

Re-Sounding the historical Congolese xylophone collection and cultural heritage through artistic research practices

Dr. Adilia On-ying YIP

ReSoXy is funded by BELSPO BRAIN-be 2.0 (Belgian Science Policy Office) and Royal Conservatoire Antwerp (2023-26)

Cultural anthropology and history section, Africa Museum, Belgium





Manza xylophone
MO.0.0.14306. RMCA

ReSoXy is a pilot project for re-investigating and reviving the declined/declining *manza* xylophone collection and its intangible musical heritage that were erased and reshaped by colonisation.

Is *manza* still in use? How do musicians play them?
The restitution of intangible cultural heritage



Manza xylophone
MO.0.0.14306. RMCA

On top of my original artistic skills as a percussionist...

Artistic experimentation (contributes to) → decolonization, cultural heritage preservation, restitution

Electronic music skills, historical archives study (contributes to) → Artistic experimentation

Other research tasks:

- Ethnography
- Participatory action research – co-experimentation with source communities
- Laboratory assessment on embodiment and ergonomics of percussion keyboards

Manza xylophone in database

- Owned by chiefs and notables of Azande, used in court ceremonies and enthronement, symbol of authority
 - Chief Guga of Bondo territory
- Acquired along the Lower Uele River in north DR Congo
 - Armand Hutereau, expedition in Belgian Congo in 1911-13
- Disappearing/disappeared (Giogetti 1951, Michiels 1986, 2021, Linwood 1995)



Manza MO.0.0.14306 (left) and MO.0.0.14308 (right). Source: RMCA collection.



The sticks of *manza*.
Source: RMCA MO.0.0.14307.



Chief Guga,
RMCA photo AP.0.0.12029

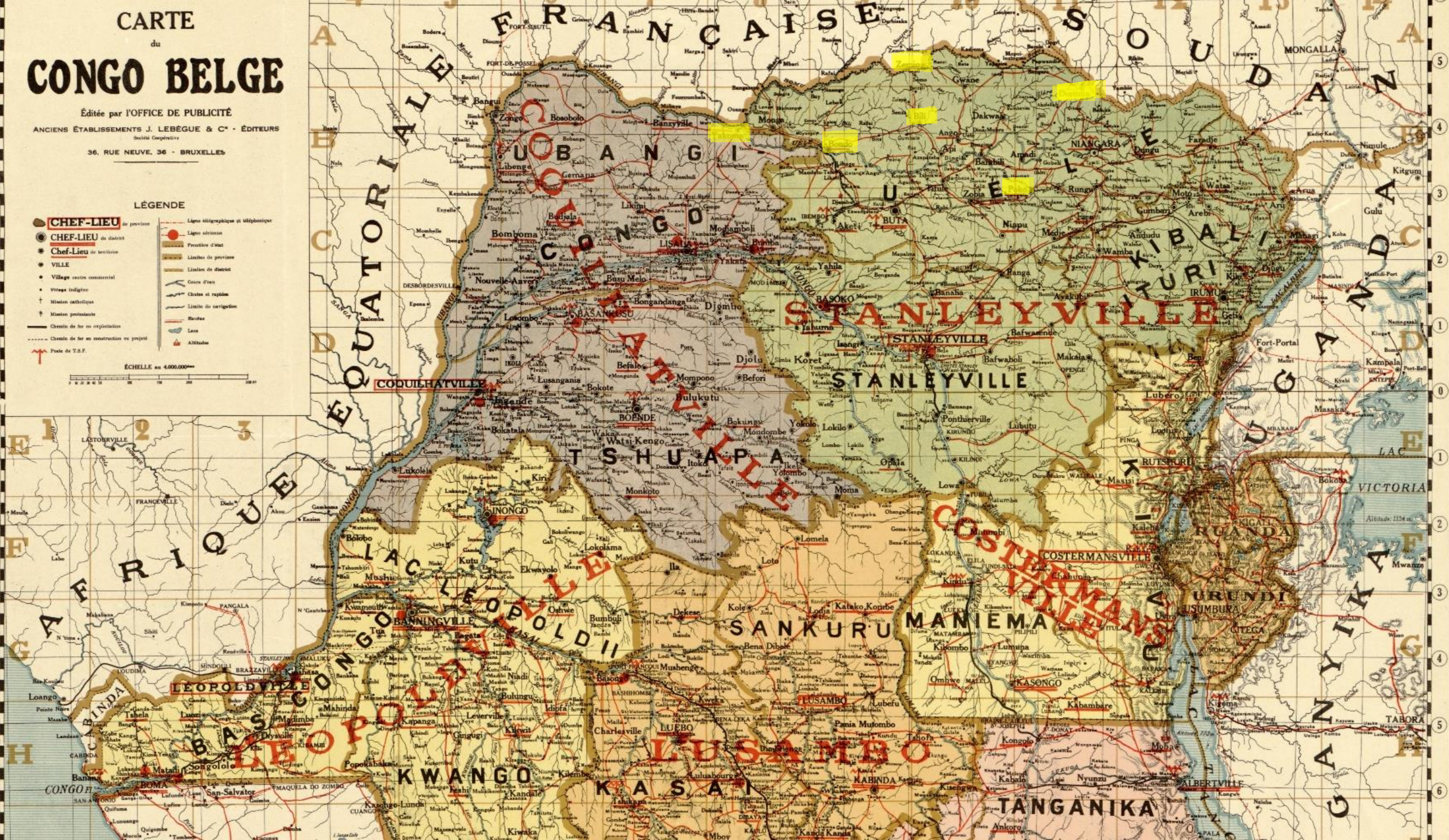
CARTE du CONGO BELGE

Éditée par l'OFFICE DE PUBLICITÉ
 ANCIENS ÉTABLISSEMENTS J. LEBÈGUE & C^e - ÉDITEURS
 Sociétés Coopératives
 36, RUE NEUVE, 36 - BRUXELLES

LÉGENDE

- CHEF-LIEU** de province
- CHEF-LIEU** de district
- Chef-Lieu** de territoire
- VILLE**
- Village centre commercial
- Village indigène
- Mission catholique
- Mission protestante
- Chemin de fer en exploitation
- Chemin de fer en construction ou projeté
- Poste de T.S.F.
- Ligne télégraphique et téléphonique
- Ligne aérienne
- Frontière d'état
- Limites de province
- Limites de district
- Cours d'eau
- Chutes et rapides
- Lignes de navigation
- Rivières
- Lacs
- Altitude

ÉCHELLE au 4.000.000^e

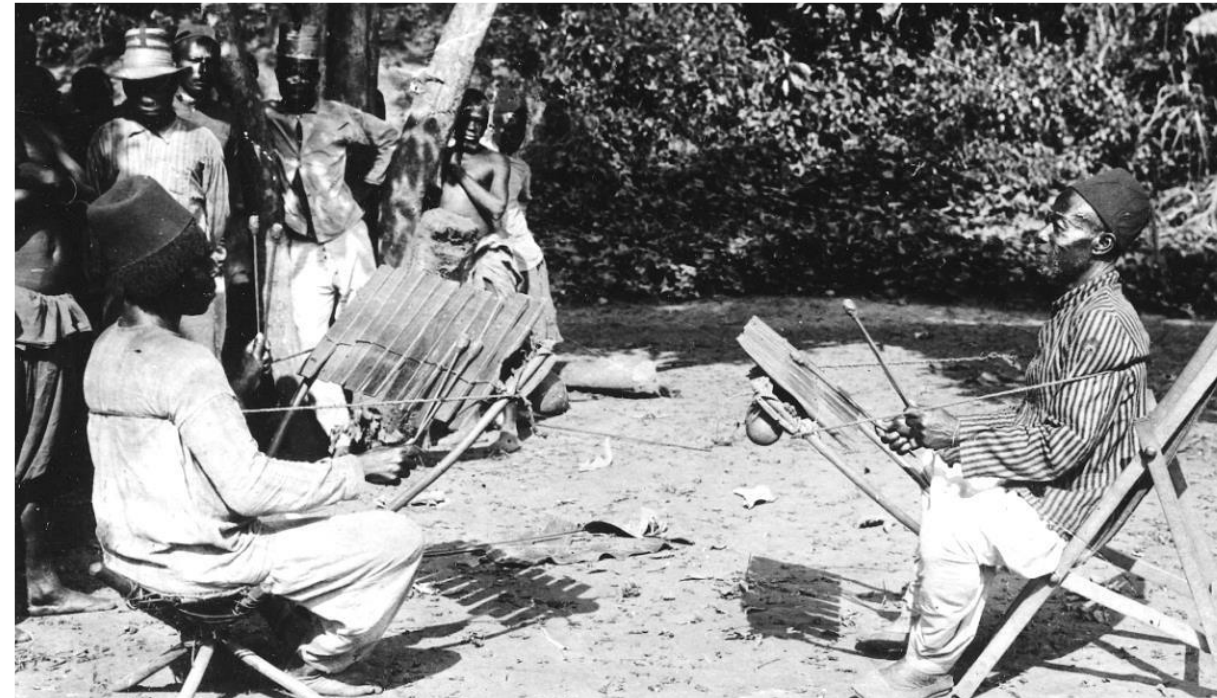


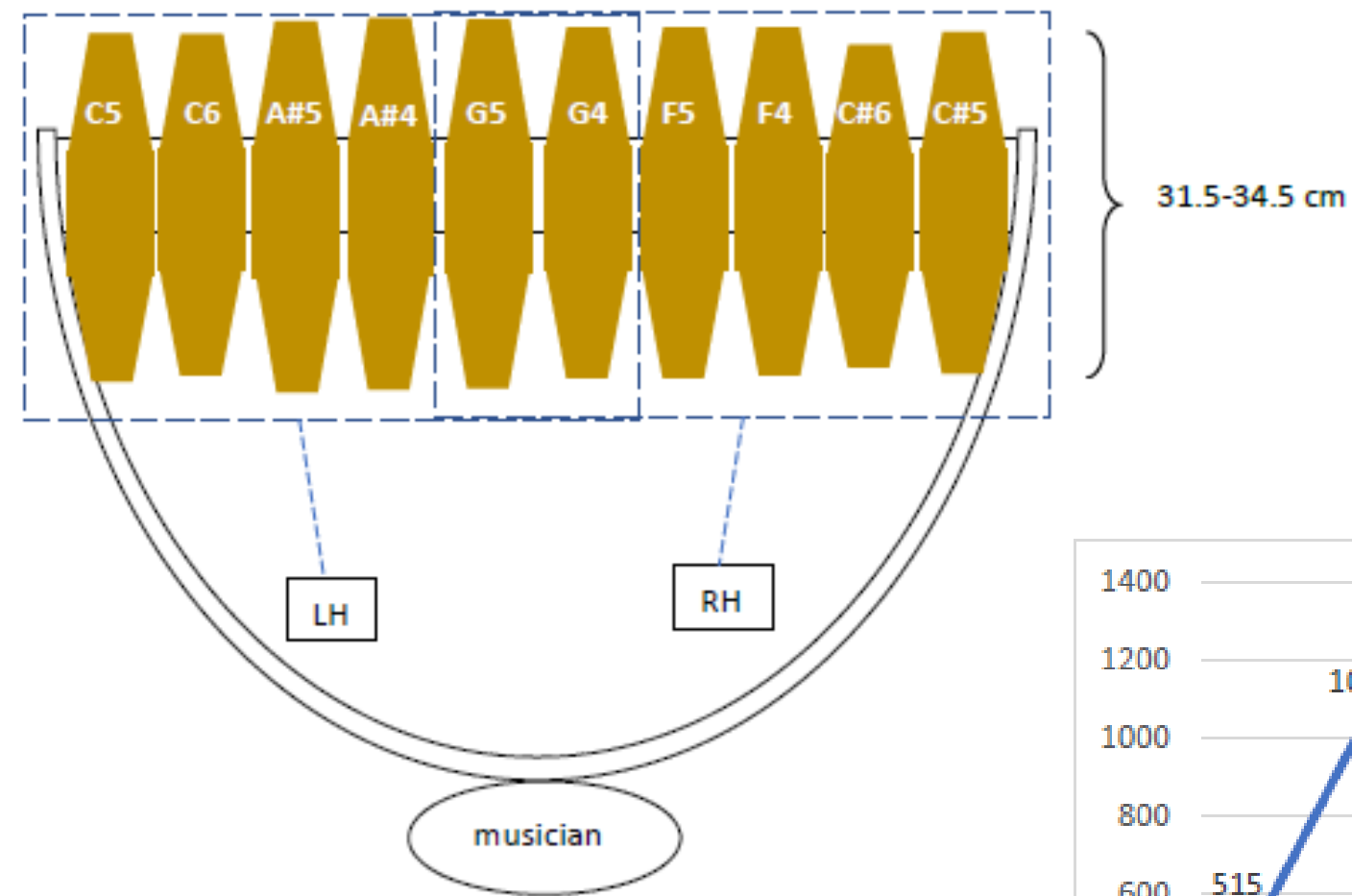
Some music practices learned from the museum archives, Olga Boone's anthology (1936), and literature

- Four mallets to strike the octave notes on the adjacent keys (Anderson 2001, Arom 1991, Linwood 1995)
- Body position: mostly seated, the arc positioned under/between the legs or at the waist, the strap circles across the arms
- Ensemble combinations: solo *manza* with voices, or/and *gaza* drum (skin drum) (DEKKMMA sound archive)
- Only one *manza* is heard in the DEKKMA recordings (Hutereau 1912)
- Rarely played in a group of more than three musicians, seldom used for accompanying dance due to the low intensity of sound (Boone 1936)

- Diverse *manza* xylophone practices in the region
- Ethnographic data is scattered, incomplete and ambiguous
- Could be staged by the ethnographer (Vanhee 2010, 2020)
- Problematic scientific practices in the past (Boone 1936)

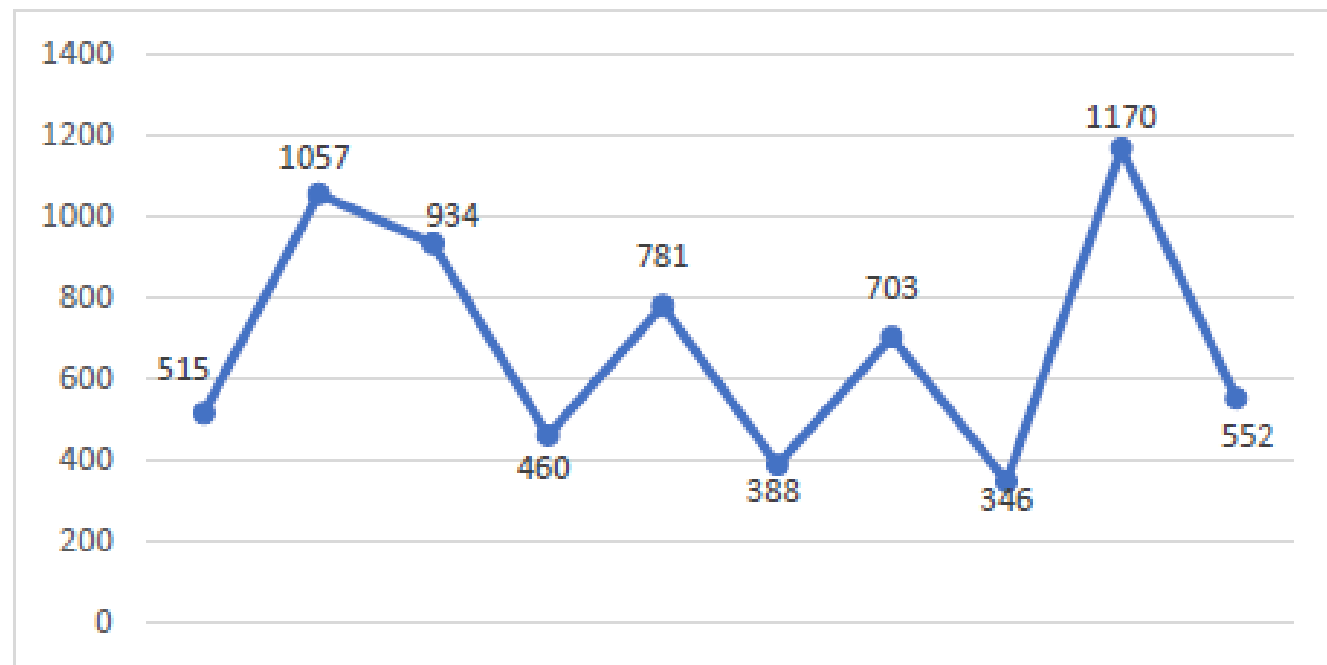
Chief Senza at Bili, taken by Hutereau (1911-13)
RMCA archive EP.0.0.14694





The ten tones of *manza* xylophone MO.0.0.14308 (Sonic Visualizer).

Sound
SAMPLING



Pitch frequencies: 515 1057 934 460 781 388 703 346 1170 (552) 552
 Relative pitch names: C5 C6 A#5 A#4 G5 G4 F5 F4 C#6 C#5

Goals of using the replica xylophone

- To carry out experimentation, analysis, and re-investigation of the music practice, embodiment and ergonomics of the declining/declined music instrument collection
- Participatory action research – co-creation and co-experimentation with the source communities in DR Congo, as well as the diaspora communities
- Interactive approach for knowledge dissemination





Prototype (Yip 2021)



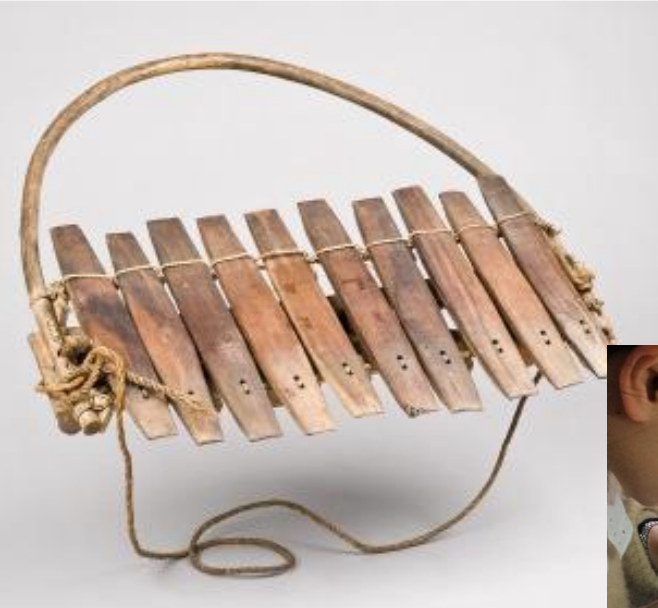
Xylosynth - Wiernick Instruments



Manza xylophones made by Jamie Linwood

Design of the DIY electronic replica

Record the tones of the **original xylophones** to create sound samples



Striking the replica keys triggers the sound samples



Through synthesizer & music software (DAW)



We hear the **original sounds** from the speakers

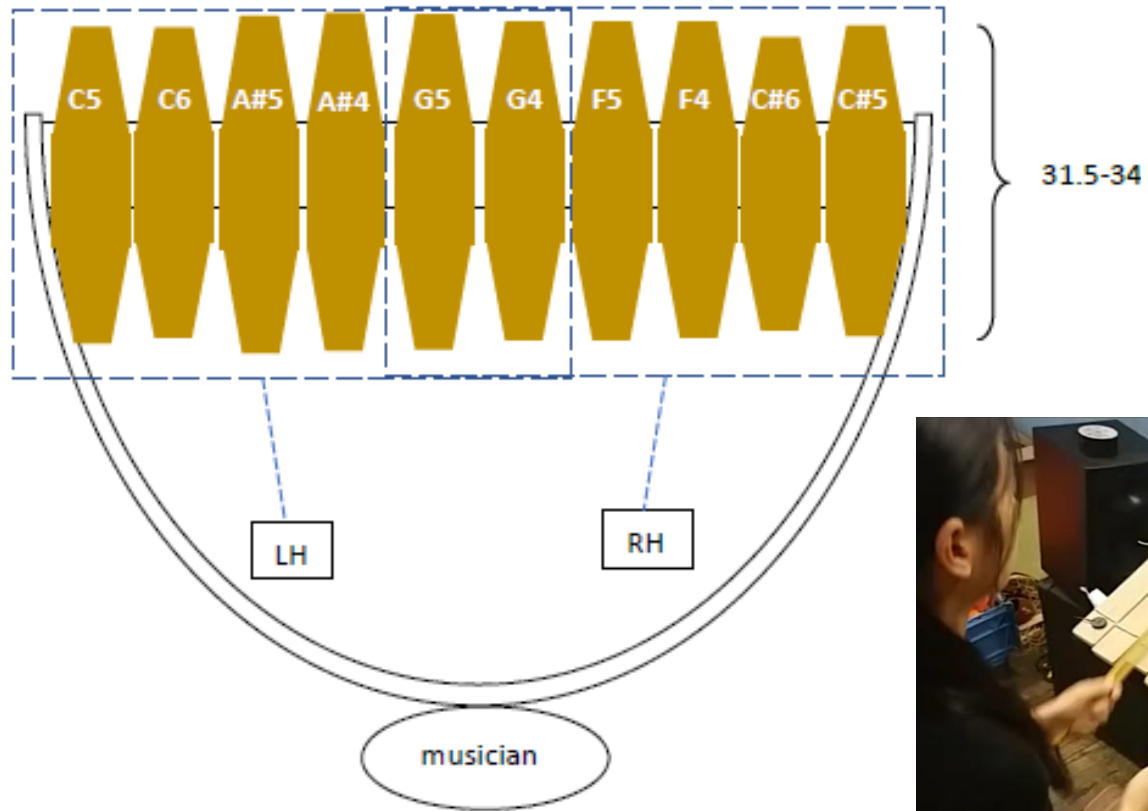




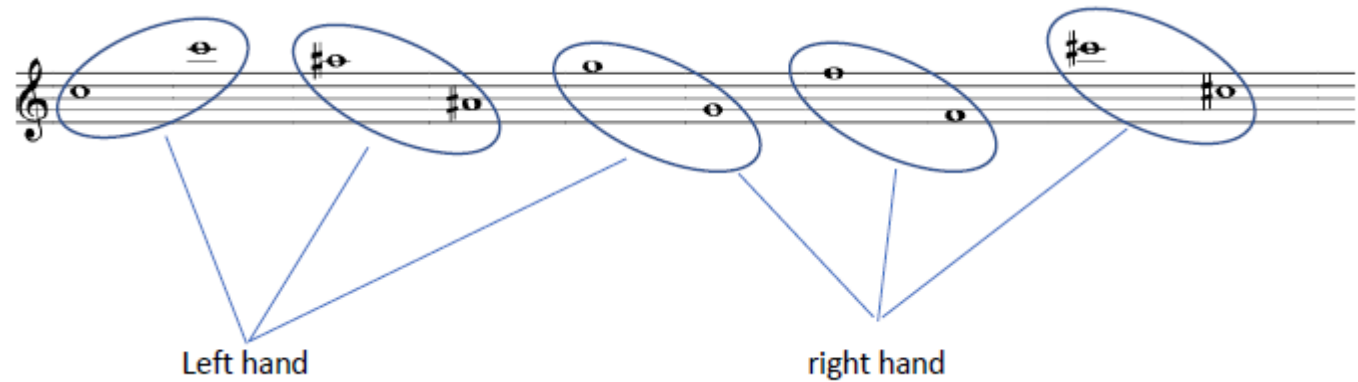
The sticks of *manza*.
Source: RMCA MO.0.0.14307.



Mapping recording MR.1959.5.160 and instrument MO.0.0.14308 through using the electronic replica



Spatial plane of *manza* MO.0.0.14308



Imitation of sound clip MR.1959.5.160
<https://youtu.be/srGjHV0fn-s>

Wax cylinder recording from Hutereau (1912)
DEKMMMA archive MR.1959.5.160



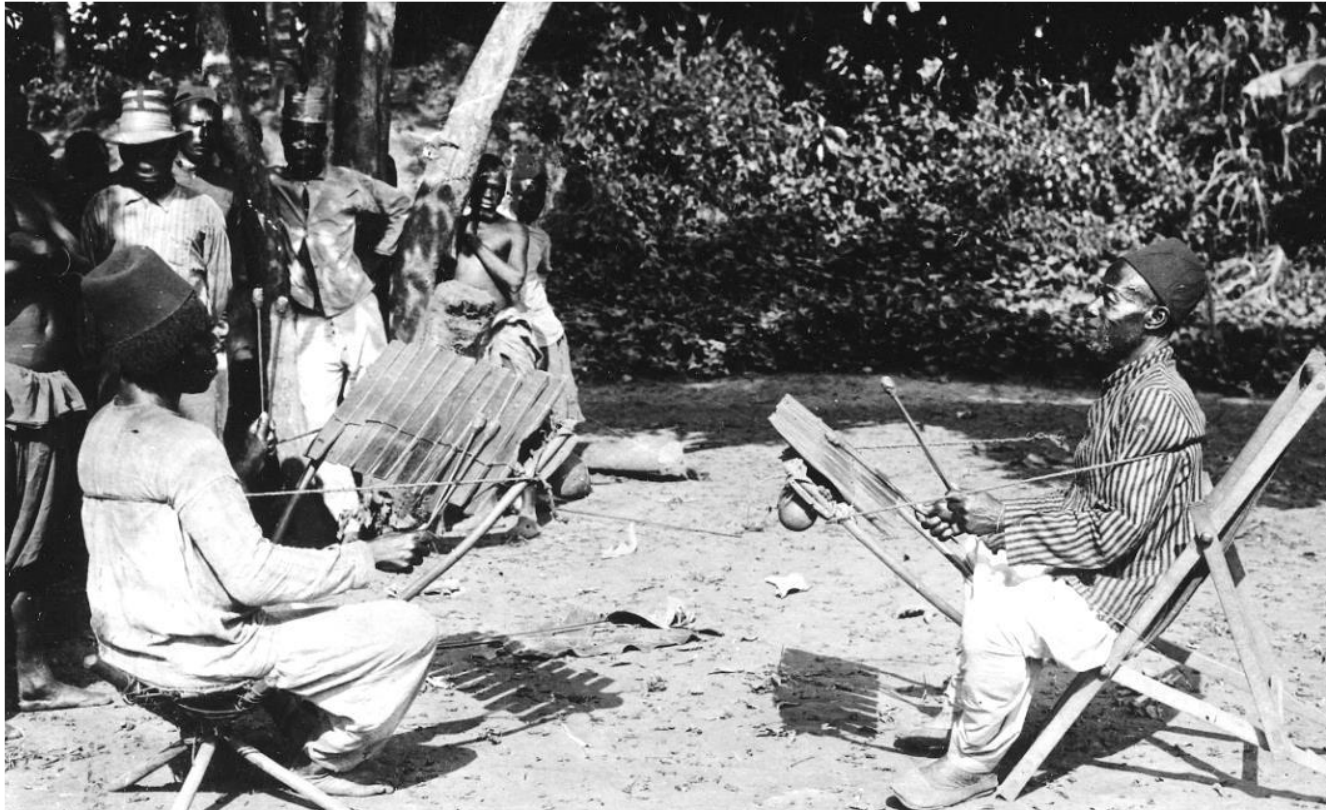
Some insights on ergonomics and embodiment

- Arc and strap → portable for dance or seated, uneasy for hand crossing, central body position
- Inclined and upright → flat mallets, wrists and arms in natural position
- Thin and light mallets → unlikely for bass xylophones
- Tight mallet grip → no need to change interval



Sticks of *manza*.

Source: RMCA MO.0.0.14307.



Manzas and musicians in Limba (Frank Michiels 1986)

Source: RMCA archive MP.0.0.5953

Chief Senza at Bili, taken by Hutereau (1911-13) RMCA archive EP.0.0.14694

References

- Arom, S. (1991). *African polyphony and polyrhythm: Musical structure and methodology*. Trans. by Thom, M., B. Tuckett & R. Boyd. Cambridge: Cambridge University Press.
- Dehoux, V. (1994). 'Les Modele Polyphoniques dans les Musiques pour Xylophone de Centrafrique,' *Polyphonies de Tradition Orale: Histoire et Traditions Vivantes*. Ed. by C. Meyer. Paris: Créaphis, 149-158.
- DEKKMMA - Digitization of the Ethnomusicological Sound Archive of the Royal Museum for Central Africa
- Royal Museum for Central Africa archives, TMS (The Museum System)
- Evans-Pritchard, E. E. 1963. 'A Further Contribution to the Study of Zande Culture'. *Africa: Journal of the International African Institute* 33 (3): 183–197. <https://doi.org/10.2307/1157414>
- Le Bomin, S. (2001). 'Raison Morphologique et Langage Musical: musiques de xylophone en Afrique centrale,' *Cahiers De Musiques Traditionnelles*, 14: 203-219. doi:10.2307/40240409.
- Linwood, J. M. 1995. *The Manufacture of Tuned Percussion Instruments in Indonesia and Africa—A selective study*. PhD dissertation. London Guild Hall University.
- Marandola, F. (1994). *Un Répertoire Instrumental et sa Musique: le kponingbo des Zandé de Centrefarique*. Unpublished pre-doctoral thesis, Université de Paris-Sorbonne (Paris IV).
- Yip, A. O. (2018). *Inventing New Marimba Performance from the African Balafon Music Practice*. PhD dissertation, University of Antwerp