privileged status – fashioning a spoon, presumably using an indigenously made tool with what appears to be a curved blade. It should be noted, however, that owing to colonial trade during the nineteenth century, ready access to metals within Natal increased and new varieties of metal tool became available.

Indigenous and European metal tools for woodworking make much the same marks so that while it is clear that a V-gouge was used in the making of the two vessels it is not possible to determine its origin. To achieve a particular effect, Unobadula may have been using either European tools (inspired by imported examples) or tools following a long-established indigenous design. The latter scenario is less plausible, given the written, visual and material record. There are relatively few metal tools (and it would seem no V-gouges) from KwaZulu-Natal in the BM collection, a pattern that is repeated in other museums, including the KwaZulu-Natal Museum’s anthropology collection [49].

While it would have been possible to achieve the same overall V-grooved effect using a flatter blade, the process would be much more laborious and it would not account for the characteristic marks created by overrunning discussed above.
Is this Unobadula’s chair?

The chair and two vessels at the BM that are thought to have been carved by Unobadula share some distinctive features. The stretchers on the chair and the horizontal bars on the vessels’ pedestals are similar and unusual, being slightly trapezoidal in section, which is a comparatively uncommon attribute in material culture from KwaZulu-Natal. In addition, some feet on the vessels are canted or angled at the rear, close to the base of the foot; a similar canting is present on one of the chair feet, again on the inside. Moreover, rather than being the result of pokeworking and burnishing, the darkened surfaces on all three objects appear to have been applied, which would have been less labour-intensive and time-consuming. Further research is needed to determine the nature of the surfaces, none of which, in common with the undersides of the feet, appear to display signs of use or wear.

Like the chair, the vessels display evidence of insect damage and of having had their surfaces coated with a substance such as creosote. Correspondence indicates that at least from 1867, A.W. Franks was “having trouble with woodworm” in the BM collections [50], John H. Pollen of the South Kensington Museum [now the Victoria and Albert Museum] suggested “positioning a saucer of creosote as protection against woodworm” [51], but no documentation detailing this or any course of treatment that may have entailed coating the objects seems to survive.

Although the three objects appear to have been finished off in some haste, which is consistent with the relatively short time available to Unobadula ahead of the exhibition, they are undeniably skilfully executed and made by an experienced hand. Unobadula’s contribution seems to be a late entry to Mann’s catalogues – his carvings and a number of other objects reused other catalogue entry numbers (as indicated by the word ‘bis’), only suffixed with the letter ‘K’.

If these three objects are the work of Unobadula, it remains a mystery why the BM registration slips for the vessels do not specify that he was their maker or why the chair was apparently only registered much later. One explanation is that the information on the slips is at best inconsistent and by no means always complete. As for the chair, it may have come to the Museum already broken and fragmentary, and although on that basis it was deemed unsuitable for the collections, it was not disposed of for some reason.

Conclusions

There is no suggestion that the chair formerly belonged to a king or other high status individual, as it appears unused and was most probably specially commissioned for the 1862 International Exhibition. If, however, it is accepted that Unobadula made the chair, this – taken with Mann’s description – suggests that the piece self-consciously quotes the isihlalo (chair) of state. The chair speaks, as it were, of both its original and its intended context, apparently drawing on elements of both indigenous and British taste. Its legs, stretchers, seat and backrest are not dissimilar to those of ‘spindle back’ type chairs found in the north west of England from the late eighteenth century, while, as mentioned, aspects of its style and execution, and its blackened surface, are characteristic of woodcarving from KwaZulu-Natal. The chair can be understood as a showpiece, intended to demonstrate skill through its form and use of materials, and possibly also to appeal specifically to a British audience.

Writing around the time of the International Exhibition of 1862 and echoing Mann, Holden commented that indigenously made chairs “are cut out of a solid block of wood, six feet long, and three feet in diameter” and added: “What a herculean task would an Englishman think this to be! – with a small hatchet, or a sharp piece of iron, to pare down and cut off this large block, until legs, seat, and back appeared” [23; pp. 252–253]. This observation suggests that at least within the colony of Natal, chairs made by indigenous carvers were a marvel, more akin to sculpture, and for the reasons indicated above not robust as items of furniture. Unobadula’s virtuosity no doubt captured Mann’s imagination and perhaps even secured him the exhibition medal “[f]or a large carving in wood” from the Natal Court [52], of which no further details are given.

By tracing the chair’s likely journey from Natal to Britain and considering its probable maker, its material and method of construction, this study has brought an interdisciplinary approach, made possible through collaborative museum work, to bear upon the object. In the process, a once broken and unprovenanced chair described as south east African has now been reinstated, both literally and figuratively. The object can be appreciated as arguably one of only a few known, extant, indigenously carved chairs from nineteenth-century KwaZulu-Natal and the work of an individual, Unobadula.

Appendix

The chair: characteristic anatomical features of Vepris lanceolata (synonym Vepris undulata (Thunb.) I.Verd. and C.A.Sm. (1951), nom. illegit.)

Indistinct growth boundaries; a diffuse-porous arrangement of vessels; simple perforation plates; alternate, polygonal intervessel pits; vessel-ray pits with distinct borders that are similar to intervessel pits in size and shape throughout the ray cell; very thick-walled, non-septate fibres with simple to minutely bordered pits; diffuse, scantly paratracheal and narrow-banded axial parenchyma; rays one to three cells wide; homocellular rays with all ray cells procumbent; prismatic calcium oxalate crystals present in chambered axial parenchyma cells.

Vessels Af.4875 and Af.4876: characteristic anatomical features of Prunus africana (synonym Pygeum africanum)

A diffuse-porous arrangement of vessels, sometimes in a diagonal or radial pattern; vessels often in radial multiples of four or more; simple perforation plates; alternate, polygonal intervessel pits; vessel-ray pits with distinct borders that are similar to intervessel pits in size and shape throughout the ray cell; helical (spiral) thickenings in vessels; gummy deposits in heartwood vessels; vascular/vasicentric tracheids; non-septate, thin- to thick-walled fibres with simple to minutely bordered pits; diffuse and scantly paratracheal axial parenchyma; larger rays mostly four to ten seriate; body ray cells procumbent with between one and four rows of upright and/or square marginal cells; druses (compound crystals) occasionally present in ray parenchyma cells.

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Materials and suppliers

• Balsa wood (Ochroma pyramidale) fillets: 4D Modelshop, The Arches, 120 Leman Street, London, E1 8EU, UK, www.modelshopuk.co.uk/

Authors

Catherine Elliott (catherine.elliott@uea.ac.uk) is a former museum assistant in the Africa section of the Department of Africa, Oceania and the Americas at the British Museum. Caroline Cartwright (cartwright@cethebritishmuseum.ac.uk) is a scientist and Philip Kevin (pkevin@thebritishmuseum.ac.uk) is a conservator, both in the Department of Conservation and Scientific Research at the British Museum.

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20. Guy, J., research fellow at the Campbell Collections of the University of KwaZulu-Natal, Durban, personal communication (February 2013).
41. ‘African cherry’, in Indigenous multipurpose trees of Tanzania: uses and economic benefits for people, Cultural Survival Canada and...
Notes

1. The research informs a Museum Studies MA dissertation written by one of the authors (CE) at the Institute of Archaeology, University College London and her contribution “From Natal” tracing the provenance of a selection of Christy Collection objects at the British Museum for a book edited by C. Hamilton and N. Leibhammer provisionally titled Tracing and untracing the archive that was in the course of publication at the time this article was written.

2. Sometimes also spelled ‘Kaffir’, a now opprobrious term formerly applied to indigenous South Africans. During the early colonial period, the Zulu-speaking peoples of Natal were often collectively referred to as ‘Natal Kaffir’, ‘Natal Kafirs’ or simply as ‘Kafirs’ and were generally distinguished from the Zulu ‘proper’ of the independent Zulu kingdom, which lay to the north across the Thukela River.

3. The modern orthography would almost certainly be ‘Nobhadula’.

The authors are grateful to John Wright for this insight, which invites further exploration.

4. See also Elliott (forthcoming) cited in note 1. According to John William Colenso (1814–1883), the first Bishop of Natal, there were “probably … more pure Zulas [i.e. from the Zulu kingdom] under Ngoza than under any other chief in Natal” [16; p. 49]. Ngoza himself was a refugee from the kingdom. The authors are grateful to Jeff Guy for his comments.

5. The sitter in Figure 5 is most probably “Unobadula, the wood-carver” [1; p.10]. The portrait comes from a series of photographs by Dr Robert James Mann, a finding corroborated by Jeff Guy [54–55]. It was displayed in the Natal Court at the International Exhibition of 1862. Significantly, this photograph is the only known example from the series to show a sitter holding a carved wooden object, thus suggesting it might indeed portray the individual known to us as Unobadula. The sitter holds a wooden vessel similar to one known to have been carved by Unobadula, discernible in Figure 3.

6. The rise, expansion and consolidation of the Zulu under the first Zulu king, Shaka kaSenzangakhona (ca.1682–1828), during the mfife (literally crushing or scattering) is a period generally acknowledged as one of upheaval when chiefdoms south of the Thukela River were variously destroyed, uprooted, incorporated or greatly diminished. It has been noted that only after the Anglo-Zulu War of 1879 was there a “draw [ing] together in a common sense of identity” of the Zulu-speaking peoples north and south of the Thukela [53].

7. Others have variously suggested that ‘Dingane’s chair’ is made out of Newtonia hildebrandtii (black ivory) or Combretum apiculatum (redbush willow), whereas ‘Cetshwayo’s chair’ is said to have been made from Erythrina caffra (coastal coral tree) or Sclerocarya birrea (mamba) [26].