Central African Hunter-Gatherer Music Lexicon Does Not Predate the Bantu Expansion

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ABSTRACT: Padilla-Iglesias, et al.¹ claim that ten Central African Hunter-Gatherer (CAHG) communities share a history of genetic, cultural, and linguistic evolution, that started many millennia before the first food producers settled in the Congo basin, based on comparative evidence from musical instruments, foraging tools, specialized vocabulary and genome-wide data. We consider the linguistic evidence for this hypothesis unsubstantiated because (1) their historical-linguistic methodology is flawed, and (2) much relevant data were overlooked.

Unlike in Eastern and Southern Africa where hunter-gatherer groups still speak languages unrelated to those of neighboring agriculturalists or pastoralists, none of the modern CAHG communities has its own, genealogically distinct language. They all speak languages also spoken by peoples inside and outside the Congo rainforest, i.e., Bantu, Ubangi, and Central Sudanic. Since today's CAHG groups are commonly seen as the descendants of the area's original inhabitants, it is widely believed that their ancestors shifted more than once to the languages of more recent immigrants.²

Genetic evidence suggests that the ancestors of western and eastern CAHG groups split at least 20 to 30,000 years ago.³ This time depth is far beyond what many linguists consider to be a cut-off point for the plausible reconstruction of ancestral language stages, i.e., around 10,000 years.⁴ Even reconstructing the original state of well-preserved Niger-Congo, Africa's largest language phylum with an estimated age of 10 to 12,000 years, is extremely challenging.⁵ Nonetheless, the idea of a unique CAHG ancestor language whose relics can be still identified as a shared substrate in the Bantu, Ubangi, and Central Sudanic languages of modern CAHG groups is old and persistent,⁶ even though linguistic diversity among CAHG groups prior to language shift was in all likelihood much greater than we think.⁷⁻¹⁰

The assumption of a shared ancestral substrate also guides the historical-linguistic research of Padilla-Iglesias, et al.¹ They compared specialized lexicon for musical instruments and subsistence tools among 10 CAHG languages, most of which are not contiguous and belong to different lineages of Bantu, Ubangi, and Central Sudanic. Their lexical dataset consists of 183 musical instrument terms from 10 CAHG groups and 89 subsistence tool terms from 9 CAHG groups. As for the music-related words, 23 would be shared between two or more CAHG, and 15 would be exclusive to CAHG languages. Among the tool-related vocabulary, only 10 words would be shared between 2 CAHG groups, of which only 3 designate objects unique to CAHGs.

Padilla-Iglesias, et al.¹ presume that shared vocabulary between CAHG must have been either copied from neighboring farmer languages or preserved from their lost ancestral language(s). In line with earlier attempts to identify a putative CAHG substrate, 11,12 vocabulary thought to be absent elsewhere is automatically analyzed as a remnant of lost

CAHG languages, although absence of evidence cannot be taken as evidence of absence given the extremely poor documentation of Central African languages. Moreover, more recent borrowing events between geographically close CAHG groups should be considered as a possible explanation for shared vocabulary. CAHG are known to be highly mobile,² and no less than 9 out of 17 terms for musical instruments shared between two groups only are between neighboring Aka and Baka, and many more between either Aka or Baka and other nearby western CAHG groups. Finally, as assumedly unique CAHG lexicon often has morphology diagnostic of Bantu origins – also in non-Bantu languages, Bantu-speaking donors are likely even though no source words are found in languages spoken by the modern neighbors of CAHG⁶. Still, Padilla-Iglesias, et al.¹ only surveyed languages in direct contact with CAHG languages.

We broadened the search for potential source words to a wider set of non-CAHG languages and to Bantu lexical reconstructions¹³. Of the 15 allegedly unique CAHG music-related terms, at least 10 have plausible Bantu origins, including borrowings in Ubangi languages such as Baka. One is a dedicated musical instrument term likely reconstructable to Proto-Bantu, i.e., *gòmbí 'musical instrument, harp' (BLR 6658). Others correspond to reconstructed Bantu roots with closely related meanings, e.g., Aka/Baka *kúbù* 'drum' to *gʊbʊ 'calabash (musical instrument)' (BLR 4524), Aka/Baka *bò-gongo* 'zither harp' to *gòngò 'back, backbone' (BLR 1450) but designating a kind of musical bow in several Gabonese Bantu languages, 14,15 Aka/Baka *mbanda* 'rhythmic stick' (not cognate to Sua *mbanza*) to *banda 'bush' (BLR 8499) also attested with the meanings 'tree' or '(walking) stick' in several Congolese Bantu languages, Babongo/Bakola *bake*, *bákà* 'struck beam' to *bágá 'stick for trigger trap' (BLR 9309).

Other terms are clearly derived from widespread Bantu roots, e.g., Aka/Baka *mò-kíndá* 'drum' from *kìnd 'dance' (BLR 1809) with *mò*- being the reflex of the Proto-Bantu noun class prefix *mò-, Aka/Baka *mò-bìó* 'flute' from *bíd 'call' (BLR 177) with the same prefix and the reflex of the Proto-Bantu deverbative instrumental suffix *-o (see also *ímbì(l)ì* 'whistle, horn' derived from the same root in several Congolese Bantu languages), Aka/Baka *hì-n-dèhú*, *è-lēpú* 'flute' derived from *dàip 'be long' (BLR 784)/ *dàìpú 'long' (BLR 8162) with *hì*- being a reflex of the Proto-Bantu diminutive prefix *pì-. For other terms no plausible Bantu reconstruction is available, but cognates do exist in various Bantu languages, e.g., Babongo/Aka *di-beka*, *li-beka*, *mò-béké* 'whistle' is also found as *di-beka* 'harmonica' in several other Gabonese Bantu languages.¹⁵

Apart from missing obvious Bantu etymologies, Padilla-Iglesias, et al.¹ also misjudge cognacy between forms occurring in multiple CAHG languages. Although the forms of Aka è-ngbítí, Baka lí-ngbidi and Efe kittingbi 'musical bow' may resemble each other and include the labial-velar stop /gb/, the Efe term is clearly distinct. For the Efe term to be related to the Aka and Baka terms, one would have to assume it reversed the latter two syllables, a process that is common in neither language contact nor regular diachronic language change. Furthermore, the initial ki of the Efe term is reminiscent of the Proto-Bantu noun class prefix *kì-. Hence, it could be a Bantu loanword from a yet unidentified donor. Look-alikes for Efe kittingbi designating the musical bow exist in several Great Lakes Bantu languages, including neighboring Nande, i.e., e-díngídî.¹6 Similarly, words for chordophones resembling Aka/Baka èngbítí/língbidi occur in western Congolese Bantu languages, e.g., Bembe ki-nditi¹7. The irregular insertion and replacement of labial-velar stops is attested in Bantu

languages of Congo rainforest^{18,19}. Such vocabulary might point to exchange networks of musical instruments and associated *wanderwörter* not exclusive to CAHG communities.

Finally, Padilla-Iglesias, et al.¹ do not consider the potential role of sound symbolism. A term like Aka/Baka *kúbù* 'drum' could also easily be onomatopoeic in origin, see, e.g., *gbugbu(gbu)* '(sound of) drum' in several Bantu languages from nearby northwestern DRC.^{20,21} Reduplicated words like Aka *pole.pole* and Baka *polo.polo* for whistle, apart from possibly being derived from the common Bantu root *púd 'blow (with mouth)' (BLR 2672), may also be a mimesis of the instrument's sound and thus independent recent innovations. The same holds for Aka/Baka *ashaka* 'ankle rattles made with seeds and tied with a string'.

In sum, we consider the hypothesis that CAHG music lexicon predates the arrival of Bantu languages as largely unsupported, because a wider and expert-informed survey of the linguistic data clearly argues against a shared, unique CAHG lexicon. We do not consider CAHG substrate in modern languages to be inexistent, but lexicon might not be the best language component to identify it and CAHG languages should not be the only target. 6,8,22-24

We do not have the expertise needed to assess the biological, musicological and archaeological evidence underlying the broader claim of Padilla-Iglesias, et al.¹ that genetic and cultural exchanges between hunter-gatherer groups are ancient and have remained mostly unaffected after recent farming expansions. However, as the linguistic support for this claim does not hold up to closer scrutiny, specialists from other disciplines need to reexamine the remaining evidence to re-evaluate the claim of a shared history of cultural evolution of CAHG communities.

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