Proposal to encode the Nsịbịdị script in Unicode

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April 30, 2023

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To: UTC
From: Eze Ojukwu, Uche Mmụọnagọ, Ijemma Onwuzulike , Oreen Yousuf
Subject: Proposal to encode the Nsịbịdị script in Unicode
Creation Date: 07-24-2022
Last Updated: 04-30-2023

1. Introduction

This is a proposal to encode the Nsịbịdị writing script in Universal Character Set. Nsịbịdị is a proto-writing system primarily used in Southeastern Nigeria for the Igbo language. This proposal provides a background for the writing script, implementation details, and a character repertoire.

There are no past Nsịbịdị proposals that this proposal can build upon.

2. Background

2.1 Overview
Nsịbịdị, often referred to as Nsịbịrị, is a pictographic and ideographic writing script originating from the southeastern region of the Niger-Congo area within West Africa. Today, this region is modern-day Nigeria. The languages that informed the creation of Nsịbịdị are Ekoid, Efik, Ibibio, and Igbo (ISO 639-3: ibo), which are all Igboid languages that are collectively spoken by more than 50 million people around the world.

Nsịbịdị is comprised of two sets of characters. Nsịbịdị has a phonetic set called Akagu and a radical/combination set referred to as Nsịbịdị similar to Japanese with Hiragana as a phonetic set and Kanji as a radical/combination set.

2.2 Precolonial Use
The origins of Nsịbịdị can be traced back to as early as 2500 BCE, well before British colonization of Nigeria. There's evidence to prove that languages beyond Igbo have history using Nsịbịdị as a form of communication within society.

2.3 Modernization

Widespread standardized use of Nsịbịdị hasn't been established within the past two decades mainly due to western colonization and the Nigerian government's deprioritization of general native language education. This has led to Nsịbịdị being discussed and used primarily from a research perspective rather than a practical academic, embedded cultural, or even artistic perspective.

Despite the lack of standardization of the script, many individuals and community groups have contributed to improving and modernizing Nsịbịdị in efforts to best represent the current dynamic and diverse nature of Niger-Congo originating or related languages. These languages include: Ejagham, Igbo, Efik, Ibibio directly through the Ekpe society and Louisiana and Haitian Creole as well with Nsibidi use in New World Afro-religious practices such as the Abakua manuscripts, a secret society in Cuba or its influence on Haitian Veve and African American Hoodoo (Wahlman, 1986)

Many West African and Diasporan languages are of a homonymic nature and would benefit from the system as well as its spiritual and social implications for the preservation of culture through writing which would benefit the long-term education for all those that use the script. (Wahlman, 1986)

One notable contributor is Chiadịkobi Nwaụbanị, who is a digital illustrator and Nsịbịdị script expert. He has redesigned more than 2,000 Nsịbịdị symbols within the Nsịbịdị character set (Nwaụbanị). His work will be referenced regularly throughout this proposal.

3. Script

The proposed Unicode script will be assigned the name "Nsịbịdị". The proposed repertoire contains 66 alphabet letters, 5 diacritics, 80 radicals, and 2526 graphemes.

We are proposing to create a new Unicode block similar to CJK that will enable future character additions to be made to the script.

3.1 Structure

Nsịbịdị is written from left-to-right. It includes two characters sets: a phonetic and a radical/ combination set. The phonetic set is called Akagu which includes vowels and consonants written as full letters. Igbo is a tonal language. Therefore, Nsịbịdị, includes five diacritic marks to apply to vowels, diagraphs (a combination of two letters representing one sound, such as 'gb' of 'kp'), and nasal sounds.

3.2 Proposed Alphabetical Characters

Glyph	Proposed Unicode Character Name
४	NSỊBỊDỊ SMALL LETTER A
४	NSỊBỊDỊ CAPITAL LETTER A
ℓ	NSỊBỊDỊ SMALL LETTER I
ℓ	NSỊBỊDỊ CAPITAL LETTER I
ℋ	NSỊBỊDỊ SMALL LETTER U
ℋ	NSỊBỊDỊ CAPITAL LETTER U
ℓ	NSỊBỊDỊ SMALL LETTER E
⌐	NSỊBỊDỊ CAPITAL LETTER E
⊘	NSỊBỊDỊ SMALL LETTER O
⊘	NSỊBỊDỊ CAPITAL LETTER O
⅟	NSỊBỊDỊ SMALL LETTER P
۹	NSỊBỊDỊ CAPITAL LETTER P
ℛ	NSỊBỊDỊ CAPITAL LETTER KP
ろ	NSỊBỊDỊ SMALL LETTER B
฿	NSỊBỊDỊ CAPITAL LETTER B
⊚	NSỊBỊDỊ SMALL LETTER G
⊚	NSỊBỊDỊ CAPITAL LETTER G
∩	NSỊBỊDỊ CAPITAL LETTER GB
ℐ	NSỊBỊDỊ CAPITAL LETTER GH'
⊃	NSỊBỊDỊ CAPITAL LETTER GW
ℤe	NSỊBỊDỊ SMALL LETTER D
ℤ	NSỊBỊDỊ CAPITAL LETTER D
2	NSỊBỊDỊ SMALL LETTER R
2	NSỊBỊDỊ CAPITAL LETTER R
⊬	NSỊBỊDỊ SMALL LETTER T
⊬	NSỊBỊDỊ CAPITAL LETTER T
ℋ	NSỊBỊDỊ SMALL LETTER K

Glyph	Proposed Unicode Character Name
ℛ	NSỊBỊDỊ CAPITAL LETTER K
𝓵	NSỊBỊDỊ CAPITAL LETTER KW
ப	NSỊBỊDỊ SMALL LETTER F
٦	NSỊBỊDỊ CAPITAL LETTER F
∂	NSỊBỊDỊ SMALL LETTER H
♪	NSỊBỊDỊ CAPITAL LETTER H
⋉	NSỊBỊDỊ SMALL LETTER W
⋉	NSỊBỊDỊ CAPITAL LETTER W
ച	NSỊBỊDỊ CAPITAL LETTER NW
⊖	NSỊBỊDỊ SMALL LETTER Y
⊖	NSỊBỊDỊ CAPITAL LETTER Y
ℊ	NSỊBỊDỊ SMALL LETTER M
ℊ	NSỊBỊDỊ CAPITAL LETTER M
ℰ	NSỊBỊDỊ CAPITAL LETTER MM
⑨	NSỊBỊDỊ SMALL LETTER N
⑨	NSỊBỊDỊ CAPITAL LETTER N
𝒳	NSỊBỊDỊ CAPITAL LETTER NY
⋂	NSỊBỊDỊ CAPITAL LETTER NN
𝓝	NSỊBỊDỊ SMALL LETTER L
𝓛	NSỊBỊDỊ CAPITAL LETTER L
ȯ	NSỊBỊDỊ SMALL LETTER V
ȯ	NSỊBỊDỊ CAPITAL LETTER V
∩ₑ	NSỊBỊDỊ SMALL LETTER J
∩	NSỊBỊDỊ CAPITAL LETTER J
۶	NSỊBỊDỊ CAPITAL LETTER SH
ℸ	NSỊBỊDỊ CAPITAL LETTER CH
ℒ	NSỊBỊDỊ SMALL LETTER Z

Glyph	Proposed Unicode Character Name
김	NSỊBỊDỊ CAPITAL LETTER Z
⅄	NSỊBỊDỊ SMALL LETTER S
⅄	NSỊBỊDỊ CAPITAL LETTER S
丝	NSỊBỊDỊ SMALL LETTER N WITH TILDE
᠍᠍	NSỊBỊDỊ CAPITAL LETTER HNW
仁	NSỊBỊDỊ CAPITAL LETTER X

3.3 Proposed Radicals

Glyph	Proposed Unicode Character Name
|	NSỊBỊDỊ RADICAL – VERTICAL LINE
○	NSỊBỊDỊ RADICAL – CIRCLE
∩	NSỊBỊDỊ RADICAL – ROD
⌟	NSỊBỊDỊ RADICAL – HOOK
˟	NSỊBỊDỊ RADICAL – INFLUENTIAL PERSON
-	NSỊBỊDỊ RADICAL – DASH
⹀	NSỊBỊDỊ RADICAL – TWO
✕	NSỊBỊDỊ RADICAL – PREDATOR
Ⅻ	NSỊBỊDỊ RADICAL – JOIN/UNITY
Ⅻ	NSỊBỊDỊ RADICAL – STEER/GOVERN
( )	NSỊBỊDỊ RADICAL – SHELL/EXTERIOR
⟨⟩	NSỊBỊDỊ RADICAL – MOUTH
⊞⊞	NSỊBỊDỊ RADICAL – ROAD
✛	NSỊBỊDỊ RADICAL – FOUR
✝	NSỊBỊDỊ RADICAL – SWORD
≢	NSỊBỊDỊ RADICAL – ZERO
�	NSỊBỊDỊ RADICAL – LEG
人	NSỊBỊDỊ RADICAL – RAZOR
�	NSỊBỊDỊ RADICAL – HAIR
⋂	NSỊBỊDỊ RADICAL – AGAIN
⋃	NSỊBỊDỊ RADICAL – SNAKE
⊣	NSỊBỊDỊ RADICAL – GUN
⊙	NSỊBỊDỊ RADICAL – YAM
⒁	NSỊBỊDỊ RADICAL – RACE

Glyph	Proposed Unicode Character Name
三	NSỊBỊDỊ RADICAL – PALM
工	NSỊBỊDỊ RADICAL – HUMAN
大	NSỊBỊDỊ RADICAL – PLACE
ꓛ	NSỊBỊDỊ RADICAL – FEMALE/WOMAN
C	NSỊBỊDỊ RADICAL – MALE/MAN
∩	NSỊBỊDỊ RADICAL – UNDER/BELOW
⌐	NSỊBỊDỊ RADICAL – PIPE/STAFF
⥮	NSỊBỊDỊ RADICAL – ARROW
工	NSỊBỊDỊ RADICAL – ELDER/ANCIENT
▤	NSỊBỊDỊ RADICAL – FISHING NET
※	NSỊBỊDỊ RADICAL – MOON
大	NSỊBỊDỊ RADICAL – MOVEMENT
◎	NSỊBỊDỊ RADICAL – DRUM
⊥	NSỊBỊDỊ RADICAL – ASSISTANCE
⁄	NSỊBỊDỊ RADICAL – LIQUID
⋮	NSỊBỊDỊ RADICAL – SMOKE
⋑	NSỊBỊDỊ RADICAL – WEALTH
⊖	NSỊBỊDỊ RADICAL – HEART
Ⅱ	NSỊBỊDỊ RADICAL – HOUSE/TEMPLE/ BUILDING
≫	NSỊBỊDỊ RADICAL – WATER
⩒	NSỊBỊDỊ RADICAL – LEAF
⋈	NSỊBỊDỊ RADICAL – HAND
(ıı)	NSỊBỊDỊ RADICAL – EYES
✧	NSỊBỊDỊ RADICAL – OJI/KOLA-NUT
⊲	NSỊBỊDỊ RADICAL – GUARD/WARRIOR
⅏	NSỊBỊDỊ RADICAL – TREE/WOOD

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Glyph	Proposed Unicode Character Name
ᵮ	NSỊBỊDỊ RADICAL – SUN/LIGHT
✳	NSỊBỊDỊ RADICAL – SEVEN/STAR
⊥	NSỊBỊDỊ RADICAL – LAND/EARTH
⊤	NSỊBỊDỊ RADICAL – SKY/ABOVE
⌐	NSỊBỊDỊ RADICAL – LIMB
⊔	NSỊBỊDỊ RADICAL – MOUND/HILL/MOUNTAIN
人	NSỊBỊDỊ RADICAL – THROW/MOVE
Ⅲ	NSỊBỊDỊ RADICAL – 4 LEGS/COMB
目	NSỊBỊDỊ RADICAL – POST
户	NSỊBỊDỊ RADICAL – FIRE
乂	NSỊBỊDỊ RADICAL – CONFLICT
廿	NSỊBỊDỊ RADICAL – CHILD
Ⅲ	NSỊBỊDỊ RADICAL – GROUP/THEM
╬	NSỊBỊDỊ RADICAL – TROUBLE/PROBLEM
田	NSỊBỊDỊ RADICAL – CHAIR/POSITION
ᵮ	NSỊBỊDỊ RADICAL – SMALLPOX
※	NSỊBỊDỊ RADICAL – FIREWOOD
舌	NSỊBỊDỊ RADICAL – LARGE/BIG
✦	NSỊBỊDỊ RADICAL – EARTH GOODESS
北	NSỊBỊDỊ RADICAL – SPEECH/WORDS
閂	NSỊBỊDỊ RADICAL – DOOR
苿	NSỊBỊDỊ RADICAL – TORTOISE
畐	NSỊBỊDỊ RADICAL – BED
Ⅰ	NSỊBỊDỊ RADICAL – BONE
Ⅲ	NSỊBỊDỊ RADICAL – BRIDGE
爻	NSỊBỊDỊ RADICAL – LOVE/AFFECTION

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Glyph	Proposed Unicode Character Name
※	NSỊBỊDỊ RADICAL – ROYAL BALL PYTHON
⊛	NSỊBỊDỊ RADICAL – COMMUNITY
𝍖	NSỊBỊDỊ RADICAL – JOURNEY

3.4 Proposed Diacritics

Glyph	Proposed Unicode Character Name
˙	NSỊBỊDỊ DIACRITIC – OVERDOT
ˌ	NSỊBỊDỊ DIACRITIC – UNDERDOT
´	NSỊBỊDỊ DIACRITIC – ACUTE ACCENT
`	NSỊBỊDỊ DIACRITIC – GRAVE ACCENT
=	NSỊBỊDỊ DIACRITIC – DOUBLING MARK

3.5 Proposed Nsịbịdị Graphemes

Link to Nsibidi Graphemes

4. Contact

Company: Nkọwa okwu
Representative: Ijemma Onwuzulike
Email: kedu@nkowaokwu.com

5. Acknowledgments

We would like to thank Chiadịkobi Nwaụbanị for conducting the researching and implementing the visual redesign of the Nsịbịdị script that is currently being used within a modern context.

6. References and Usage

Link to list of references and usages of Nsibidi

ISO/IEC JTC 1/SC 2/WG 2
PROPOSAL SUMMARY FORM TO ACCOMPANY SUBMISSIONS
FOR ADDITIONS TO THE REPERTOIRE OF ISO/IEC 10646[1]
Please fill all the sections A, B and C below.

Please read Principles and Procedures Document (P & P) from http://std.dkuug.dk/JTC1/SC2/WG2/docs/principles.html **for guidelines and details before filling this form.**
Please ensure you are using the latest Form from http://std.dkuug.dk/JTC1/SC2/WG2/docs/summaryform.html **.**
See also http://std.dkuug.dk/JTC1/SC2/WG2/docs/roadmaps.html **for latest _Roadmaps_.**

A. Administrative

1. **Title:** Proposal to encode the Nsịbịdị script in Unicode
2. Requester's name: Eze Ojukwu, Uche Mmuọnago, Ijemma Onwuzulike, Oreen Yousuf
3. Requester type (Member body/Liaison/Individual contribution): Member body
4. Submission date: April 15, 2023
5. Requester's reference (if applicable): Ijemma Onwuzulike
6. Choose one of the following:
   - This is a complete proposal: Yes
   - (or) More information will be provided later:

B. Technical – General

1. Choose one of the following:
   - a. This proposal is for a new script (set of characters): Yes
     - Proposed name of script: Nsibidi
   - b. The proposal is for addition of character(s) to an existing block: No
     - Name of the existing block:
2. Number of characters in proposal: 2677
3. Proposed category (select one from below - see section 2.2 of P&P document):
   - A-Contemporary   B.1-Specialized (small collection)   B.2-Specialized (large collection) Yes
   - C-Major extinct   D-Attested extinct   E-Minor extinct
   - F-Archaic Hieroglyphic or Ideographic   G-Obscure or questionable usage symbols
4. Is a repertoire including character names provided? No
   - a. If YES, are the names in accordance with the "character naming guidelines" in Annex L of P&P document?
   - b. Are the character shapes attached in a legible form suitable for review? Yes
5. Fonts related:
   - a. Who will provide the appropriate computerized font to the Project Editor of 10646 for publishing the standard?
     Ijemma Onwuzulike, Nkọwa okwu
   - b. Identify the party granting a license for use of the font by the editors (include address, e-mail, ftp-site, etc.):
     Nkọwa okwu, kedu@nkowaokwu.com
6. References:
   - a. Are references (to other character sets, dictionaries, descriptive texts etc.) provided? Yes
   - b. Are published examples of use (such as samples from newspapers, magazines, or other sources) of proposed characters attached? Yes
7. Special encoding issues:
   - Does the proposal address other aspects of character data processing (if applicable) such as input, presentation, sorting, searching, indexing, transliteration etc. (if yes please enclose information)? Yes

8. Additional Information:

Submitters are invited to provide any additional information about Properties of the proposed Character(s) or Script that will assist in correct understanding of and correct linguistic processing of the proposed character(s) or script. Examples of such properties are: Casing information, Numeric information, Currency information, Display behaviour information such as line breaks, widths etc., Combining behaviour, Spacing behaviour, Directional behaviour, Default Collation behaviour, relevance in Mark Up contexts, Compatibility equivalence and other Unicode normalization related information. See the Unicode standard at http://www.unicode.org for such information on other scripts. Also see Unicode Character Database (http://www.unicode.org/reports/tr44/) and associated Unicode Technical Reports for information needed for consideration by the Unicode Technical Committee for inclusion in the Unicode Standard.

C. Technical - Justification

1. Has this proposal for addition of character(s) been submitted before? **No**
    If YES explain ....

2. Has contact been made to members of the user community (for example: National Body,
    user groups of the script or characters, other experts, etc.)? **Yes**
        If YES, with whom? **Nkọwa okwu**
        If YES, available relevant documents: **https://www.notion.so/Meeting-Notes-8b7f1b9d450a42e49fe69f2a2727a172?pvs=4**

3. Information on the user community for the proposed characters (for example:
    size, demographics, information technology use, or publishing use) is included? **Yes**
    Reference: **This document**

4. The context of use for the proposed characters (type of use; common or rare) **Yes**
    Reference: **This document**

5. Are the proposed characters in current use by the user community? **Yes**
    If YES, where? Reference: **This document**

6. After giving due considerations to the principles in the P&P document must the proposed characters be entirely
    in the BMP? **No**
        If YES, is a rationale provided? ....
        If YES, reference: ....

7. Should the proposed characters be kept together in a contiguous range (rather than being scattered)? **Yes**

8. Can any of the proposed characters be considered a presentation form of an existing
    character or character sequence? **No**
        If YES, is a rationale for its inclusion provided? ....
        If YES, reference: ....

9. Can any of the proposed characters be encoded using a composed character sequence of either
    existing characters or other proposed characters? **No**
        If YES, is a rationale for its inclusion provided? ....
        If YES, reference: ....

10. Can any of the proposed character(s) be considered to be similar (in appearance or function)
    to, or could be confused with, an existing character? **No**
        If YES, is a rationale for its inclusion provided? ....
        If YES, reference: ....

11. Does the proposal include use of combining characters and/or use of composite sequences? **No**
    If YES, is a rationale for such use provided? ....
        If YES, reference: ....
    Is a list of composite sequences and their corresponding glyph images (graphic symbols) provided?
        If YES, reference: ....

12. Does the proposal contain characters with any special properties such as
    control function or similar semantics? **No**
        If YES, describe in detail (include attachment if necessary)
    ....
    ....

13. Does the proposal contain any Ideographic compatibility characters? **No**
    If YES, are the equivalent corresponding unified ideographic characters identified? ....
        If YES, reference: ....