

1 **Saving 1,000 years of African history: there is no evidence of a population collapse in**
2 **Congo rainforest from 400 to 600 CE – 2. The pottery styles.**

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4 Mbida Minzie.

5 **Pre Print for the *Science Advances* journal, response to the published paper** “Seidensticker (D.), Hubau
6 (W.), Verschuren (D.), Fortes-Lima (C.), de Maret (P.), Schlebusch (C.M.) & Bostoen (K.), 2021, Population
7 collapse in Congo rainforest from 400 CE urges reassessment of the Bantu Expansion, *Science Advances*,
8 Published online: 12 February 2021, Vol. 7, no. 7.”

9 Seidensticker *et al.* ‘*compiled a dataset of well described styles of pottery groups*’, marking the
10 expansion of Iron Age villagers, probably Bantu-speakers, recorded over the last 40 years.
11 These groups, however, are not yet correctly published. There are major differences between
12 insufficient descriptions, text and figures versus a well described and illustrated analysis.

13 The S2 table, listing pottery styles, contains inaccuracies that impact our understanding of the
14 evolution of styles, their true cultural representation and association with radiocarbon dates.

15 For example, the 5 pottery types found at Dibamba (Cameroon) do not yet constitute individual
16 style groups (1). Certainly, they are not equal to the Okala Group (southern Cameroon and
17 Gabon), identified at several sites and positioned by 44 dates. Similarly, Seidensticker *et al.*
18 misrepresent the 4 pottery types in the Kongo Group as four different styles (2). It is also
19 difficult to consider the 59 styles from the Inner Congo Basin (zones D to F), 40 of them
20 undated, together with the 56 from west of the Congo River (zones A to C) of which only 2 are
21 undated, or the 16 ethnographic and modern styles in the D to F zones, while ignoring similar
22 styles identified in zone C. The authors also overlook other styles: for instance, styles in the
23 Bouar area (CAR) as well as the Nkang style in Cameroon, the Lindili in Gabon and the Kazu
24 or Muanda in the Lower Congo (DRC) (2, 3).

25 Only three styles are thought to continue after AD 600, representing ‘scattered populations’
26 (Ilambi in the DRC; Nandá in Gabon; and Spaced Curvilinear in Congo). In contrast to that
27 interpretation, Muanda and other styles found along the coast of the DRC date to between AD
28 400 and 800 and provide a more comprehensive picture (4).

29 In the three areas where complete pottery sequences are available (Gabon: northwest and
30 center; DRC: Upemba Depression and Inner Congo Basin; Congo: Kouilou River), we find
31 continuous sequences, broken every few centuries by changes in “*chaînes opératoires*” and
32 styles (5); on the coast of Gabon, they are *c.* 2,500, 2,000, 1,400, 950 and 450 BP, the latest
33 being the contact with the Portuguese, in Katanga (DRC), *c.* 1,600, 1,300 and 800 BP. It is
34 particularly important to distinguish between internal shifts and complete stylistic changes.
35 Complete change, or transitions, is strong evidence for new people, and of a spread-over-spread
36 process. This has been followed by archaeologists mainly by PhD studies carried out in
37 Cameroon, Gabon and the DRC since the mid-1980s (6).

38 The “Late Iron Age” (LIA) has been less studied, thus yielding fewer dates and pottery
39 descriptions than for the Early Iron Age (EIA). For instance, the styles in Cameroon (Table S2)
40 provide an incomplete sequence. Only 12 are listed for the whole of southern Cameroon and
41 for the entire “Iron Age” or 3,000 years. By removing the 5 Dibamba ‘styles’ discussed earlier,
42 we are left with only Neolithic and EIA styles and none for the LIA. In Gabon, the continuous
43 or nearly continuous Neolithic-EIA-LIA sequences extend from *c.* 2,500 BP to *c.* 200 BP in
44 the northwest and center, while the northern and southern parts are poorly known (5). Most
45 recently, new LIA fieldwork has dramatically increased the number of ¹⁴C dates and specific
46 style groups (7, 8).

47 Since 2014, the cultural sequences slowly obtained west of the Congo River have given us a
48 renewed understanding. Neolithic styles subdivisions exist and suggest that the so-called
49 regionalization process was not specific to the Iron Age. Furthermore, we understand the onset
50 of the EIA is characterized by a new expansion spreading from Cameroon-Gabon, interacting
51 with the first villagers, and extending over the border of Angola c. 2100-1800 BP (5). The LIA
52 remains inadequately known, but other dynamics are illustrated.

53 For several decades, researchers have recognized a stylistic split between the EIA and LIA
54 periods based on technological and stylistic aspects. While a *'fossile directeur'* such as round-
55 based vessels may indicate such a split in the Inner Congo Basin, it does not apply to other
56 areas. Round-based vessels are well known along the Atlantic coastline of Equatorial Guinea,
57 Congo and the DRC between 2,000 and 1,500 BP neighbors to EIA flat-based pottery groups,
58 and in Katanga (DRC) round-based vessels are there since the inception of the EIA c. 1,600
59 BP. Moreover, stylistic distinctions between the EIA and later pottery date to different times.
60 In Gabon, it occurs at about 950 BP, but in Bas Congo (DRC) it is probably 300 years earlier,
61 at about 1250 BP, while in Katanga it is more fluid without major discontinuities in the EIA-
62 LIA pottery. Thus, the break is not as sharp as the authors claim.

63 Seidensticker *et al.* use the "Justinian plague" of the 6th-8th centuries to strengthen their
64 unconvincing claim of a demographic crash from AD 400 to 600. Nowhere in the Sahara, Sahel,
65 West Africa, nor East Africa, however, is there archaeological evidence for a demographic
66 collapse. Furthermore, M. Green's genetic identification of *Yersinia pestis* in Central Africa
67 shows it is an offshoot of the Middle Ages plague (9), which may have entered Africa in the
68 late 15th or early 16th century (10). In Central Africa, the higher number of LIA sites document
69 an important demographic boost, supported by genetics for Gabon, a result inconclusive to the
70 presence of a plague.

71 Last, the early stages of the Bantu expansion relate to the pre-metallurgy phase and the EIA.
72 By c. 1500 BP (roughly AD 500), Iron Age farmers had moved through southern and eastern
73 Africa, settling into South Africa. In Central Africa, the period after AD 500 is about multiple
74 local reshuffling of the established and already settled communities, which has drawn less
75 attention by archaeologists.

76 We agree with Seidensticker *et al.* that the present distribution of Bantu languages does not
77 reflect the early stages of expansion; this is a different situation from archaeology. Quite
78 recently it was possible to indicate that "As is often the case in West-Central Africa, linguistic
79 and archaeological evidence do not always match." (11: 25).

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