## YORÙBÁ IN UNICODE: AN OVERVIEW OF A PROBLEM

Kólá Túbòsún Yorùbá Names Project www.YorubaName.com Lagos, Nigeria project@yorubaname.com

## 1 EXTENDED ABSTRACT

There is a recurring problem in the writing of Yorùbá on the internet (or on the computer) that has proven intractable over the years. This problem applies to Igbo and other African languages that depend on diacritics for disambiguation, and it has to do with not just the application of diacritics themselves but the way words are eventually rendered on the screen after said diacritics have been applied or, in most cases, after such writings have been transferred to another platform different from the one where the original writing was done, e.g. from Microsoft Word to PDF, etc.

The work of Unicode has been fingered as having something to do with this problem—a belief that has now been borne out by some fact and public confirmation—but it also appears that the issue is more nuanced than just *Unicode equals bad*. This paper attempts to discuss the with personal and public examples, on books and on the internet, to argue for a more holistic response to the intractable problem.

The paper discusses Yorùbá tonal ambiguities, covering the history of Yorùbá orthography from Àjàyí Crowther through the work of Ayò Bámgbósé to modern times. It covers the technology paradox through which solutions designed to help provide inclusion have come to create more problems. It then examines the role of Unicode from its inception to date, and how it currently affects underserved languages like Yorùbá. The paper shows examples of books and web pages where these technology problems have caused misunderstandings and unintended consequences for intelligibility.

It examines Unicode's explanations of its role in these problems, and weighs them against its work on emojis and other languages. It then mentions current solutions and interventions by others in the field, and concludes with suggestions of the way forward for languages like Yorùbá which depend on diacritics and good working of tonemarking software to facilitate intelligibility.

## References

Adekanmbi, A. (1989). Tones of Yoruba Language. *Journal of the Washington Academy of Sciences*, 79(1), 29-34. Retrieved May 27, 2020, from www.jstor.org/stable/24537005

Ajayi, J.F. Ade (1960). "How Yoruba was Reduced to Writing". *Odu: A Journal of Yoruba, Edo and Related Studies* (8): 49–58.

Bamgbose, Ayo. (1965). *Yoruba orthography: a linguistic appraisal with suggestions for reform*. Ibadan Univ. Press. iv+33pp.

Brandon, George Edward. "From Oral to Digital: Rethinking the Transmission of Tradition in Yorùbá Religion." In *Orisha Devotion as World Religion*, edited by Jacob K. Olupona and Terry Rey , 448-469. Madison: University of Wisconsin Press, 2008.

Crowther, Samuel Ajayi. (1843). A Vocabulary of the Yoruba Language: Part I English and Yoruba; Part II Yoruba and English: to which Are Prefixed Grammatical Elements of the Yoruba Language. London: Church Missionary Society. Esch, Daan van & Sarbar, Elnaz & Lucassen, Tamar & O'Brien, Jeremy & Breiner, Theresa & Prasad, Manasa & Crew, Evan & Nguyen, Chieu & Beaufays, Françoise (2019) Writing Across the World's Languages: Deep Internationalization for Gboard, the Google Keyboard

Linguapax Review (2018) Languages, Worlds and Action Llengües, mons i acció

McCulloch, G. (2019). Because Internet: Understanding the New Rules of Language. Penguin

Orife, Iroro & Adelani, David & Fasubaa, Timi & Williamson, Victor & Oyewusi, Wuraola & Wahab, Olamilekan & Tubosun, Kola. (2020). "Improving Yorùbá Diacritic Restoration."

Osborn D. Anderson D & Kodama (2008) Support for modern African languages and scripts in Unicode/iso 10646: Where are we today? Paper presented at the 32nd Internationalization and Unicode Conference, San Jose, California (10 September)

Oyeniyi, Bukola. "Oral Tradition" in *Encyclopedia of the Yorùbá*, edited by Toyin Falola and Akintunde Akinyemi, 255-256. Indiana University Press, 2016

Túbộsún, K. (2022) "An overview of the British Library Yorùbá language collection" in Africa Bibliography, Research and Documentation, Volume 1, November 2022, pp. 47 - 62 DOI: https://doi.org/10.1017/abd.2022.3

 Túbộsún, K. (2018) "The Web Alternative, Dimensions of Literacy, and Newer Prospects for African Languages in Today's World." in Languages, Worlds and Action. Linguapax International.

 https://www.linguapax.org/wp-content/uploads/2020/02/Linguapax Review 2018 revisio%CC%81MC-complet-1.pdf

Zhiming, B. (2003). Moira Yip (2002). Tone. (Cambridge Textbooks in Linguistics.) Cambridge: Cambridge University Press. Pp. xxxiv 341. *Phonology*, 20(2), 275-279. doi:10.1017/S0952675703004536