**Observations from James MacDonell on latest version of NgUnified keyboard -** *naijatype-16* (once built as an Android keyboard app) - 08/05/2021

**Keyboard appearance:**

* Centred spacebar is better now, with comma and full stop either side.
* Emoji option nice but some of the key icons are only monochrome.
* With the lexical model installed, the problem of top row keys having their long-press options appearing over the same row is solved. However, for other languages without a lexical model the problem will remain but I think we can live with it.

**Keyboard function – changing of case:**

* Change-to-caps after full stop (and Enter key) is working fine. Is it possible for keyboard to start with caps on when keyboard is launched?
* Automatic caps release does **not** work **following**:
  + uppercase (underlined) “**E̱**”
  + **some** consonant final options (e.g. 1st D option “Ɗ” releases caps but 2nd option does not)
    - Y option is OK

**Keyboard function – keys:**

* N options better now but still not consistent between cases
  + lowercase: right leg tail; left leg tail; dot below; line above; tilde above; line below.
  + uppercase: right leg tail; left leg tail; tilde above; dot below.

**Predictive text:**

*Positives:*

* When a suggested word is chosen a space is added. If I type a full stop or comma then that space is automatically deleted. (Nice!)
* Your idea of allowing “a” to bring suggestions also including “a̱” is good.
  + Advantage: it speeds typing as if I type common words but missing the underlined vowels it will suggest the correct spelling.
  + Disadvantage: leads to laziness in correct typing and also limits the choice of words presented if only “a” is intended.

*Negatives:*

* At the beginning of new sentence (with Caps on), if I choose a selected word that is shown in lowercase it will then be typed in lowercase.
* For now it doesn’t recognise words with glottals because apostrophe is a punctuation symbol but in the texts we use a different symbol (Unicode A78C).
* For some words that are in the text data (perhaps not very frequent?) they do not appear as suggestions (only in quotation marks once fully typed) but often they do appear subsequently.
* Words not in the text data always have to be typed fully. The system doesn’t “learn” these new words, but if it did I guess there is the danger it would learn misspellings…

*General question:*

* Question: When I type Pangu in some apps, many words are underlined in red. I have the option to “Add to Dictionary” but I think all this is from Android/Google using my phone’s English dictionary and has nothing to do with the Pangu lexical model in the keyboard? The red spelling underlines make it really hard to read the Pangu text correctly.
  + Just answered my own question. If I go to my phone settings and disable Spell checker then the red lines disappear. However, the spell-checker doesn’t appear to be tied to any particular keyboard (though Gboard does have some settings options but your keyboard does not). So not sure if there is any solution to switch spellchecking on/off with different keyboards or link keyboards with different dictionaries (since Pangu is not a language that can be added in Android!).