

## The Bantu Expansion

---

# Oxford Research Encyclopedia of African History

## The Bantu Expansion

Koen Bostoen

Subject: Archaeology, Central Africa, East Africa and Indian Ocean, Historical Linguistics, Language and History, Southern Africa

Online Publication Date: Apr 2018 DOI: 10.1093/acrefore/9780190277734.013.191

### Summary and Keywords

The Bantu Expansion stands for the concurrent dispersal of Bantu languages and Bantu-speaking people from an ancestral homeland situated in the Grassfields region in the borderland between current-day Nigeria and Cameroon. During their initial migration across most of Central, Eastern, and Southern Africa, which took place between approximately 5,000 and 1,500 years ago, Bantu speech communities not only introduced new languages in the areas where they immigrated but also new lifestyles, in which initially technological innovations such as pottery making and the use of large stone tools played an important role as did subsequently also farming and metallurgy. Wherever early Bantu speakers started to develop a sedentary way of life, they left an archaeologically visible culture. Once settled, Bantu-speaking newcomers strongly interacted with autochthonous hunter-gatherers, as is still visible in the gene pool and/or the languages of certain present-day Bantu speech communities. The driving forces behind what is the principal linguistic, cultural, and demographic process in Late Holocene Africa are still a matter of debate, but it is increasingly accepted that the climate-induced destruction of the rainforest in West Central Africa around 2,500 years ago gave a boost to the Bantu Expansion.

Keywords: Bantu, Niger-Congo, Central Africa, Eastern Africa, Southern Africa, historical linguistics, archaeology, evolutionary genetics, interdisciplinarity, language spread, prehistory

---

## The Bantu Expansion

The “Bantu Expansion” is the term commonly used to refer to the initial spread of the Bantu languages and the communities speaking them over large parts of Central, Eastern, and Southern Africa. Compared to similar expansions of languages and peoples that occurred in other parts of the world during the Holocene, this dispersal stands out in three regards: its vastness, its rapidness, and its predominantly longitudinal orientation.

Leaving Bantu speakers in the diaspora out of consideration, the Bantu language family stretches today between Cameroon’s South-West region (4°8’N and 9°14’E) in the North-West, southern Somalia’s Barawe (Brava) area (1°6’N and 44°1’E) in the North-East, and Cape Agulhas (34°48’S and 20°E), the continent’s southernmost tip in South Africa’s Western Cape province. This more or less contiguous distribution area crosscuts no fewer than twenty-three present-day countries on the African mainland. In alphabetical order, these are Angola, Botswana, Burundi, Cameroon, Central African Republic, Congo-Brazzaville, Congo-Kinshasa, Equatorial Guinea, Gabon, Kenya, Lesotho, Malawi, Mozambique, Namibia, Rwanda, Somalia, South Africa, Southern Sudan, Swaziland, Tanzania, Uganda, Zambia, and Zimbabwe. In some of these countries, such as Burundi, Malawi, and Rwanda, Bantu languages are the only indigenous African languages. In others, situated in the northern and southern borderlands, other African language families are also present. In still others, such as the Central African Republic, Southern Sudan, and Somalia, Bantu languages are very marginal, not to say near to non-existent. Long-standing Bantu speech communities are also found on the islands of Bioko (part of Equatorial Guinea), Mayotte (an overseas department of France), and the Comoros.<sup>1</sup> A variety of Southern Swahili—thus Bantu—is spoken on the small island of Nosse-Be, off the northwest coast of Madagascar, with another pocket farther down the west coast of the island.<sup>2</sup>



[Click to view larger](#)

Figure 1. Map of Bantu expansion. Courtesy of Moritz Zauleck.

In sum, Bantu is the prevalent language family in Central, Eastern, and Southern Africa. The remainder of the Niger-Congo phylum, also known as Atlantic-Congo, prevails in sub-Saharan Western Africa, but has a distribution area which represents no more than a third to a half of the Bantu area. Due to the massiveness of its Bantu branch, Niger-Congo is by far Africa’s biggest language phylum, i.e., a

## The Bantu Expansion

---

grouping of related languages that is considered to be larger than a family. One in three Africans would speak one or more Bantu languages. A recent study estimates the current-day Bantu speakers at about 310 million.<sup>3</sup> According to *Ethnologue*, the number of Bantu languages today is 556.<sup>4</sup>

The vastness of the Bantu language family is all the more remarkable if one reckons that its time depth is rather shallow. While the Niger-Congo phylum has an estimated age of 10,000 to 12,000 years, its low-level Bantu offshoot is believed to be no older than 4,000 to 5,000 years.<sup>5</sup> It would have gradually split off from its closest South-Bantoid relatives in the borderland straddling South-Eastern Nigeria and Western Cameroon, an area of high linguistic diversity within the Bantoid subgroup of Niger-Congo's Benue-Congo branch. The Bantu homeland has been situated there—quite unanimously—since the early 1970s.<sup>6</sup> In conjunction with archaeological data, the internal diversity within the Bantu language family suggests that an initial phase of slow fragmentation and expansion over small distances was followed by a second phase of rapid large-scale dispersal.<sup>7</sup>

The divergence of the Bantu branch from its closest relatives was a long, steady, and local development in the Grassfields of North-Western Cameroon that lasted for more than 2,000 years, between 6,000–7,000 and 4,000–5,000 years ago. Similarly, the first southward expansions of Bantu speech communities were relatively slow. It is only about 3,500 to 3,000 years ago that the first Bantu speakers would have appeared in the region around the present-day capital of Yaoundé in Central Cameroon, some 200 km south of the Bantu homeland. Only from then on did the Bantu Expansion start to gain momentum.

About 2,500 years ago, Bantu-speaking societies are thought to have reached more or less simultaneously the Congo Basin, West Central Africa south of the forest, and the Great Lakes Region of Eastern Africa. By the first centuries CE already, their descendants would have made their first appearance in parts of what is today South Africa, i.e., somewhat less than 2,000 years ago. In other words, the embryonic stage of local Bantu divergence in the Cameroonian Grassfields region and the first southward spread to the Yaoundé region took twice as long, at the very least, than the subsequent expansion of Bantu languages and their speakers to the southern end of their current-day distribution area. In less than two millennia they bridged the distance—more than 4,000 km as the crow flies—between Central Cameroon and South Africa.

The vastness and the rapidness of the Bantu Expansion is even more remarkable if one takes into account that its north-south orientation is more than 1.5 times as large as its west-east orientation. This observation is noteworthy, since it has been argued that continental axes of orientation have a decisive impact on the migration of human populations (and other species) and the accompanying diffusion of modes of subsistence, cultural traits, and technological innovations. In different parts of the world, spread along latitudinal lines has turned out to be easier—that is, faster—than along longitudinal lines, because east-west/west-east migration involves less differences in climate, rainfall, day length, and diseases of crops and livestock and thus requires less adaptation to new habitats.<sup>8</sup> With its predominantly longitudinal axis, the Bantu Expansion runs counter to a

## The Bantu Expansion

---

universal tendency. Moreover, early Bantu speech communities had to traverse the Central African rainforest block, which stretches out between the Sudanian savannahs of Western Africa with the Bantu homeland in their southern margin and the Zambezian savannahs of Southern Africa where the majority of Bantu speech communities live today. These dense and humid forests situated in the northern part of the Bantu area imposed a major change in habitat on early migrant speech communities, which would have been a serious restraint on their dispersal, were it not that the Central African rainforest underwent a major climate-induced crisis, which started at its periphery around 4,000 years ago and struck its core around 2,500 years ago.<sup>9</sup>

Given the distinctiveness of the Bantu Expansion sketched above, it does not come as a surprise that it has sparked a lot of speculation and discussion across the disciplines. It is not only the principal linguistic, cultural, and demographic process in Late Holocene Africa; it has also become a hotly debated issue in African history and far beyond Africanist circles. Moreover, it has not remained without political repercussions, for example, in (post)apartheid South Africa,<sup>10</sup> but also elsewhere in the continent.<sup>11</sup> In the following sections, we revisit the present-day linguistic, archaeological, and genetic evidence for the Bantu Expansion, and we shortly discuss how historians have endeavored to reconstruct the role of human agency in this major event for African history.

## Linguistic Evidence for the Bantu Expansion

The genealogical unity of the Bantu languages was already established in the 19th century, by Wilhelm Bleek around 1850.<sup>12</sup> The languages commonly seen as “Bantu” today are actually those which Malcolm Guthrie included in his referential classification<sup>13</sup> following two principal (1–2) and two subsidiary (3–4) criteria: (1) a system of grammatical genders (or noun classes), usually at least five, corresponding to four more features which we cannot recall here for reasons of space; (2) a vocabulary, part of which can be related by fixed rules to a set of hypothetical common roots; (3) a set of invariable cores, or radicals, from which almost all words are formed by an agglutinative process [note: agglutinative languages have “morphologically complex words in which morpheme boundaries are clearly discernible”<sup>14</sup>], these radicals having five more features which we also cannot recall here for reasons of space; (4) a balanced vowel system in the radicals, consisting of one open vowel “a” with an equal number of back and front vowels.<sup>15</sup> From his classification were excluded those languages spoken in Cameroon and south-eastern Nigeria, i.e., in the wider vicinity of the Bantu homeland, which “have a system of grammatical genders and agreements operated by means of prefixes,” but “show little or no relationship of vocabulary with full Bantu languages” and also “do not display even the rudiments of the structural features laid down in the third criterion; moreover their vowel system is frequently complicate.”<sup>16</sup> Ever since, these languages are known as “Bantoid” or “Wide Bantu” as opposed to Guthrie’s “Narrow Bantu.” This distinction has been

## The Bantu Expansion

---

maintained until today, even if it has been shown that it is somewhat artificial, because “Narrow” and “Wide” Bantu languages do share regularly inherited vocabulary. There also is no clear cut-off point between the two clusters. Quite the opposite, in fact. The small “Mbam-Bubi” subgroup, including several languages of the Mbam region spoken in Central Cameroon as well as Bubi from Bioko Island, actually transcends the Narrow and Wide Bantu divide.<sup>17</sup>

Within the Bantu area, the North-West, more specifically Cameroon and northern Gabon, is linguistically the most heterogeneous. Apart from the “Wide Bantu” and “Mbam-Bubi” branches, it also hosts the languages of the “North-Western” branch. This high linguistic diversity is in line with the assumption that the earliest phases of the Bantu Expansion were characterized by a rather slow and small-scale dispersal of Bantu languages and speech communities. The rest of the Bantu area is occupied by only four major branches, which emerged after the initial diversification of the family in the North-West. Three of them consist of languages spoken in the western half of the Bantu domain: (1) “Central-Western,” aka “North Zaire” or “Congo,” (2) “West-Western,” aka “West-Coastal,” and (3) “South-Western.” All Bantu languages spoken in Eastern and South-Eastern Africa belong to a single “Eastern” branch.<sup>18</sup> The Western Bantu domain is thus linguistically much more diverse than the Eastern part.

It has been debated for a long time whether the Eastern Bantu branch split from the common Bantu trunk at an early stage and reached Eastern Africa after a movement north of the rainforest or whether it only emerged as the most recent subgroup subsequent to southward expansion through the rainforest and internal diversification in the West.<sup>19</sup> The most recent studies in both linguistic phylogenetics and molecular anthropology favor the second scenario, i.e., the late split model.<sup>20</sup> Scholars increasingly agree that a climate-induced destruction of the rainforest around 2,500 years ago would have given a strong impetus to the Bantu Expansion through West-Central Africa.<sup>21</sup> Relying on a phylogeny of the Bantu languages calibrated through the association of archaeological dates to certain nodes in the family tree as well as on contemporary geographical information and statistical modeling, it has even been claimed that early Bantu-speaking populations did not randomly move through the equatorial rainforest but rather through emerging savannah corridors with dense rainforest environments imposing temporal barriers to expansion.<sup>22</sup> Although this model provides us with a chronological framework of the Bantu Expansion that is roughly in line with archaeological data available for West-Central Africa, it is rather at odds with those from Eastern Africa. If Eastern Bantu did indeed only split off after the mid-first millennium BC dispersal through the rainforest, it is difficult to account for the fact that the earliest pottery- and iron-producing communities in the Great Lakes region of Eastern Africa, which have commonly assumed to be the first Eastern Bantu speakers,<sup>23</sup> emerged in the same period (see the discussion on Urewe pottery in the next section).<sup>24</sup> Either the reconstructed migration chronology is not perfectly sound yet or the association of the earliest attestations of the Early Iron Age in interlacustrine Eastern Africa with the Eastern Bantu homeland is to be reconsidered. Instead of attributing the start of the Early Iron Age cultural complex in the Great Lakes region to people present before the

---

## The Bantu Expansion

---

arrival of the first Bantu speech communities, as some might now be tempted to do, an alternative explanation could be that phylogenies generated from current-day languages do not necessarily reflect the original migration of Bantu speech communities, unlike what is commonly assumed.<sup>25</sup> The loss of linguistic diversity due to language death cannot be easily factored in to reconstruct the best migration model and certainly not if only small sets of basic vocabulary are considered, as is often the case in quantitative approaches to Bantu language classification.<sup>26</sup>

## Archaeological Evidence for the Bantu Expansion

The gradual southward spread of initially Neolithic and subsequently Early Iron Age (EIA) assemblages, clearly distinct from pre-existing Stone Age industries, has since long been seen as the archaeological signature of Bantu speakers migrating through Central, Eastern, and Southern Africa.<sup>27</sup> Due to its strong association with food production, for which early evidence is missing in West-Central Africa, certain scholars have considered the term “Neolithic” inappropriate and have proposed alternative terms, such as “Stone to Metal Age.”<sup>28</sup> Others have redefined “Neolithic” to make it fit with the Central African data and have continued to use it, as we do here.<sup>29</sup>

Pottery is the most distinctive marker of the archaeologically visible cultures associated with early expanding Bantu speakers; it starts to appear in the Shum Laka rock-shelter in North-Western Cameroon, the principal archaeological site associated with the Bantu homeland, around 7,000 to 6,000 years ago, together with a number of other technological innovations, such as polished stone tools and bifacial macrolithic tools of basalt and tuffs, to become prevalent around 5,000 to 4,000 years ago.<sup>30</sup> The long period of about 2,000 to 3,000 years during which this new industry gradually replaced the pre-existing microlithic Late Stone Age quartz industry has been tentatively associated with the introduction and local development of Benue-Congo languages in the Bantu homeland.<sup>31</sup> Obobogo in the Yaoundé area of Central-Cameroon is the oldest open air settlement south of the homeland, which manifests a similar material culture and dates back to between 3,500 and 3,000 years ago.<sup>32</sup>

Slightly later, from the mid-first millennium BC onwards, settlements with large rubbish pits, covering a considerable surface and containing large quantities of pottery associated with polished stone tools, such as axes and hoes, a poor lithic industry, and remains of oil palm (*Elaeis guineensis*) and bush candle tree (*Canarium schweinfurthii*) emerge across West-Central Africa. These archaeological sites, which sometimes also provide evidence for postholes and wattle-and-daub structures, are remnants of the earliest villages. They manifest a chronological gradient indicating that sedentary pottery-producing cultures spread from central Cameroon to the Lower Congo and the Central Congo Basin in a timespan of about one millennium, i.e., from ca. 3,500 to ca. 2,300 BP.<sup>33</sup> This spread of the

## The Bantu Expansion

---

first village communities through the North-Western part of the Bantu domain is commonly seen as the archaeological signature of the earliest phases of the Bantu Expansion. Although the Central African archaeological data available for that period still manifest numerous geographic gaps, they are in line with historical language classifications in suggesting that the initial expansion was slow, limited in extent (Cameroon and northern Gabon), and possibly predominantly coast-bound, while it underwent a boost from the mid-first millennium BC when climate-induced forest openings facilitated southward expansion through the Central African interior.<sup>34</sup>

The more rapid inland expansion of Bantu languages and their speakers in the mid-first millennium BC seems to have coincided more or less with the advent of iron metallurgy in Central Africa, which started to spread from north to south from around 2,800 years ago.<sup>35</sup> Slightly later, the first secure and direct archaeological evidence for food production and domestication in Central Africa becomes available, though still very scarcely. Domesticated pearl millet (*Pennisetum glaucum*) was discovered in three sites from southern Cameroon, all dated between 2,350 to 2,200 years ago, and in one in the Democratic Republic of the Congo on the Lulonga River dated around 2,200 years ago.<sup>36</sup> In another South-Cameroonian site, remains of the pulse species Bambara groundnut (*Vigna subterranea*) dated around 1,750 years ago were retrieved.<sup>37</sup> Both crop species originate from more northerly savannah regions and are adapted to drier environmental conditions, which ties in with the hypothesis that throughout equatorial Central Africa the rainforest was struck by a climate crisis. The only early evidence available for forest crops are banana phytoliths from Cameroon dated between 2,750 and 2,350 years ago<sup>38</sup> and from Uganda dated to the 6th millennium before present.<sup>39</sup> Such early dates for a domesticated plant of Southeast Asian origin has caused a great deal of controversy and call for corroborating evidence from other Central and Eastern African sites.<sup>40</sup> Hence, as things stand now, the only secure evidence for plant cultivation and domestication in Central Africa is much more recent than the assumed start of the Bantu Expansion and was found far from the Bantu homeland. It is therefore unwarranted to consider the Bantu Expansion, and certainly so its earliest phases, as a textbook case of a farming/language dispersal as often is advocated without presenting any factual evidence for agriculture.<sup>41</sup> The large blades and bifacial tools of basalt found in Shum Laka and elsewhere in the Grassfields<sup>42</sup> as well as the large polished stone tools, such as axes and adzes, discovered in many Neolithic sites in Central Africa,<sup>43</sup> do suggest important changes in subsistence strategies, but cannot be taken as direct evidence for farming. They may have been used for the intensified exploitation and protection of wild plants, such as trees (e.g., oil palm) and tubers (e.g., yams), which were indeed very prominent in the way of life of ancestral Bantu speakers, as the reconstruction of Proto-Bantu vocabulary has pointed out.<sup>44</sup>

In East-Africa, as mentioned above, the earliest archaeological assemblages commonly associated with the Bantu Expansion belong to the Early Iron Age. They are part of the so-called Urewe tradition, called after an eponymous site northeast of Lake Victoria in Kenya and characterized by a distinctive kind of pottery<sup>45</sup> that is found all over the Great Lakes region from the Kivu (Eastern Congo) in the West to the eastern shores of Lake

---

## The Bantu Expansion

---

Victoria in the East and from the Ugandan Chobi region in the North to the southern shores of Lake Victoria and Burundi in the South.<sup>46</sup> It first appeared around 2,600 years ago and lasted for more than a millennium.<sup>47</sup> Its oldest manifestations occur to the West of Lake Victoria in the vicinity of Buhaya in Tanzania and the River Kivu-Rusizi in Burundi and Rwanda, while the oldest sites to the East of Lake Victoria are 700 to 1,000 years younger and testify to a gradual eastward spread.<sup>48</sup> Apart from pottery, Urewe culture features a distinctive iron-smelting technology present from the very beginning<sup>49</sup> as well as farming, though possibly from a later stage since the earliest direct evidence for the cultivation of domesticated grains in Rwanda and Burundi is not older than the third century CE.<sup>50</sup> Linguistic evidence suggests that early Eastern Bantu speakers may have adopted cereal agriculture through contact with speakers of Nilo-Saharan languages.<sup>51</sup>

Although Urewe ware is right from the beginning “a well-made and highly crafted ceramic,”<sup>52</sup> it cannot be typologically linked in any conclusive way to (Neolithic) Bantu-related ceramic traditions further west, even though some scholars have hinted at possible similarities with pottery traditions from Chad<sup>53</sup> and the Central African Republic.<sup>54</sup> For the time being, it seems to have emerged “out of the blue.”<sup>55</sup> Nevertheless, it does bear strong resemblances to many primary but younger pottery traditions further east and south, which are part of a larger Early Iron Age complex, which David Phillipson baptized “Chimfumbaze” and considered to be the archaeological signature of Eastern Bantu.<sup>56</sup> This signature industry consisted of several other traits, such as settled villages (houses, grain bins, and storage pits) with large and small domestic stock, grain agriculture, and metallurgy, none of these having “evolved from an earlier hunter-gatherer base in eastern or southern Africa.”<sup>57</sup>

The ceramic traditions most closely related to Urewe ware are inland wares in the North-Eastern part of East-Africa on the one hand and coastal wares stretching between southern Kenya and South Africa on the other hand. To the first category belong wares, such as Lelesu pottery from Central Tanzania and Limbo pottery from the Dar-es-Salaam hinterland, which occur between the last century BCE and the first centuries CE.<sup>58</sup> To the second category belong the characteristic Kwale and Matola ceramics, which constitute a vast Early Iron Age continuum that emerged in less than two centuries, i.e., between the early second and the mid-3rd century CE, from southern Kenya over coastal Mozambique to KwaZulu-Natal. These primary Early Iron Age traditions along the coast lowlands and their immediate hinterland can be seen as the material signature of the earliest Eastern Bantu speech communities.<sup>59</sup> They migrated from the East-African Great Lakes Region to South Africa in less than a millennium.

The gradual eastward expansion of Urewe culture may correlate with the initial spread of the so-called “Great Lakes Bantu” languages, which constitute a distinct Eastern Bantu clade within the larger Bantu phylogeny.<sup>60</sup> The further expansion of closely related ceramics towards the coast possibly mirrors that of the larger “North-East Savannah Bantu,” a distinct branch of Eastern Bantu to which Great Lakes Bantu belongs.<sup>61</sup> Similarly, the southernmost Eastern Bantu languages of Southern Africa, the so-called zone S languages in Guthrie’s classification, are most closely related in the latest Bantu



## The Bantu Expansion

---

phylogeny with a number of languages spoken in the coastal lowlands of southern Tanzania and Mozambique and their hinterland.<sup>62</sup> However, much more research, both historical linguistic and archaeological, is needed to go beyond these robust patterns of correlation. This is certainly so for those inland parts of the Eastern Bantu domain, such as the South-Eastern part of the Democratic Republic of the Congo and Zambia, which are closer to those areas where South-Western Bantu languages are spoken, such as Angola and Namibia.

The most recent and most comprehensive overview of the Early Iron Age in Southern Africa—mainly South Africa, Lesotho, Swaziland, Zimbabwe, South-Western Mozambique, and South-Eastern Botswana but also adjacent areas—is to be found in the 2007 handbook of Tom Huffman.<sup>63</sup> In the wake of David Phillipson, he divides the earliest ceramics of the region in two main traditions: Urewe tradition and Kalundu tradition, the former further subdivided in the Nkope branch (or central stream) and Kwale branch (or eastern stream).<sup>64</sup> Unsurprisingly, he associates the Urewe tradition with Eastern Bantu. More surprisingly, however, he equally assumes that “the makers of all Kalundu tradition spoke early forms of Eastern Bantu,”<sup>65</sup> even if he situates the origins of the latter in Benfica, south of Luanda, in Angola,<sup>66</sup> and possibly even further north in Gabon.<sup>67</sup> Not only has the Angolan and/or Gabonese source of Kalundu pottery been questioned,<sup>68</sup> but also no Eastern Bantu languages are spoken there today and, as far as we can tell, were never spoken there before. In large parts of Southern Africa—and especially within the area which Huffman considers to be belonging to the Kalundu tradition—it is still poorly understood how the emergence of the Early Iron Age can be linked to the evolution of the Bantu languages spoken there.<sup>69</sup>

# Genetic Evidence for the Bantu Expansion

Even if several scholars have previously questioned migration as the main dynamic underlying this language dispersal,<sup>70</sup> we have defined the “Bantu Expansion” above as the initial spread of the Bantu languages AND the communities speaking them. That is because recent studies in population genetics, which give new insights in the genetic structure and history of Bantu speech communities, have demonstrated that the initial dispersion of Bantu languages unmistakably results from the diffusion of people.<sup>71</sup>

In contrast to what earlier critics of the migration model have proposed, it was not just the outcome of the concurrent diffusion of languages, material culture, and technological innovations through cultural contact between pre-established communities. The relatively low Y-chromosome diversity in current-day Bantu-speaking populations provides the most conclusive evidence for the fact that the Bantu Expansion was a major demic diffusion.<sup>72</sup> It can even be considered as “one of the most dramatic demographic events in human history.”<sup>73</sup> Especially the Y-chromosomal haplogroups E1b1a8 (also known as E-U175) and E1b1a7a (also known as E-U174), which are actually subgroups of E1b1a (also known as E-M2) and E1b1a7 (also known as E-M191), respectively, are very prominent among both Bantu speakers and Niger-Congo-speaking populations from West Africa as opposed to communities speaking languages belonging to one of Africa’s other major phyla.<sup>74</sup> Y-chromosomes are inherited solely from fathers to sons and can therefore inform us on the prehistory of the paternal half of a population. Haplogroups are groups of related molecules defined by specific diagnostic shared mutation.<sup>75</sup>

Although migrating Bantu speakers definitely spread their languages from their ancestral homeland all the way down to Southern Africa, the present-day geographic distribution of Bantu languages does not necessarily reflect the original migration of Bantu speech communities. Recent analyses of genetic data suggest the occurrence of successive expansion phases.<sup>76</sup> Y-chromosome variation is not only low, but it also remains relatively stable throughout the Bantu domain, although one would expect it to shrink with distance from the putative homeland as the result of a founder event, i.e., a severe reduction in genetic diversity due to a small number of newcomers producing much offspring.<sup>77</sup> It has been proposed that the signal of the initial migration was attenuated by later migrations and contact among Bantu-speaking populations,<sup>78</sup> as also suggested in earlier genetic studies.<sup>79</sup>

Such prehistoric spread-over-spread events recurrently led to Bantu-internal language shift and eventually to language death. As it still happens today, possibly on a larger scale than in the past due to mass media and schooling, individual Bantu speakers or larger communities gave up their first language in favor of another Bantu language, which may have guaranteed more economic or social success. That is why, as discussed above,

## The Bantu Expansion

---

phylogenetic trees of present-day Bantu languages probably do not mirror initial migrations.

Genetic studies have also significantly contributed to the documentation of prehistoric contacts between Bantu speaking newcomers and autochthonous populations, usually hunters-gatherers.<sup>80</sup> Biological contact with indigenous groups in both Central and Southern Africa is easily detectable, since they are genetically very distinct from Bantu speakers who are West African in origin. Especially beneficial in this regard has been the study of mitochondrial DNA (mtDNA), which is “a very small [ . . . ] circular molecule that is present in hundreds to thousands of copies inside each cell” that is only passed on from mothers to their offspring.<sup>81</sup> The mtDNA thus contributes to reconstructing the prehistory of the maternal half of a population.

As for Bantu speech communities, it is above all their maternal gene pool that provides evidence for interaction with native populations. MtDNA diversity among and within Bantu-speaking groups tends to be much higher than Y-chromosome diversity. Women from local non-Bantu-speaking groups had considerable more offspring with men from Bantu speech communities than the other way around. Sociocultural practices, such as patrilocality (i.e., the residence of a married couple near the husband’s family or clan) and polygyny (i.e., the marriage of a man with different women), are signaled in the gene pool of Bantu-speaking groups by the substantial presence of mtDNA haplogroups that are even more characteristic of present-day hunter-gatherer groups. One such diagnostic mutation commonly found in certain western Bantu speech communities is L1c1a, which is otherwise omnipresent in Central African “Pygmy” groups. In Southern Africa, “L0d” and “L0k” are mtDNA haplogroups that originate in Khoisan-speaking populations but are also often found in significant portions among Bantu-speaking groups. In some of them, though not all, this intensive contact also left a linguistic residue, which is most saliently flagged through the presence of click sounds.<sup>82</sup> For cross-disciplinary review of prehistoric Bantu-Khoisan language contact, we refer the reader to a recent study by Brigitte Pakendorf and colleagues;<sup>83</sup> for a comparative study of the impact of autochthonous languages on Bantu language variation in Southern and Central Africa to a review chapter by Hilde Gunnink and myself.<sup>84</sup>

Numerous linguistic studies have pointed out that Bantu speech communities, especially in the northern borderlands, also interacted with speakers of Nilo-Saharan, Afro-Asiatic, and distantly related Niger-Congo languages.<sup>85</sup> These groups, which also originate outside Central and Southern Africa, are genetically more similar to Bantu speech communities than autochthonous hunter-gatherers. Prehistoric contacts between Bantu speech communities and these groups therefore used to be more difficult to detect, though not impossible.<sup>86</sup> Much progress has been made, however, through the use of autosomal data.<sup>87</sup> Besides two sex chromosomes (X- and Y-chromosome), the nuclear genome consists of 22 pairs of autosomes. An autosome is a chromosome that does not determine the sex of a human being.

## The Bantu Expansion

---

In contrast to the “uniparental markers” Y-chromosome and mtDNA, autosomes are inherited from both parents, just like the X-chromosome in females, and thus provide insights into the prehistory of the population as a whole. Moreover, in contrast to mtDNA and most parts of the Y-chromosome, they also undergo recombination during the production of germ cells, which generates huge variation, ensuring that the inherited chromosomes consist of random portions of DNA from both parents.<sup>88</sup> Autosomal DNA thus provides an enormous wealth of information, which allows primarily for biogeographic comparison of modern populations, but whose potential for prehistoric reconstruction is gradually enhanced through the use of new analytical techniques, especially single-nucleotide polymorphisms (SNPs or “snips”). These techniques allow simultaneous comparison of variation at tens or hundreds of thousands of genetic locations from thousands of individuals, in “genome-wide” or “whole-genome” scans.<sup>89</sup> Recent studies relying on single-nucleotide polymorphisms, although not focusing on East Africa specifically, have provided evidence for non-Bantu East-African admixture in Eastern Bantu-Speakers.<sup>90</sup> The use of such data is expected to drastically change our understanding of the population dynamics underlying the Bantu Expansion for years to come, especially in conjunction with others bodies of historical evidence and through close cross-disciplinary collaboration. Although our comprehension of this important historical event has been considerably improved over the past decades, many remaining questions require further exploration, such as why Bantu speakers actually migrated over such immense distances and how large their numbers were.

## Historical Research on the Bantu Expansion

From what precedes one might be impressed with the idea that only linguists, archaeologists, paleoenvironmentalists, and evolutionary geneticists have engaged in debates on the Bantu Expansion. Such an impression would certainly not do justice to the significant contributions that historians have made to our understanding of the early history of Bantu speech communities. The historian Roland Oliver, whom Jan Vansina considered as one of the “very few institutional founders” in the research field of African History,<sup>91</sup> was probably even the first to posit the “problem of the Bantu Expansion” in the *Journal of African History*.<sup>92</sup> Historians like Jan Vansina<sup>93</sup> (focusing on the western Bantu-speaking world) and Christopher Ehret<sup>94</sup> (concentrating on the eastern half of the Bantu domain) were also pioneering in bringing together bodies of evidence from different disciplines, mainly linguistics and archaeology, to propose different possible models of Bantu Expansion and to develop historical narratives shedding new light on the social, political, and economic dynamics underlying it. Christopher Ehret also trained several new historians in his multidisciplinary approach to reconstructing early African history, which they applied to different areas where early Bantu speakers settled and to different themes highlighting the significance of human agency and contingency in shaping the Bantu Expansion, e.g., ethnic and economic change and interactions with non-Bantu-speakers in the Uele region of Congo,<sup>95</sup> agrarian change, gender, and social identity in the

## The Bantu Expansion

---

Great Lakes region of Eastern Africa,<sup>96</sup> social and economic exchanges with autochthonous foragers in the Western Equatorial rainforest,<sup>97</sup> agriculture, ecology, kinship, and gender in Tanzania's Corridor,<sup>98</sup> thought, belief, and practice in Central East Tanzania,<sup>99</sup> and economy and society in Northern Namibia.<sup>100</sup> David Schoenbrun has continued Ehret's legacy by training of a new generation of PhD students in African history, who have also engaged in interpretative, multi-causal approaches to the Bantu Expansion by dealing with innovative themes such as motherhood, food procurement, and politics in East-Central Uganda<sup>101</sup> and wild resource use and political culture in the southern part of present-day Zambia.<sup>102</sup>

## Primary Sources

As explained in this article, scholars dealing with the Bantu Expansion do not have access to the same kind of primary sources as historians of more recent African history do. This historical event occurred before the introduction of literacy in the Bantu-speaking world. It also happened too long ago to be accessible through oral history. In order to understand the when, where, how, and why of the Bantu Expansion, bodies of evidence from different sciences need to be studied: archaeology provides insights into the chronology of the Bantu Expansion and into the material culture of early Bantu speech communities; evolutionary genetics informs us on the demographic dynamics underlying the Bantu language dispersal and especially on interactions with autochthonous hunter-gatherers having a very distinct genetic profile; paleoenvironmental evidence can be used to reconstruct how changes in climate and vegetation have facilitated the initial migration of Bantu-speaking groups; historical Bantu linguistics can be instrumental in at least three subfields—linguistic classification, lexical reconstruction, and language contact. Below are listed some useful online resources for students interested in the Bantu Expansion.

- The **Bantu Lexical Reconstructions 3 database** contains ca. 10,000 entries which represent reconstructions of common Bantu words going back to distinct stages in Bantu language history:
- The **website of the Royal Museum of Central Africa in Tervuren (Belgium)** also hosts my Comparative Bantu Pottery Vocabulary database.
- The **Glottolog website** provides comprehensive reference information for the world's languages, including Bantu languages.
- The **World Wide Web Library of African Archaeology**, which was regularly updated until 2015, contains a massive amount of relevant bibliographical references including much so-called "grey" literature.

# Acknowledgments

I wish to thank Carina Schlebusch (Uppsala University), Pierre de Maret (Université Libre de Bruxelles), Inge Brinkman (Ghent University), Gillian Matthys (Ghent University), Sebastian Dom (Ghent University), Bernard Clist (Ghent University), and two anonymous reviewers for their helpful comments on an earlier draft of this article. The usual disclaimers apply.

## Further Reading

Bostoen, K. "Pots, Words and the Bantu Problem: On Lexical Reconstruction and Early African History." *Journal of African History* 48, no. 2 (2007): 173–199.

Bostoen, K., and Y. Bastin. "**Bantu Lexical Reconstruction.**" In *Oxford Handbooks Online*. Oxford: Oxford University Press, 2016.

Bostoen, K., B. Clist, C. Doumenge, R. Grollemund, J.-M. Hombert, J. Koni Muluwa, and J. Maley. "Middle to Late Holocene Paleoclimatic Change and the Early Bantu Expansion in the Rain Forests of West Central-Africa." *Current Anthropology* 56, no. 3 (2015): 354–384.

Bouquiaux, L., ed. *L'expansion bantoue: Actes du Colloque International du Centre National de la Recherche Scientifique, Viviers (France), 4-16 avril 1977*. Vol. 2: *L'expansion bantoue*. Paris: Société des Etudes Linguistiques et Anthropologiques de France, 1980.

de Luna, K. M., J. B. Fleisher, and S. K. McIntosh. "Thinking Across the African Past: Interdisciplinarity and Early History." *African Archaeological Review* 29, nos. 2–3 (2012): 75–94.

de Maret, P. "Archaeologies of the Bantu Expansion." In *Oxford Handbook of African Archaeology*, ed. P. Mitchell & P. Lane, 319–328. Oxford: Oxford University Press, 2013.

Eggert, M. "The Bantu Problem and African Archaeology." In *African Archaeology: A Critical Introduction*, ed. A. B. Stahl, 301–326. Malden, MA: Blackwell, 2005.

Eggert, M. "The Archaeology of the Central African Rainforest: Its Current State." In *The Cambridge World Prehistory*, ed. C. Renfrew and P. Bahn, 183–203. Cambridge, UK: Cambridge University Press, 2014.

Ehret, C. *An African Classical Age: Eastern and Southern Africa in World History, 1000 B.C. to A.D. 400*. Charlottesville: University of Virginia Press, 2001.

Pakendorf, B., K. Bostoen, and C. de Filippo. "Molecular Perspectives on the Bantu Expansion: A Synthesis." *Language Dynamics and Change* 1 (2011): 50–88.

## The Bantu Expansion

---

Pakendorf, B., H. Gunnink, B. Sands, and K. Bostoen. "Prehistoric Bantu-Khoisan Language Contact: A Cross-Disciplinary Approach." *Language Dynamics and Change* 7, no. 1 (2017): 1–46.

Rocha, J., and A. M. Fehn. "**Genetics and Demographic History of the Bantu.**" *eLS*, 2016.

Schoenbrun, D. L. *The Historical Reconstruction of Great Lakes Bantu: Etymologies and Distributions*. Cologne: Rüdiger Köppe, 1997.

Schoenbrun, D. L. *A Green Place, a Good Place: Agrarian Change, Gender, and Social Identity in the Great Lakes Region to the 15th Century*. Portsmouth, NH: Heinemann, 1998.

Vansina, J. *Paths in the Rainforest: Toward a History of Political Tradition in Equatorial Africa*. Madison: University of Wisconsin Press, 1990.

Vansina, J. *How Societies Are Born: Governance in West Central Africa before 1600*. Charlottesville: University of Virginia Press, 2004.

### Notes:

(1.) See also Harald Hammarström, Robert Forkel, and Martin Haspelmath, eds., *Glottolog 3.0* (Jena, Germany: Max Planck Institute for the Science of Human History, 2017); Derek Nurse and Gérard Philippson, "Introduction," in *The Bantu Languages*, ed. Derek Nurse and Gérard Philippson, Routledge Language Family Series (London: Routledge, 2003).

(2.) Derek Nurse and Thomas J. Hinnebusch, *Swahili and Sabaki: A Linguistic History* (Berkeley: University of California Press, 1993), 14.

(3.) Etienne Patin et al., "Dispersals and Genetic Adaptation of Bantu-Speaking Populations in Africa and North America," *Science* 356, no. 6337 (2017): 543–546.

(4.) Gary F. Simons and Charles D. Fennig, eds., *Ethnologue: Languages of the World*, 20th ed. (Dallas: SIL International, 2017).

(5.) Roger Blench, *Archaeology, Language and the African Past* (Lanham, MD: Altamira Press, 2006), 126; Jan Vansina, "New Linguistic Evidence and the Bantu Expansion," *Journal of African History* 36, no. 2 (1995): 52.

(6.) Joseph Harold Greenberg, "Evidence Regarding Bantu Origins," *Journal of African Languages and Linguistics* 13, no. 2 (1972): 189–216.

(7.) For a review, see Koen Bostoen, *Des mots et des pots en bantou. Une approche linguistique de l'histoire de la céramique en Afrique*, *Schriften Zur Afrikanistik—Research in African Studies* (Frankfurt: Peter Lang, 2005), and Koen Bostoen et al., "Middle to Late

## The Bantu Expansion

---

Holocene Paleoclimatic Change and the Early Bantu Expansion in the Rain Forests of West Central-Africa," *Current Anthropology* 56, no. 3 (2015): 354–384; see also David W. Phillipson, *African Archaeology*, 3rd ed. (Cambridge, UK: Cambridge University Press, 2005), 151–160; Pierre de Maret, "Archaeologies of the Bantu Expansion," in *Oxford Handbook of African Archaeology*, ed. Peter Mitchell and Paul Lane (Oxford: Oxford University Press, 2013), 319–328; Peter Mitchell, "Early Farming Communities of Southern and South-Central Africa," in *Oxford Handbook of African Archaeology*, eds. P. Mitchell and P. Lane (Oxford: Oxford University Press, 2013), 657–670.

(8.) J. Diamond and P. Bellwood, "Farmers and Their Languages: The First Expansions," *Science* 300, no. 5619 (2003); Jared M. Diamond, *Guns, Germs, and Steel: The Fates of Human Societies* (New York: W. W. Norton, 1997); Alfred W. Crosby, *Ecological Imperialism: The Biological Expansion of Europe, 900–1900* (Cambridge, UK: Cambridge University Press, 1986); S. Ramachandran and N. A. Rosenberg, "A Test of the Influence of Continental Axes of Orientation on Patterns of Human Gene Flow," *American Journal of Physical Anthropology* 146, no. 4 (2011): 515–529.

(9.) Dominique Schwartz, "Assèchement climatique vers 3000 B.P. et expansion bantu en Afrique centrale atlantique: Quelques réflexions," *Bulletin de la Société Géologique de France* 163, no. 3 (1992): 353–361; Rebecca Grollemund et al., "Bantu Expansion Shows That Habitat Alters the Route and Pace of Human Dispersals," *Proceedings of the National Academy of Sciences of the United States of America* 112, no. 43 (2015): 13296–13301; Bostoen et al., "Middle to Late Holocene"; Richard Oslisly et al., "Climatic and Cultural Changes in the West Congo Basin Forests over the Past 5000 Years," *Philosophical Transactions of the Royal Society of London. Series B* 368, no. 1625 (2013); Jean Maley, "Mise en évidence d'une péjoration climatique entre ca 2500 et 2000 ans bp en Afrique tropicale humide," *Bulletin de la Société Géologique de France* 163, no. 3 (1992): 363–365.

(10.) Amanda Esterhuysen and Paul J. Lane, "Archaeology and Education," in *Oxford Handbook of African Archaeology*, ed. Peter Mitchell and Paul Lane (Oxford: Oxford University Press, 2013); Shula Marks, "South Africa: 'The Myth of the Empty Land'," *History Today* 30 (1980); Saul Dubow, *Scientific Racism in Modern South Africa* (Cambridge, UK: Cambridge University Press, 1995).

(11.) Jean-Pierre Chrétien, "Les Bantous, de la philologie allemande à l'authenticité africaine. Un mythe racial contemporain," *Vingtième Siècle* 8 (1985); Justin Bisanswa, "Memory, History and Historiography of Congo-Zaïre," in *Historical Memory in Africa: Dealing with the Past, Reaching for the Future in an Intercultural Context*, ed. Mamadou Diawara, Bernard Lategan, and Jörn Rüsen (New York and Oxford: Berghahn, 2013); Roger Kamanda Kola, "A propos de la bantouisation culturelle en R.D. du Congo," *Annales Aequatoria* 21 (2000).

(12.) Wilhelm Bleek, *De Nominum Generibus Linguarum Africae Australia* (Bonnae: Formis Caroli Georgii, 1851).



## The Bantu Expansion

---

- (13.) Malcolm Guthrie, *Bantu Word Division: A New Study of an Old Problem*, Memorandum—International African Institute (London: Published for the International African Institute by the Oxford University Press, 1948).
- (14.) Joan L. Bybee, Revere D. Perkins, and William Pagliuca, *The Evolution of Grammar: Tense, Aspect, and Modality in the Languages of the World* (Chicago: University of Chicago Press, 1994), 115.
- (15.) Guthrie, *Bantu Word Division*, 11–12.
- (16.) Guthrie, 19.
- (17.) Yvonne Bastin and Pascale Piron, “Classifications lexicostatistiques: bantou, bantou et bantoïde. De l’intérêt des “groupes flottants”,” in *Bantu Historical Linguistics: Theoretical and Empirical Perspectives*, ed. Jean Marie Hombert and Larry M. Hyman (Stanford, CA: CSLI Publications, 1999); Bostoen et al. “Middle to Late Holocene”; Grollemund et al., “Bantu Expansion”; Rebecca Grollemund, “Nouvelles approches en classification: Application aux langues bantu du nord-ouest” (PhD diss., Université Lumière Lyon 2, 2012), 349.
- (18.) Vansina, “New Linguistic Evidence”; Grollemund et al., “Bantu Expansion”; Bastin and Piron, “Classifications”; Bostoen et al., “Middle to Late Holocene.”
- (19.) See Birgitt Wiesmüller, “Möglichkeiten der Interdisziplinären Zusammenarbeit von Archäologie und Linguistik am Beispiel Der Frühen Eisenzeit in Afrika,” in *Traditionelles Eisenhandwerk in Afrika: Geschichtliche Rolle Und Wirtschaftliche Bedeutung Aus Multidisziplinärer Sicht*, ed. Reinhard Klein-Arendt (Cologne: Heinrich-Barth-Institut für Archäologie und Geschichte Afrikas, 1997); and Brigitte Pakendorf, Koen Bostoen, and Cesare de Filippo, “Molecular Perspectives on the Bantu Expansion: A Synthesis,” *Language Dynamics and Change* 1 (2011) for a more detailed discussion
- (20.) Grollemund et al., “Bantu Expansion”; Cesare de Filippo et al., “Bringing Together Linguistic and Genetic Evidence to Test the Bantu Expansion,” *Proceedings of the Royal Society B (Biological Sciences)* 279, no. 1741 (2012): 3256–3263; I. Alves et al., “Genetic Homogeneity Across Bantu-Speaking Groups from Mozambique and Angola Challenges Early Split Scenarios Between East and West Bantu Populations,” *Human Biology* 83 (2011); Patin et al., “Dispersals.”

## The Bantu Expansion

---

(21.) Katharina Neumann et al., "Comment on 'Intensifying Weathering and Land Use in Iron Age Central Africa'," *Science* 337, no. 6098 (2012); Alfred Ngomanda et al., "Seasonality Change and the Third Millennium Bp Rainforest Crisis in Southern Cameroon (Central Africa)," *Quaternary Research* 71 (2009): 307-318; Jean Maley et al., "Comment on 'Intensifying Weathering and Land Use in Iron Age Central Africa'," *Science* 337 (2012): 1040; Terry M. Brncic et al., "Fire and Climate Change Impacts on Lowland Forest Composition in Northern Congo During the Last 2580 Years from Palaeoecological Analyses of a Seasonally Flooded Swamp," *Holocene* 19, no. 1 (2009): 79-89; Wannan Hubau et al., "Charcoal-Inferred Holocene Fire and Vegetation History Linked to Drought Periods in the Democratic Republic of Congo," *Global Change Biology* 21, no. 6 (2015): 2296-2308; Schwartz, "Assèchement"; Oslisly et al. "Climatic and Cultural Changes"; Bostoen et al., "Middle to Late Holocene."

(22.) Grollemund et al., "Bantu Expansion."

(23.) Phillipson, *African Archaeology*, 151-160; de Maret, "Archaeologies," 635-636.

(24.) This contradiction is pointed out by Bostoen et al., "Middle to Late Holocene," 377-378, and Christopher Ehret, "Proceedings of the National Academy of Sciences of the United States of America," *PNAS* 112, no. 44 (2015): 13428-13429.

(25.) Such phylogenies are presented in Thomas E. Currie et al., "Cultural Phylogeography of the Bantu Languages of Sub-Saharan Africa," *Proceedings of the Royal Society B (Biological Sciences)* 280, no. 1762 (2013): 1-8, and Grollemund et al., "Bantu Expansion."

(26.) Clare Janaki Holden, Andrew Meade, and Mark Pagel, "Comparison of Maximum Parsimony and Bayesian Bantu Language Trees," in *The Evolution of Cultural Diversity: A Phylogenetic Approach*, ed. R. Mace, C. J. Holden, and S. Shennan (London: UCL Press, 2005): 53-65; Katherina Rexová, Yvonne Bastin, and Daniel Frynta, "Cladistic Analysis of Bantu Languages: A New Tree Based on Combined Lexical and Grammatical Data," *Naturwissenschaften* 93, no. 4 (2006): 189-194; de Filippo et al. "Bringing Together"; Thomas E. Currie et al., "Cultural Phylogeography of the Bantu Languages of Sub-Saharan Africa," *Proceedings of the Royal Society B (Biological Sciences)* 280, no. 1762 (2013): 1-8; Clare Janaki Holden and Russell D. Gray, "Rapid Radiation, Borrowing and Dialect Continua in the Bantu Languages," in *Phylogenetic Methods and the Prehistory of Languages.*, ed. Peter Forster and Colin Renfrew (Cambridge, UK: The McDonald Institute for Archaeological Research, 2006), 19-31; Grollemund et al., "Bantu Expansion"; Holden and Gray, "Rapid Radiation"; Clare Janaki Holden, "Bantu Language Trees Reflect the Spread of Farming across Sub-Saharan Africa: A Maximum-Parsimony Analysis," *Proceedings of the Royal Society of London Series B-Biological Sciences* 269, no. 1493 (2002): 793-799; Yvonne Bastin, André Coupez, and Michael Mann, *Continuity and Divergence in the Bantu Languages: Perspectives from a Lexicostatistic Study*, *Annales, Série in-8°*, Sciences Humaines (Tervuren, Belgium: Royal Museum for Central

## The Bantu Expansion

---

Africa, 1999); Bastin and Piron, "Classifications"; Pascale Piron, *Classification interne du groupe bantoïde*, 2 vols. (Munich: Lincom Europa, 1997).

(27.) Thomas Huffman, "The Early Iron Age and the Spread of the Bantu," *South African Archaeological Bulletin* 25, no. 3-21 (1970); Pierre de Maret, "Pits, Pots and the Far West Streams," *Azania* 29-30 (1994-1995): 318-323; David W. Phillipson, "Archaeology and Bantu Linguistics," *World Archaeology* 8, no. 65-82 (1976), 65-82.

(28.) See Philippe Lavachery, "Shum Laka Rock Shelter Late Holocene Deposits: From Stone to Metal (North Western Cameroon)," in *Aspects of African Archaeology: Papers from the 10th Congress of the Panafrican Association for Prehistory and Related Studies*, ed. G. Pwiti and R. Soper (Harare: University of Zimbabwe Publications, 1996); "De la pierre au métal. Archéologie des dépôts holocènes de l'abri sous roche de Shum Laka (Cameroun)" (PhD thesis, Université Libre de Bruxelles, 1998); de Maret, "Pits, Pots and the Far West Streams."

(29.) See, for instance, Bernard Clist, "Des derniers chasseurs aux premiers métallurgistes: Sédentarisation et débuts de la métallurgie du fer (Cameroun, Gabon, Guinée-Equatoriale)," in *Paysages quaternaires de l'Afrique centrale atlantique*, ed. Raymond Lanfranchi and Dominique Schwartz, Collection Didactiques (Paris: ORSTOM, 1990), 466.

(30.) Philippe Lavachery, "The Holocene Archaeological Sequence of Shum Laka Rock Shelter (Grassfields, Cameroon)," *African Archaeological Review* 18 (2001): 213-247; de Maret, "Archaeologies of the Bantu Expansion."

(31.) Bostoen, "Pots, Words and the Bantu Problem"; Bostoen, *Des mots et des pots en bantou*.

(32.) Pierre de Maret, "Sédentarisation, agriculture et métallurgie du Sud-Cameroun: Synthèse des recherches depuis 1978," in *L'archéologie au Cameroun. Actes du premier colloque international de Yaoundé, 6-9 Janvier 1986*, ed. J.-M. Essomba (Paris: Karthala, 1992).

(33.) de Maret, "Archaeologies of the Bantu Expansion"; de Maret, "Pits, Pots and the Far West Streams"; Bostoen et al., "Middle to Late Holocene"; Oslisly et al., "Climatic and Cultural Changes"; Bernard Clist, "Coexistences matérielles entre 6000 et 20 Cal. BC en Afrique centrale: Une mosaïque culturelle," in *Normes techniques et pratiques sociales: De la simplicité des outillages pré- et protohistoriques*, ed. L. Astruc et al., Rencontres internationales d'archéologie et d'histoire d'Antibes (Antibes, France: CNRS, 2006); "West Central African Peoples: Survey of Radiocarbon Dates over the Past 5000 Years," *Radiocarbon* 55, no. 2-3 (2013): 1377-1382.

(34.) Oslisly et al., "Climatic and Cultural Changes"; Roger Blench, "Two Vanished African Maritime Traditions and a Parallel from South America," *African Archaeological Review* 29, no. 2 (2012): 273-292; Bostoen et al., "Middle to Late Holocene."

## The Bantu Expansion

---

- (35.) Bernard Clist, "Vers une réduction des préjugés et la fonte des antagonismes: Un bilan de l'expansion de la métallurgie du fer en Afrique sub-saharienne," *Journal of African Archaeology* 10, no. 1 (2012): 71–84; "Mais Où Se Sont Taillées Nos Pierres En Afrique Centrale Entre 7.000 et 2.000 BP," in *Grundlegungen. Beiträge Zur Europäischen Und Afrikanischen Archäologie Für Manfred K.H. Eggert*, ed. Hans-Peter Wotzka (Tübingen, Germany: Francke Attempto, 2006), 291–302; Oslisly et al., "Climatic and Cultural Changes"; Bernard Clist, "Our Iron Smelting 14c Dates from Central Africa: From a Plain Appointment to a Full Blown Relationship," in *The World of Iron*, ed. J. Humphris and T. Rehren (London: Archetype Publications, 2013), 22–28.
- (36.) Manfred K. H. Eggert et al., "Pits, Graves and Grains: Archaeological and Archaeobotanical Research in Southern Cameroon," *Journal of African Archaeology* 4 (2006): 273–298; Stefanie Kahlheber et al., "Pearl Millet and Other Plant Remains from the Early Iron Age Site of Boso-Njafo (Inner Congo Basin, Democratic Republic of the Congo)," *African Archaeological Review* 31, no. 3 (2014): 479–512; Stefanie Kahlheber, Koen Bostoen, and Katharina Neumann, "Early Plant Cultivation in the Central African Rain Forest: First Millennium BC Pearl Millet from South Cameroon," *Journal of African Archaeology* 7, no. 2 (2009): 253–272.
- (37.) Manfred K. H. Eggert et al., "Pits, Graves and Grains: Archaeological and Archaeobotanical Research in Southern Cameroon."
- (38.) Christophe Mbida Mindzié et al., "Evidence for Banana Cultivation and Animal Husbandry During the First Millennium BC in the Forest of Southern Cameroon," *Journal of Archaeological Science* 27, no. 2 (2000): 151–162.
- (39.) Julius B. Lejju, David Taylor, and Peter Robertshaw, "Late-Holocene Environmental Variability at Munsa Archaeological Site, Uganda: A Multicore, Multiproxy Approach," *The Holocene* 15, no. 7 (2005): 1044–1061; Julius B. Lejju, Peter Robertshaw, and David Taylor, "Africa's Earliest Bananas?," *Journal of Archaeological Science* 33, no. 1 (2006).
- (40.) Jan Vansina, "Bananas in Cameroon c. 500 BCE? Not Proven," *Azania* 38 (2003): 174–176; Christophe Mbida Mindzié et al., "The Initial History of Bananas in Africa: A Reply to Vansina," *Azania* 40 (2005): 128–135; Katharina Neumann and Elisabeth Hildebrand, "Early Bananas in Africa: The State of the Art," *Ethnobotany Research & Applications* 7 (2009): 353–362.
- (41.) Peter Bellwood and Colin Renfrew, eds., *Examining the Farming/Language Dispersal Hypothesis* (Cambridge, UK: McDonald Institute for Archaeological Research, 2002); David W. Phillipson, "Language and Farming Dispersals in Sub-Saharan Africa, with Particular Reference to the Bantu-Speaking Peoples," in *Examining the Farming/Language Dispersal Hypothesis*, ed. Peter Bellwood and Colin Renfrew (Cambridge, UK: McDonald Institute for Archaeological Research, 2003), 177–187; Diamond and Bellwood, "Farmers and Their Languages"; C. Renfrew, "Archaeology, Genetics and Linguistic Diversity," *Man* 27, no. 3 (1992): 445–478; Holden, "Bantu Language Trees"; Thembi

## The Bantu Expansion

---

Russell, Fabio Silva, and James Steele, "Modelling the Spread of Farming in the Bantu-Speaking Regions of Africa: An Archaeology-Based Phylogeography," *PLoS ONE* 9, no. 1 (2014): e87854.

(42.) Lavachery, "The Holocene Archaeological Sequence"; de Maret, "Archaeologies of the Bantu Expansion"; Lavachery, "De la pierre au métal."

(43.) de Maret, "Pits, Pots and the Far West Streams"; Clist, "Mais Où Se Sont Taillées Nos Pierres En Afrique Centrale Entre 7.000 Et 2.000 Bp"; de Maret, "Archaeologies of the Bantu Expansion."

(44.) Jacky Maniacky, "Quelques thèmes pour 'igname' en bantu," in *Studies in African Comparative Linguistics, with Special Focus on Bantu and Mande*, ed. Koen Bostoen and Jacky Maniacky (Tervuren, Belgium: Royal Museum for Central Africa, 2005); Blench "Archaeology, Language and the African Past"; Koen Bostoen, Rebecca Grollemund, and Joseph Koni Muluwa, "Climate-Induced Vegetation Dynamics and the Bantu Expansion: Evidence from Bantu Names for Pioneer Trees (*Elaeis Guineensis*, *Canarium Schweinfurthii* and *Musanga Cecropioides*)," *Comptes Rendus Geoscience* 345 (2013); Koen Bostoen, "A Diachronic Onomasiological Approach to Early Bantu Oil Palm Vocabulary," *Studies in African Linguistics* 34, no. 2 (2005): 143-188; "Wild Trees in the Subsistence Economy of Early Bantu Speech Communities: A Historical-Linguistic Approach," in *Archaeology of African Plant Use*, ed. C. J. Stevens et al. (Walnut Creek, CA: Left Coast Press, 2014), 129-140; Koen Bostoen and Joseph Koni Muluwa, "Were the First Bantu Speakers South of the Rainforest Farmers? A First Assessment of the Linguistic Evidence," in *Language Dispersal Beyond Farming*, ed. Martine Robbeets and Sander Savelyev (Amsterdam: John Benjamins, 2017), 235-258; Koen Bostoen, "Pearl Millet in Early Bantu Speech Communities in Central Africa: A Reconsideration of the Lexical Evidence," *Afrika und Übersee* 89 (2006-2007), 183-213.

(45.) Marie-Claude Van Grunderbeek, "Essai d'étude typologique de céramique Urewe de la région des collines au Burundi et Rwanda," *Azania* 23 (1988): 11-55; Merrick Posnansky, "The Iron Age in East Africa," in *Background to Evolution in Africa*, ed. Walter W. Bishop and J. Desmond Clark (Chicago: University of Chicago Press, 1967), 629-649; Bernard Clist, "A Critical Reappraisal of the Chronological Framework of the Early Urewe Iron Age Industry," *Muntu* 6 (1987): 35-62; Robert C. Soper, "A General Review of the Early Iron Age of the Southern Half of Africa," *Azania* 6 (1971): 5-38.

(46.) Clist, "A Critical Reappraisal," 38.

(47.) Ceri Ashley, "Towards a Socialised Archaeology of Ceramics in Great Lakes Africa," *African Archaeological Review* 27 (2010): 135-163; Clist, "A Critical Reappraisal"; Marie-Claude Van Grunderbeek, "Essai de délimitation chronologique de l'Age du Fer ancien au Burundi, au Rwanda et dans la région des Grands Lacs," *Azania* 27 (1992): 53-80; Peter R. Schmidt, "Archaeological Views on a History of Landscape Change in East Africa," *Journal of African History* 38 (1997): 393-421.

## The Bantu Expansion

---

(48.) Paul Lane, "The 'Moving Frontier' and the Transition to Food Production in Kenya," *Azania* 39, no. 1 (2004): 243–264; Van Grunderbeek, "Essai de délimitation chronologique."

(49.) Marie-Claude Van Grunderbeek, Emile Roche, and Hugues Doutrelepon, "Type de fourneau de fonte de fer, associé à la culture Urewe (Age du Fer ancien), au Rwanda et au Burundi," *Mediterranean Archaeology* 14 (2001): 271–297.

(50.) Marie-Claude Van Grunderbeek and Emile Roche, "Multidisciplinary Evidence of Mixed Farming During the Early Iron Age in Rwanda and Burundi," in *Rethinking Agriculture: Archaeological and Ethnoarchaeological Perspectives*, ed. Tim Denham, José Iriarte, and Luc Vrydaghs (Walnut Creek, CA: Left Coast Press, 2007).

(51.) Bostoen, "Pearl Millet in Early Bantu Speech Communities"; Christopher Ehret, *An African Classical Age: Eastern and Southern Africa in World History, 1000 B.C. to A.D. 400* (Charlottesville: University Press of Virginia; James Currey, 1998), 83; "Agricultural History in Central and Southern Africa, ca. 1000 B.C. to A.D. 500," *Transafrican Journal of History* 4, no. 1–2 (1974): 1–25; "Patterns of Bantu and Central Sudanic Settlement in Central and Southern Africa (ca. 1000 B.C.–500 A.D.)," *Transafrican Journal of History* 3 (1973): 1–71.

(52.) Ashley, "Towards a Socialised Archaeology," 144.

(53.) Soper, "A General Review."

(54.) Marie-Claude Van Grunderbeek, "Essai de délimitation chronologique" .

(55.) Bostoen, "Pots, Words and the Bantu Problem: On Lexical Reconstruction and Early African History," 197.

(56.) David W. Phillipson, "The Spread of the Bantu Languages," *Scientific American* 236 (1977): 106–114; *The Later Prehistory of Eastern and Southern Africa* (London: Heinemann, 1977).

(57.) Thomas N. Huffman, "Comment on 'Middle to Late Holocene Paleoclimatic Change and the Early Bantu Expansion in the Rain Forests of Western Central Africa'," *Current Anthropology* 56, no. 3 (2015): 371.

(58.) Soper, "A General Review"; Felix Chami, *The Tanzanian Coast in the First Millennium AD: An Archaeology of the Iron-Working, Farming Communities* (Uppsala: Societas Archaeologica Upsaliensis, 1994); "The Excavation at Kwale Island, South of Dar Es Salaam, Tanzania," *Nyame Akuma* 4 (1997).

(59.) Innocent Pikirayi, "The Archaeology of Sub-Saharan Africa," in *The Oxford Handbook of Archaeology*, ed. Chris Gosden, Barry Cunliffe, and Rosemary A. Joyce (Oxford: Oxford University Press, 2009), 723–762; Soper, "A General Review"; Phillipson,

## The Bantu Expansion

---

*African Archaeology*, 252; Peter Sinclair, "Archaeology in Eastern Africa: An Overview of Current Chronological Issues," *Journal of African History* 32 (1991): 191–192.

(60.) See Grollemund et al., "Bantu Expansion," where these languages are coded as part of zone J.

(61.) Nurse and Philippson, "Towards a Historical Classification of the Bantu Languages"; Derek Nurse, "Towards a Historical Classification of East African Bantu Languages," in *Bantu Historical Linguistics: Theoretical and Empirical Perspectives*, ed. Jean-Marie Hombert and Larry Hyman (Stanford, CA: CSLI, 1999).

(62.) Grollemund et al., "Bantu Expansion."

(63.) Tom N. Huffman, *Handbook to the Iron Age: The Archaeology of Pre-Colonial Farming Societies in Southern Africa* (Pietermaritzburg: University of KwaZulu-Natal Press, 2007); see also Mitchell, "Early Farming Communities," for a synthesis.

(64.) Phillipson, *The Later Prehistory of Eastern and Southern Africa*.

(65.) Huffman, "Handbook to the Iron Age", 335.

(66.) Huffman, 349.

(67.) Huffman, 359.

(68.) E.g., Sonia Ludmila Da Silva Domingos, "Les séries céramiques des amas coquilliers de la région de Luanda (Angola). Contribution à l'étude de la préhistoire récente angolaise" (PhD thesis, Université de Toulouse-Le Mirail, 2009), 251; Bernard Clist, personal communication.

(69.) See also Bostoen, *Des mots et des pots en bantou.*, 27–31, for a short discussion.

(70.) R. M. Gramly, "Expansion on Bantu-Speakers Versus Development of Bantu Language in Situ. An Archaeologist's Perspective," *South African Archaeological Bulletin* 33 (1978): 107–112; Vansina, "New Linguistic Evidence and the Bantu Expansion"; Samwiri Lwanga-Lunyiigo, "The Bantu Problem Reconsidered," *Current Anthropology* 17, no. 2 (1976): 282–286; John H. Robertson and Rebecca Bradley, "A New Paradigm: The African Early Iron Age without Bantu Migrations," *History in Africa* 27 (2000): 287–323; Lynne A. Schepartz, "Who Were the Later Pleistocene Eastern Africans?," *African Archaeological Review* 6, no. 1 (1988): 57–72.

(71.) Sen Li, Carina Schlebusch, and Mattias Jakobsson, "Genetic Variation Reveals Large-Scale Population Expansion and Migration During the Expansion of Bantu-Speaking Peoples," *Proceedings of the Royal Society B (Biological Sciences)* 281 (2014): 20141448; George B. J. Busby et al., "Admixture into and within Sub-Saharan Africa," *eLife* 5 (2016): e15266; Patin et al. "Dispersals"; Pakendorf, Bostoen, and de Filippo, "Molecular Perspectives."

## The Bantu Expansion

---

(72.) Alves et al., "Genetic Homogeneity"; Gemma Berniell-Lee et al., "Genetic and Demographic Implications of the Bantu Expansion: Insights from Human Paternal Lineages," *Molecular Biology and Evolution* 26, no. 7 (2009): 1581–1589.

(73.) Li, Schlebusch, and Jakobsson, "Genetic Variation," who rely on multi-loci genetic data.

(74.) Pakendorf, Bostoen, and de Filippo, "Molecular Perspectives."

(75.) Brigitte Pakendorf, "Historical Linguistics and Molecular Anthropology," in *The Routledge Handbook of Historical Linguistics*, ed. Claire Bower and Bethwyn Evans (London: Routledge, 2014), 637–638.

(76.) E.g., Pour N. Ansari, C. A. Plaster, and N. Bradman, "Evidence from Y-Chromosome Analysis for a Late Exclusively Eastern Expansion of the Bantu-Speaking People," *European Journal of Human Genetics* 21, no. 4 (2013): 423–429.

(77.) See Brigitte Pakendorf, "Prehistoric Population Contact and Language Change," in *The Oxford Handbook of Language Evolution*, ed. Kathleen R. Gibson and Maggie Tallerman (Oxford: Oxford University Press, 2011), 579.

(78.) De Filippo et al., "Bringing Together."

(79.) M. Coelho et al., "On the Edge of Bantu Expansions: mtDNA, Y Chromosome and Lactase Persistence Genetic Variation in Southwestern Angola," *BMC Evolutionary Biology* 9 (2009): 80; L. Castri et al., "Mtdna Variability in Two Bantu-Speaking Populations (Shona and Hutu) from Eastern Africa: Implications for Peopling and Migration Patterns in Sub-Saharan Africa," *American Journal of Physical Anthropology* (2009); Cesare de Filippo et al., "Y-Chromosomal Variation in Sub-Saharan Africa: Insights into the History of Niger-Congo Groups," *Molecular Biology and Evolution* 28, no. 3 (2011): 1255–1269; Alves et al., "Genetic Homogeneity."



## The Bantu Expansion

---

(80.) Joseph K. Pickrell et al., "The Genetic Prehistory of Southern Africa," *Nature Communications* 3, no. 1143 (2012); Busby et al. "Admixture into and within Sub-Saharan Africa"; Carina M. Schlebusch et al., "Genomic Variation in Seven Khoe-San Groups Reveals Adaptation and Complex African History," *Science* 338, no. 6105 (2012): 374-379; L. Quintana-Murci et al., "Maternal Traces of Deep Common Ancestry and Asymmetric Gene Flow Between Pygmy Hunter-Gatherers and Bantu-Speaking Farmers," *Proceedings of the National Academy of Sciences of the United States of America* 105, no. 5 (2008): 1596-1601; E. Patin et al., "Inferring the Demographic History of African Farmers and Pygmy Hunter-Gatherers Using a Multilocus Resequencing Data Set," *PLOS Genetics* 5, no. 4 (2009): e1000448; Etienne Patin et al., "The Impact of Agricultural Emergence on the Genetic History of African Rainforest Hunter-Gatherers and Agriculturalists," *Nature Communications* 5 (2014): 3163; Elizabeth T. Wood et al., "Contrasting Patterns of Y Chromosome Andmtdna Variation in Africa: Evidence for Sex-Biased Demographic Processes," *European Journal of Human Genetics* 13 (2005): 867-876; Giovanni Destro-Bisol et al., "Variation of Female and Male Lineages in Sub-Saharan Populations: The Importance of Sociocultural Factors," *Molecular Biology and Evolution* 21 (2004): 1673-1682; Paul Verdu et al., "Sociocultural Behavior, Sex-Biased Admixture, and Effective Population Sizes in Central African Pygmies and Non-Pygmies," *Molecular Biology and Evolution* 30, no. 4 (2013): 918-937; Chiara Barbieri et al., "Migration and Interaction in a Contact Zone: Mtdna Variation Among Bantu-Speakers in Southern Africa," *PLoS ONE* 9, no. 6 (2014): e99117; Pakendorf, "Historical Linguistics"; Cesare de Filippo et al., "Genetic Perspectives on Forager-Farmer Interaction in the Luangwa Valley of Zambia," *American Journal of Physical Anthropology* 141 (2010): 382-394.

(81.) Pakendorf, "Historical Linguistics", 636-637.

(82.) Chiara Barbieri et al., "Genetic Perspectives on the Origin of Clicks in Southwestern Bantu Languages," *European Journal of Human Genetics* 21, no. 4 (2013): 430-436; Koen Bostoen and Bonny Sands, "Clicks in South-Western Bantu Languages: Contact-Induced vs. Language-Internal Lexical Change," in *Proceedings of the 6th World Congress of African Linguistics Cologne 2009*, ed. Matthias Brenzinger and Anne-Maria Fehn (Cologne: Rüdiger Köppe, 2012), 129-140; Hilde Gunnink et al., "Prehistoric Language Contact in the Kavango-Zambezi Transfrontier Area: Khoisan Influence on Southwestern Bantu Languages," *Journal of African Languages and Linguistics* 36, no. 2 (2015): 193-232; Tom Güldemann and Mark Stoneking, "A Historical Appraisal of Clicks: A Linguistic and Genetic Population Perspective," *Annual Review of Anthropology* 37 (2008): 93-109; S. A. Tishkoff et al., "History of Click-Speaking Populations of Africa Inferred from Mtdna and Y Chromosome Genetic Variation," *Molecular Biology and Evolution* 24, no. 10 (2007): 2180-2195.

(83.) Brigitte Pakendorf et al., "Prehistoric Bantu-Khoisan Language Contact: A Cross-Disciplinary Approach," *Language Dynamics and Change* 7, no. 1 (2017): 1-46.

## The Bantu Expansion

---

(84.) Koen Bostoen and Hilde Gunnink, "The Impact of Autochthonous Languages on Bantu Language Variation: A Comparative View on Southern and Central Africa," in *Cambridge Handbook of Language Contact*, ed. Salikoko S. Mufwene and Anna María Escobar (Cambridge, UK: Cambridge University Press, forthcoming).

(85.) E.g., Koen Bostoen and Jean-Pierre Donzo, "Bantu-Ubangi Language Contact and the Origin of Labial-Velar Stops in Lingombe (Bantu, C41, Drc)," *Diachronica* 30, no. 4 (2013): 435–468; Roland Kiessling, "The Integration of Bantu Loans into Burunge (Southern Cushitic)." *Sprache und Geschichte in Afrika* 16/17 (2001): 213–238; Ehret, "Patterns of Bantu and Central Sudanic Settlement"; Ehret, "Cattle-Keeping and Milking in Eastern and Southern African History: The Linguistic Evidence," *Journal of African History* 8, no. 1 (1967): 1–17; Derek Nurse, *Inheritance, Contact and Change in Two East African Languages*, Sprachkontakt in Afrika/Language Contact in Africa (Cologne: Rüdiger Köppe Verlag, 2000); Maarten Mous, *The Making of a Mixed Language : The Case of Ma'a/Mbugu*, Creole Language Library 26 (Amsterdam: John Benjamins Publishing Company, 2003).

(86.) See, for instance, Brenna M. Henn et al., "Y-Chromosomal Evidence of a Pastoralist Migration through Tanzania to Southern Africa," *Proceedings of the National Academy of Sciences of the United States of America* 105, no. 31 (2008): 10693–10698, who rely on Y-chromosomal data; Alessia Ranciaro et al., "Genetic Origins of Lactase Persistence and the Spread of Pastoralism in Africa," *American Journal of Human Genetics* 94, no. 4 (2014): 496–510, who rely on lactase persistence genes.

(87.) Begoña Dobon et al., "The Genetics of East African Populations: A Nilo-Saharan Component in the African Genetic Landscape," *Scientific Reports* 5 (2015): 9996; Sarah A. Tishkoff et al., "The Genetic Structure and History of Africans and African Americans," *Science (New York, N.Y.)* 324, no. 5930 (2009): 1035–1044; Luca Pagani et al., "Ethiopian Genetic Diversity Reveals Linguistic Stratification and Complex Influences on the Ethiopian Gene Pool," *American Journal of Human Genetics* 91, no. 1 (2012): 83–96.

(88.) Pakendorf, "Historical Linguistics", 637.

(89.) Scott MacEachern, "Genetics and African Archaeology," in *Field Manual for African Archaeology*, ed. Alexandre Livingstone Smith et al. (Tervuren, Belgium: Royal Museum for Central Africa, 2017), 296.

(90.) Patin et al., "Dispersals"; Carina M. Schlebusch et al., "Genomic Variation in Seven Khoe-San Groups Reveals Adaptation and Complex African History," *Science* 338, no. 6105 (2012): 374–379.

(91.) Jan Vansina, "De Vita Sua," *Society* 53, no. 3 (2016): 242.

(92.) Roland Oliver, "The Problem of the Bantu Expansion," *Journal of African History* 7 (1966): 361–376.

## The Bantu Expansion

---

(93.) Jan Vansina, "Bantu in the Crystal Ball 1," *History in Africa* 6 (1979): 287–333; Vansina, "Bantu in the Crystal Ball 2," *History in Africa* 7 (1980): 287–333; Vansina, "Western Bantu Expansion," *Journal of African History* 25, no. 2 (1984): 129–145; Vansina, *Paths in the Rainforest: Toward a History of Political Tradition in Equatorial Africa* (Madison: University of Wisconsin Press, 1990); Vansina, "New Linguistic Evidence and the Bantu Expansion"; Vansina, "Linguistic Evidence for the Introduction of Ironworking in Bantu-Speaking Africa," *History in Africa* 33 (2006): 173–195; Vansina, *How Societies Are Born: Governance in West Central Africa before 1600* (Charlottesville: University of Virginia Press, 2004).

(94.) Ehret, "Cattle-Keeping and Milking"; Ehret, "Patterns of Bantu and Central Sudanic Settlement"; Ehret, "Agricultural History in Central and Southern Africa, Ca. 1000 B.C. To A.D. 500"; Ehret, *An African Classical Age*; Ehret, "Bantu Expansions: Re-Envisioning a Central Problem of Early African History," *The International Journal of African Historical Studies* 34, no. 1 (2001): 5–27; Ehret, "The Establishment of Iron-Working in Eastern, Central, and Southern Africa: Linguistic Inferences on Technological History," *Sprache und Geschichte in Afrika* 16/17 (2001): 125–175; Christopher Ehret and Merrick Posnansky, eds., *The Archaeological and Linguistic Reconstruction of African History* (Berkeley: University of California Press, 1982).

(95.) Mary Allen McMaster, "Patterns of Interaction: A Comparative Ethnolinguistic Perspective on the Uele Region of Zaire ca. 500 B.C. to 1900 A.D" (PhD thesis, University of California, 1988).

(96.) David Lee Schoenbrun, "Early History on Eastern Africa's Great Lakes Region: Linguistic, Ecological and Archaeological Approaches, ca. 500 BC to AD 1000" (PhD thesis, University of California at Los Angeles (UCLA), 1990); Schoenbrun, *A Green Place, a Good Place: Agrarian Change, Gender, and Social Identity in the Great Lakes Region to the 15<sup>th</sup> Century*, *Social History of Africa* (Portsmouth, NH: Heinemann, 1998).

(97.) Kairn A Klieman, "Hunters and Farmers of the Western Equatorial Rainforest: Economy and Society, 3000 BC to AD 1880" (PhD thesis, University of California, 1997); Kairn A. Klieman, *"The Pygmies Were Our Compass": Bantu and Batwa in the History of West Central Africa, Early Times to c. 1900 CE*, *Social History of Africa* (Portsmouth, NH: Heinemann, 2003).

(98.) Catherine Cymone Fourshey, "Agriculture, Ecology, Kinship and Gender: A Social and Economic History of Tanzania's Corridor 500 BC to 1900 AD" (PhD thesis, University of California, 2002).

(99.) Rhonda Marie Gonzales, "Continuity and Change: Thought, Belief, and Practice in the History of the Ruvu Peoples of Central East Tanzania, c. 200 B.C. to A.D. 1800" (PhD thesis, University of California, 2002).

(100.) Anita Marie Pfouts, "Economy and Society in Northern Namibia 500 BCE to 1800 CE: A Linguistic Approach" (PhD diss., University of California, 2003).

## The Bantu Expansion

---

(101.) Rhiannon Stephens, "A History of Motherhood, Food Procurement and Politics in East-Central Uganda to the Nineteenth Century" (PhD thesis, Northwestern University, 2007); Stephens, "Lineage and Society in Precolonial Uganda," *Journal of African History* 50, no. 2 (2009): 203-221.

(102.) Kathryn M. de Luna, "Collecting Food, Cultivating Persons: Wild Resource Use in Central African Political Culture, c. 1000 B.C.E. to C. 1900 C.E." (PhD thesis, Northwestern University, 2008); de Luna, "Hunting Reputations: Talent, Individualism, and Community-Building in Precolonial South Central Africa," *Journal of African History* 53, no. 3 (2012): 279-299; de Luna, *Collecting Food, Cultivating People: Subsistence and Society in Central Africa* (New Haven, CT: Yale University Press, 2016).

### **Koen Bostoën**

Department of Languages and Cultures, Ghent University

