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## **Documenting Luyia Together: A Study of Tiriki Tone**

Matthew DeHass and Michael R. Marlo

The research I am presenting is on the tone system of Tiriki, a language variety of Luhya that is spoken in Western Kenya. I have done this research as part of the ASH Project: *Documenting Luhya Together*, and with continued guidance and help from Associate Professor, Michael Marlo. The first and largest part of this research has included the segmentation and transcription of Tiriki sound files, and the tonal transcriptions of Tiriki word lists. The data cleaning and transcription process has been facilitated greatly by the use of the software Audacity. Most data collection was completed previously by Michael Marlo and Tiriki-speaking associates including Kelvin Alulu, though this is still an ongoing process. Tone patterns of Tiriki nouns were compared with those of other languages, as well as tone shifts when in various phono-syntactic environments, including before adjectives and possessives. Nouns were assigned tone labels in order to group them together based on their tonal patterns in more than one context. The analysis of tone was aided by using Python to process and visualize tone data. I have been writing various scripts using Python and relevant libraries such as Numpy, Pandas and Plotly in order to great graphs showing the frequency of different tone patterns. Additionally, I have created algorithms in order to convert columns of tonally-transcribed excel data into tonal codes such as HHL (for high-high-low toned words) and converted into a data format compatible with data visualization. In the near-term future, I plan to formally compare the results of this Tiriki noun tone study with the results of noun tone studies of other Luhya varieties such as Logoori and Bukusu. In my presentation, both the methods and results of this Tiriki noun tone study will be showcased in-depth. Relevant Python code and any other related work will be included as links for further inquiry by viewers.