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# Implications of new AMS dates for the Khami Period in the Mapungubwe Landscape

After the abandonment of Mapungubwe, the Limpopo Valley was reoccupied first by Sotho people, making *Icon* pottery, and then by Kalanga speakers making *Khami* pottery. The senior Kalanga chief, in this case Twamamba, was based at Machedemma about 60 km to the south, while several petty chiefs administered various portions of the valley itself. Because of fluctuating rainfall, the occupations of both Sotho and Kalanga people occurred in pulses during higher rainfall periods. New AMS dates place one site in the Icon Period, eight sites in *Pulse 1* (AD 1400–1480) and eight sites or components in *Pulse 2* (AD 1520–1590). Kalanga people occupied the best agricultural land near the Limpopo floodplains and Sotho people lived on the plateau to the south. The two groups thus shared the landscape, but not the resources equally. The ceramic record documents this unequal interaction. This interaction, facilitated by male and female initiation schools on the ethnic boundary, helped to create Venda as a language and macro-cultural entity.

**Significance:**

- Interaction between Sotho (Icon) and Kalanga (Khami) over some 200 years led to the creation of Venda.
- New radiocarbon dates relate to Tshivenda origins, the language spoken by Venda today.
- Initiation schools in the Limpopo Valley provide a model for interaction in the rest of Venda.

By AD 1320, Mapungubwe people had abandoned the Limpopo Valley and the landscape remained unoccupied by agriculturalists for some 80 years until early Sotho people took up residence.<sup>1,2</sup> With a probable origin in East Africa<sup>3</sup>, *Icon* pottery marks the first appearance of Sotho speakers in southern Africa. Shortly afterwards, Kalanga speakers (Western Shona) who made *Khami* pottery moved south from Zimbabwe and reoccupied the valley: it was their ancestors who had lived at Mapungubwe.

## The Khami Period

Khami chiefdoms can be ranked according to a hierarchy in which each chiefly level was the apex of a pyramid of lower courts.<sup>4</sup> Between AD 1400 and 1450, Khami<sup>5</sup> near Bulawayo (Figure 1) became the large capital of an independent Torwa state in an area known as Butua<sup>6</sup>. States with such large capitals encompassed some 90 000 km<sup>2</sup> and multiple smaller chiefdoms. In the early 15th century, Khami expanded its control into Botswana<sup>7</sup>, southern Zimbabwe<sup>8</sup> and across the Limpopo. The senior chief for the Limpopo settlements was based at Machedemma<sup>9</sup>, about 60 km to the south of the Limpopo. A paramount chief at this time did not exist in South Africa nor in Botswana, and so, the provincial capital must have been in Zimbabwe.

Because Shona and Venda people use natural features to mark political boundaries<sup>10</sup>, the Shashi and Limpopo rivers most likely separated the southwest (Botswana) and southern (South Africa) districts from those in Zimbabwe. Interaction between early Sotho and Kalanga appears to have occurred only in the southern district and further southeast. Kalanga people withdrew during the dry period around AD 1500 and then returned to the Limpopo, and to Machedemma, when rainfall improved.<sup>10</sup>

## Sotho and Kalanga interaction in the Mapungubwe Landscape

Interaction between Sotho and Kalanga peoples is of special interest because it led to the creation of Venda as a language and macro-cultural entity. Venda people are archaeologically and anthropologically important because they have continued the essence of the pre-colonial Zimbabwe Culture – class distinction and sacred leadership – distinguishing them further from Sotho- and Nguni-speaking communities.<sup>11</sup>

The Tshivenda language is known to be a unique blend of Shona (both Kalanga and Karanga) and Sotho.<sup>12</sup> Previous research near the Soutpansberg shows that the creation of Tshivenda parallels the creation of *Letaba* (Venda) ceramics from a blend of *Icon* (Sotho) and *Khami* (Kalanga) pottery.<sup>13</sup>

It is not possible to use ceramic data alone to identify which, if any, present-day Sotho and Kalanga dialects were spoken 600 years ago. Broad correspondences between *Icon* and Sotho, and *Khami* and Kalanga, are nevertheless sufficient for our Limpopo research.

Foot surveys in the Limpopo Valley have recently yielded some 398 sites with *Icon* (95) and *Khami* (285) pottery, plus some with both (18) (Figure 2): Khami people occupied the best agricultural land, demonstrating their political dominance. The sites belonged to two main pulses: *Pulse 1* in the 15th century and *Pulse 2* in the mid-16th century. Isotopic analyses of the rings of four baobab trees (with ±5-year ring accuracy) show that these two pulses experienced relatively high and sustained rainfall separated by dry conditions inimical to farming.<sup>14</sup>

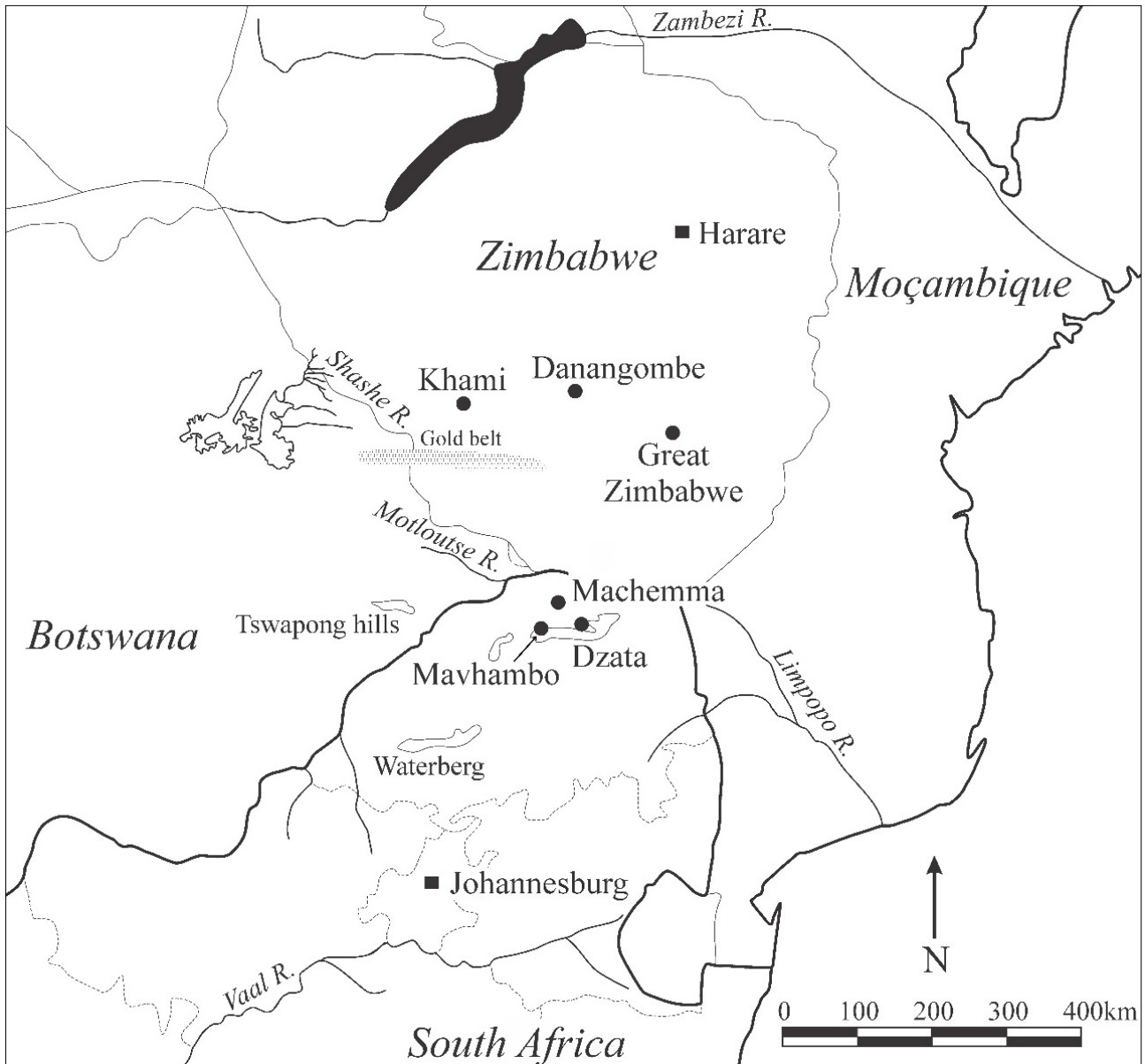


Figure 1: Important Khami-Period sites mentioned in the text.

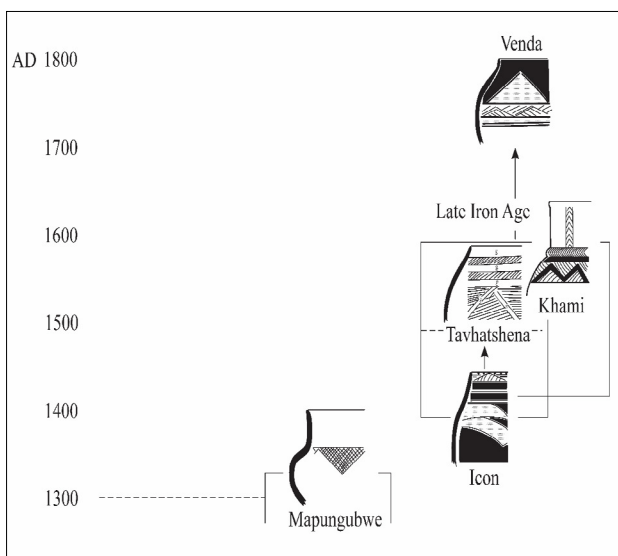


Figure 2: Ceramic sequence associated with Venda origins.

### New dates

We have recently processed dung samples from 16 new sites or components related to Venda origins. They were collected from below the surface level inside central cattle kraals: eight in *Pulse 1* and eight in *Pulse 2* (Table 1). We use the southern hemisphere data set SHCal20 at one sigma accuracy, following Calib 8.10 (available online at <http://calib.org/calib/calib.html>). We use one sigma errors rather than two because each dung sample derives from a short, discrete dating event limited by our tight ceramic and baobab sequences. Our sequence confirms that recorded by Loubser<sup>13</sup>: a few Icon sites date to the beginning of the 15th century (e.g. Edmondsberg site AD 161); then sites with *Khami* pottery, or *Khami* with *Icon*, date to *Pulse 1* (e.g. Machedemma DC1); and *Khami* and *Tavhatshena* date to *Pulse 2* (e.g. DS 32). *Tavhatshena* pottery is similar to *Icon* (and difficult to distinguish), but with the addition of *Khami* motifs. Indeed, *Icon* and *Khami* motifs occasionally occur together on the same vessel surface. The third and final step in the creation of Venda ceramics, *Letaba*, is not present in the Limpopo Valley until the 19th century, after it evolved elsewhere. This third step is not part of the Limpopo sequence because it was too dry for farmers to live there after *Pulse 2*.

**Table 1:** New AMS dates for the Khami Period in the Mapungubwe Landscape: SHCal20 from Calib 8.10

Site	Ceramics	Lab no.	$\delta^{13}\text{C}$	BP $\pm 1\sigma$	SHCal20 $1\sigma$
<b>Pulse 2 [AD 1520–1590] BP 300–390</b>					
DS 32 (VI/G) (V/B/UF)	Khami + Tavhatshena	IT-C-1087	-24.2 -24.9	300 $\pm$ 33	1512-1546 1544-1625
		IT-C-1497		380 $\pm$ 37	
Edmondsberg AD161a	Icon/Tavhatshena	IT-C-683	-13.8	310 $\pm$ 49	1569-1585
Kongo AD531	Icon/Tavhatshena	IT-C-682	-14.4	310 $\pm$ 49	1569-1585
Samaria AB354	Khami	IT-C-2053	-14.8	320 $\pm$ 26	1511-1547 1564-1571
KK 110 (IV/K/2)	Khami	IT-C-1499	-24.1	320 $\pm$ 39	1509-1551 1558-1582
Glen Avon AD433	Icon/Tavhatshena	IT-C-2059	-12.3	350 $\pm$ 31	1508-1587
Breslau AB603	Khami	IT-C-2044	-15.1	380 $\pm$ 31	1546-1625
Breslau AB605	Khami	IT-C-2035	-14.1	390 $\pm$ 27	1550-1559
<b>Pulse 1 [AD 1400–1480] BP 420–550</b>					
Kilsyth HM AD268	Khami	IT-C-2046	-13.1	420 $\pm$ 27	1457-1501
Greefswald AB16	Khami	IT-C-2057	-15.7	430 $\pm$ 33	1454-1501
Collins AD642	Khami	IT-C-565	-16.2	440 $\pm$ 31	1451-1498
Samaria AB161	Khami + Icon	IT-C-2054	-5.8	460 $\pm$ 27	1443-1485
Horizon 104 BC5	Icon	IT-C-2036	-16.5	460 $\pm$ 27	1443-1485
Venetia BCP	Icon	IT-C-2055	-16.2	470 $\pm$ 27	1438-1462 1432-1453
		IT-C-2061		500 $\pm$ 27	
AD533B	Icon	IT-C-2048	-11.5	480 $\pm$ 27	1436-1459
DS 32 midden II/A/4	Khami + Icon	IT-C-528	-23.6	530 $\pm$ 32	1418-1445
<b>Icon</b>					
Edmondsberg AD161	Icon	IT-C-638	-13.8	630 $\pm$ 62	1381-1415

### Initiation schools

Loubser's<sup>13</sup> research suggested that the Soutpansberg was the boundary between Shona speakers to the north and Sotho speakers to the south. Our survey shows that the initial interaction took place in more confined localities, such as the Mapungubwe Landscape. The channel for this interaction was probably through initiation schools. Such schools as *domba* inculcate various aspects of culture, including history, worldview and proper moral behaviour<sup>15–18</sup>, and both royal and commoner youths attend. It is therefore significant that the remains of these schools stretch along the boundary between Khami and Icon settlements (e.g. Faure AD 2 and Kilsyth AD 268) and nowhere else in the Mapungubwe area. They are not located in the centre as researchers once thought.<sup>10</sup> The new dates show that these schools date to both *Pulse 1* and *Pulse 2*, when *Icon* changed to *Tavhatshena*. In addition, male circumcision sites occur on the eastern boundary associated with the Khami-Period palace called Haddon.<sup>9,19</sup> Both types of schools were therefore present in the valley at the same time, and over the years, hundreds of youth would have attended both. These schools provide a model for interpreting Tshivenda origins in the rest of Venda.

### End of Khami

In AD 1644, the Khami capital was destroyed by a combined force of Portuguese and a disgruntled faction of the Torwa state<sup>20</sup>, and for the next 40 years, no single leader controlled the former kingdom. A few chiefs controlled some areas in Botswana<sup>21</sup>, but none appears to have been based in the Limpopo Valley, perhaps because this Interregnum

Phase was too dry. The third step in the evolution of Tshivenda took place at this time, when Butua lacked strong leadership.

Strong leadership was reinstated when the Rozvi established a new capital at Danangombe<sup>22</sup> (formerly Dhlo Dhlo) in the 1680s<sup>20</sup>. This new state did not expand to the south but instead defeated the Portuguese to the east and northeast. When the famous Rozvi leader, Changamire Dombolakonachingwano, died in 1696 after defeating the Portuguese, at least three sons competed for kingship. One unsuccessful son went to the Hwange area to give rise to the Nanzwa<sup>23</sup> and another crossed the Limpopo to establish the Singo capital at Dzata in present-day Venda<sup>24</sup>. Some researchers<sup>25</sup> consider the Singo as 'true Venda', but as Loubser's<sup>13</sup> archaeological research shows, Venda language and identity had evolved before the Singo established Dzata. Once there, the Singo forged a new state, incorporating the Khami-Period chiefdoms that extended east from Machedema. *Letaba* pottery and Venda walling at the top of the Machedema sequence documents this change.<sup>10</sup> Somewhat later, the Tshivhula dynasty of the Twamamba built a new headquarters at Mavhambo at the base of the Soutpansberg (Figure 3).<sup>13</sup> The Tshivhula claim that their territory once extended from Machedema to the Limpopo.<sup>26</sup> Because each chiefdom level is two to three times the size of the level below, Machedema would have controlled about 10 000 km<sup>2</sup>, corresponding to the area claimed by the Tshivhula. It is therefore reasonable to conclude that the Khami Period in the Mapungubwe Landscape marks the arrival of the Tshivhula dynasty, or at least the Twamamba.<sup>10</sup> Originally, they would have spoken Kalanga, but by the 17th century, they had become Venda and independent of the Khami state.

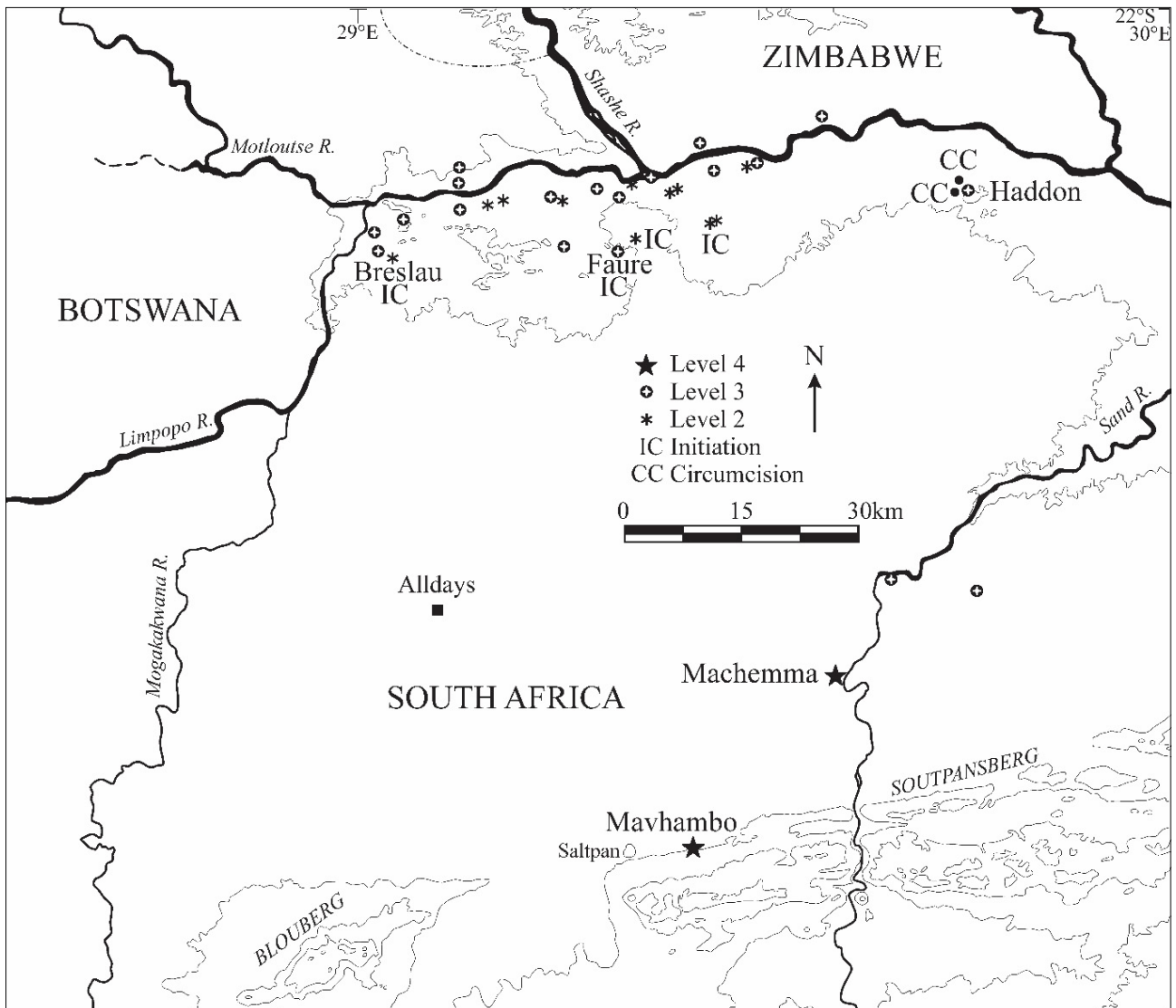


Figure 3: Location of Machedemma and Mavhambo in relation to the Limpopo Valley.

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## Competing interests

We have no competing interests to declare.

## Author's contributions

T.N.H. directed the fieldwork and S.W. the AMS dating. Both authors helped prepare the manuscript.

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