

PROPOSAL TO ENCODE NEW OKINAWAN KANA (新沖縄文字) IN THE UCS

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☒	フレッド・ブレンナン	☒
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とどてでふふい
ぐええすずるづ
ふふふやゆはあ
あゑんいゑを
とどてでふふい
ぐええすずるづ
ふふふやゆはあ
あゑんいゑを

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in no particular order...

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For providing several rare sources.

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Yoshiaki Funatsu (船津 好明), Meisei University (明星 大学), originator of these characters

In order to avoid the appearance of impropriety, I didn't attempt to contact Dr. Funatsu before this submission.
However, I do find it proper to acknowledge his careful online archival of many of the sources concerning his script, especially mentions in Japanese media. Without that I couldn't have come up with the requisite evidence.

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0.1 Quick summary

I propose the encoding of 18 new hiragana letters, to be added to a new block, Kana Extended-C. There are no katakana versions of these letters. I only have evidence of the proposed letters in use to write the Central Okinawan language (沖縄口, うちなあぐち, [ʔut̚ɕina:ɡut̚ɕi]), although they may be used to write other languages in the Ryukyuan language family.

Through adding U+3099 COMBINING KATAKANA-HIRAGANA VOICED SOUND MARK, these characters represent all 27 of the letters known collectively in Japanese as the “New Okinawan Kana” (新沖縄文字). 23 of them have existed since 1986, with the remaining four having been created c. 2004. They are the creation of Dr. Yoshiaki Funatsu (船津好明; born 1936), a professor of statistics, applied mathematics and economics; he later in life became a linguist.

Despite their novelty, these letters have seen quite wide use throughout Okinawa. I had no contact with Mr. Funatsu while writing this paper.

I propose that the block Kana Extended-C be two columns wide, beginning at U+1AFD0 and extending until U+1AFEF, at which point it meets Kana Extended-B, which starts at U+1AFF0.





0.1.1 UnicodeData.txt

1AFD0;	HIRAGANA	LETTER	NEW	OKINAWAN	TU;Lo;0;L;;;;;N;;;;;
1AFD1;	HIRAGANA	LETTER	NEW	OKINAWAN	TI;Lo;0;L;;;;;N;;;;;
1AFD2;	HIRAGANA	LETTER	NEW	OKINAWAN	KWA;Lo;0;L;;;;;N;;;;;
1AFD3;	HIRAGANA	LETTER	NEW	OKINAWAN	KWI;Lo;0;L;;;;;N;;;;;
1AFD4;	HIRAGANA	LETTER	NEW	OKINAWAN	KWE;Lo;0;L;;;;;N;;;;;
1AFD5;	HIRAGANA	LETTER	NEW	OKINAWAN	HWA;Lo;0;L;;;;;N;;;;;
1AFD6;	HIRAGANA	LETTER	NEW	OKINAWAN	HWI;Lo;0;L;;;;;N;;;;;
1AFD7;	HIRAGANA	LETTER	NEW	OKINAWAN	HWE;Lo;0;L;;;;;N;;;;;
1AFD8;	HIRAGANA	LETTER	NEW	OKINAWAN	YA;Lo;0;L;;;;;N;;;;;
1AFD9;	HIRAGANA	LETTER	NEW	OKINAWAN	YU;Lo;0;L;;;;;N;;;;;
1AFDA;	HIRAGANA	LETTER	NEW	OKINAWAN	YO;Lo;0;L;;;;;N;;;;;
1AFDB;	HIRAGANA	LETTER	NEW	OKINAWAN	WA;Lo;0;L;;;;;N;;;;;
1AFDC;	HIRAGANA	LETTER	NEW	OKINAWAN	WI;Lo;0;L;;;;;N;;;;;
1AFDD;	HIRAGANA	LETTER	NEW	OKINAWAN	WE;Lo;0;L;;;;;N;;;;;
1AFDE;	HIRAGANA	LETTER	NEW	OKINAWAN	N;Lo;0;L;;;;;N;;;;;
1AFDF;	HIRAGANA	LETTER	NEW	OKINAWAN	WU;Lo;0;L;;;;;N;;;;;
1AFE0;	HIRAGANA	LETTER	NEW	OKINAWAN	SI;Lo;0;L;;;;;N;;;;;
1AFE1;	HIRAGANA	LETTER	NEW	OKINAWAN	TSI;Lo;0;L;;;;;N;;;;;

0.1.2 Chart

	1AFD	1AFE
0	と 1AFD0	す 1AFE0
1	ゐ 1AFE1	り 1AFE1
2	て 1AFD2	
3	ゝ 1AFD3	
4	ゑ 1AFD4	
5	ゎ 1AFD5	
6	ふ 1AFD6	
7	ふ 1AFD7	
8	ふ 1AFD8	
9	や 1AFD9	
A	ゆ 1AFDA	
B	よ 1AFDB	
C	ゐ 1AFEC	
D	ゑ 1AFED	
E	ん 1AFEE	
F	を 1AFEF	

U+1AFD0	と	HIRAGANA LETTER NEW OKINAWAN TU ligature of とう may receive ` ⇒ ど
U+1AFD1	て	HIRAGANA LETTER NEW OKINAWAN TI ligature of てい may receive ` ⇒ て
U+1AFD2	ゝ	HIRAGANA LETTER NEW OKINAWAN KWA ligature of くわ may receive ` ⇒ ゝ
U+1AFD3	ゑ	HIRAGANA LETTER NEW OKINAWAN KWI ligature of くい may receive ` ⇒ ゑ
U+1AFD4	ゎ	HIRAGANA LETTER NEW OKINAWAN KWE ligature of くえ may receive ` ⇒ ゑ
U+1AFD5	ふ	HIRAGANA LETTER NEW OKINAWAN HWA ligature of ふわ
U+1AFD6	ふ	HIRAGANA LETTER NEW OKINAWAN HWI ligature of ふい
U+1AFD7	ふ	HIRAGANA LETTER NEW OKINAWAN HWE ligature of ふえ
U+1AFD8	や	HIRAGANA LETTER NEW OKINAWAN YA → や
U+1AFD9	ゆ	HIRAGANA LETTER NEW OKINAWAN YU → ゆ
U+1AFDA	よ	HIRAGANA LETTER NEW OKINAWAN YO → よ
U+1AFDB	ゐ	HIRAGANA LETTER NEW OKINAWAN WA no relationship to ☒ hentaigana letter mi-5
U+1AFDC	ゐ	HIRAGANA LETTER NEW OKINAWAN WI → ゐ no relationship to ☒ hentaigana letter u-3
U+1AFDD	ゑ	HIRAGANA LETTER NEW OKINAWAN WE → ゑ
U+1AFDE	ん	HIRAGANA LETTER NEW OKINAWAN N → ん
U+1AFDF	を	HIRAGANA LETTER NEW OKINAWAN WU ligature of をう

U+1AFE0		HIRAGANA LETTER NEW OKINAWAN SI ligature of すい may receive ` ⇒ ず
U+1AFE1		HIRAGANA LETTER NEW OKINAWAN TSI ligature of つい may receive ` ⇒ づ
U+3044 U+3099		N/A = い + ` = New Okinawan yi
U+3048 U+3099		N/A = え + ` = New Okinawan ye

See § Atomicity of い and え

0.2 Overview

Central Okinawan (hereon Okinawan) is the most widely spoken and studied language in the family of Ryukyuan languages, which are Japonic languages spoken in Okinawa and Kagoshima Prefectures (沖縄県 と 鹿児島県), which are the modern day territories consisting of the land which used to belong to the ancient independent Ryūkyū Kingdom (琉球國) (1429–1609). Despite being a vassal state of the Empire of Japan from 1609 onwards, the kingdom had a degree of independence and the Okinawan language continued to be the language of administration until the late 19th century, when Emperor Meiji decided to more thoroughly integrate the islands into the Japanese mainland. The Okinawan language was banned and was practically invisible in public life by 1945, but with the end of World War II, saw a resurgence, though declined in prominence by the end of the 21st century.

Language revitalization efforts are ongoing; a problem it faces is the ongoing language shift in the region and the dominant view among lay Japanese that Okinawan is a “dialect” (方言) of Japanese rather than a language proper. (Japanese linguists, on the other hand, know better.)

The characters proposed here are used by a minority of Okinawan writers. The majority use hiragana sequences, combined with outdated hiragana (to write Standard Japanese) such as ゐ and ゑ, to write the missing phonemes of Okinawan, or otherwise a Latin-based writing system based on linguistic transcription of Japanese; this system is used in most Okinawan dictionaries. Also extant is the University of the Ryukyus (琉球大学) system, which in my research, seems mostly limited to academic use.

It is difficult for me to account for why these characters are minority usage; it's quite likely that their unencoded status makes them less usable on computers, decreasing their use. Their utility is obvious and their derivation very easy to figure out, being based on existing norms for writing Okinawan in Japanese, as well as even ancient norms for writing Okinawan.

0.2.1 History

The New Okinawan Kana (あらうちなーむ 新沖縄文字) are a system for writing the languages of Okinawa devised by Dr. Yoshiaki Funatsu, who for most of his life was a professor of statistics, applied mathematics and economics. Later in life, he visited Okinawa and became interested in its language; in the 1980's, he began creating the system of Okinawan letters described in this paper.

The Okinawan letters created by Funatsu are designed to be easy to understand for speakers of Okinawan; rather than being a complication, they're meant to simplify the writing of the language. It was also Mr. Funatsu's observation that children who were familiar with the system of Japanese kana more easily took to letters like と than sequences like と う, which they would mispronounce as [tou].

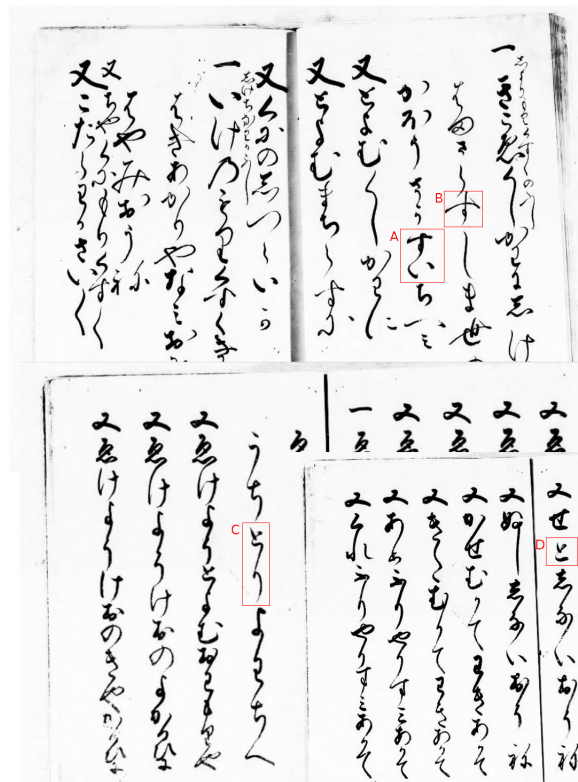


Figure N°0—Omoro Sōshi (うむるそーし), NARA A3389

The image above compares three pages from the Omoro Sōshi (うむるそーし), a compilation of traditional Okinawan music. The manuscript above was recorded some time in the 16th century. The version above was put on microfilm after World War II and is from the National Archives. While I don't make any claims of character identity, the origins of the New Okinawan Kana letterforms are clear from this medieval hiragana document; the same impulse to combine characters seen in the form of すい (A) vs. isolated す (B) and in とう (C) vs. isolated と (D) is seen in the characters ず HIRAGANA LETTER NEW OKINAWAN SI and と HIRAGANA LETTER NEW OKINAWAN TU.

The New Okinawan Kana are known in their author's documents as simply the “Okinawan Kana” (沖縄文字), literally “Okinawan letters”. They were originally disseminated in a series of newspaper articles in the Ryūkyū Shimpō (週休新報) by Funatsu beginning on June 6, 1986.¹ The name “New Okinawan Kana” is often used in third party reporting to refer to the characters, as a neutral term for them that does not prescribe their use to the community.²

1. Funatsu, Yoshiaki (1986-06-06 – 1986-07-16). よみがえれ地方語 [Yomigaere Chihōgo; lit. Resurrecting a Regional Language] (series of 15 articles). *Ryūkyū Shimpō* (週休新報). [Archived by Funatsu on his website](#).
2. See e.g.: Emori (1987); Otsuka (2010); Japanese Wikipedia's 沖縄方言の表記体系 [Comparison of Okinawan Scripts] article. While both 新しい沖縄文字 and 新沖縄文字 are in use, (having identical English translations, “new”), there is a preference for 新 over 新しい in modern sources.

Funatsu claims no copyright on these characters and allows free distribution of their shapes and phonetic values, unlike, for example, Mojikyō; therefore, GlyphWiki, (sticklers for copyright issues,) accept the New Okinawan Kana and have a category for them.³

There are two repertoirees in current use. The first repertoiree, consisting of all characters up to and including U+1AFE6, is exactly as it was in 1986, as explained in Funatsu's series of articles in the *Ryūkyū Shimpō* (週休新報). The second repertoiree, that plus U+1AFE7–U+1AFEA, is of more complex origin. It seems that originally, Funatsu did not consider word origin when coming up with this writing system. However, with the frequent and common mixing of Okinawan and Japanese words, he came up with those four characters in around 2004 to mark out a word's origin. For example, both ちち and 𐄌ち are pronounced equally, as [t͡ɕit͡ɕi]. However, because 月 is pronounced in Japanese as つき, the second is used: 𐄌月. Likewise, the extremely rare character 𐄌 has hardly any use at all, being used to transcribe e.g. 三日月. Nevertheless, just barely enough attestations were found for me to recommend even these rare characters.⁴ The chart:

沖縄文字一覧

と[tu] とい (鳥)、うと (音)、みーと (夫婦)	𐄌[hwe] 𐄌ー (南)、に𐄌ーでーびる (有り難うございます)
と[to] とーふ (豆腐)、とーばる (桃原<地名>)	へ[he] へい (おい「目下への呼びかけ」)
ど[du] どし (友人)、やど (宿)、どー (自分)	𐄌[?ja]* 𐄌ー (君、お前)、𐄌ん (言わない)
ど[do] どーぐ (道具)、まんどーん (たくさんある)	や[?ja] やー (家)、やん (である)
𐄌[ti] 𐄌ーち (一つ)、𐄌ーだ (太陽)、𐄌ん (天)	𐄌[?ju]* 𐄌ん (言う)
て[te] てーく (太鼓)、てーしち (大切)	𐄌[?ju] 𐄌んたく (おしゃべり)
𐄌[di] ふ𐄌 (筆)、ぬー𐄌ー (喉)、𐄌きやー (秀才)	𐄌[?jo]* 𐄌ーいー (おさな子)
で[de] でーじ (大変なこと)、ちよーでー (兄弟)	よ[?jo] よーんなー (ゆっくり)
𐄌[kwa] 𐄌じ (火事)、𐄌ちちー (ごちそう)	あ[?wa]* あー (豚)、あーちち (天気)
か[ka] かじ (風)、かんない (雷)、かーま (遠方)	わ[?wa] わーむん (私のもの)
𐄌[gwa] にん𐄌ん (念願)、𐄌んく (頑固)	あ[?wi]* あー (上)、あーりきさん (面白い)
が[ga] がんちよー (眼鏡、めがね)、しがた (姿)	ゐ[?wi] あきが (男)、あなぐ (女)
𐄌[kwi] 𐄌ー (声)、さつ𐄌ー (咳)、𐄌𐄌ん (呉れる)	𐄌[?we]* 𐄌ーきー (金持ち)、𐄌んちゅ (ねずみ)
き[ki] きー (木)、きゅん (蹴る)、きぶし (煙)	𐄌[?we] うい𐄌ー (お祝い)、わじゃ𐄌ー (災い)
𐄌[ghi] 𐄌ーく (越來<地名>)、	ん[?N]* 𐄌み (梅)、𐄌に (稲)、𐄌なじ (うなぎ)
ぎ[gi] かーぎ (容ぼう)	ん[?N] 𐄌に (胸)、𐄌み (瀬井<地名>)
𐄌[kwe] 𐄌ー (鉄)、からじ𐄌ー (髪きり虫)	い[?i]* びん (緑)、いだ (枝)
け[ke] けー (かゆ)、ちけー (使者)	い[?i] いん (犬)、いーび (指)、いちゅん (行く)
𐄌[gwe] 𐄌ったい (ぬかるみ)	𐄌[?u]* 𐄌と (夫)、𐄌ーじ (さとうきび)
げ[ge] げー (害)、にげー (願い)	う[?u] うと (音)、うーび (帯)
𐄌[hwa] 𐄌ー (葉)、なー𐄌 (那覇)	ズ[?e]*△ ズーま (八重山)、ズーじ (八重洲)
は[ha] はる (畑)、はぎもー (荒地)	え[?e]△ えーさち (挨拶)、えーじ (合図)
𐄌[hi] 𐄌じゃい (左)、𐄌ーと (いるか)	お[?o] おーじ (廟)、おーさん (青い)
ひ[hi] ひやみかすん (えい、と言う)	を[?o] をーじ (王子)、をーれー (往来)
以下の4文字は文語専用	
𐄌[si] 𐄌むん (済む)、ぐ𐄌く (城)	𐄌[zi] 𐄌んぶん (知恵)、しじか (静か)
𐄌[ci] 𐄌ち (月)、まー𐄌 (松)	𐄌[zi] みかぞち (三日月)

[] 内は沖縄語辞典による読み方 (沖縄文字の使用は自由です。)

* は単語の語頭だけに用います。語頭以外では用いません。 例 ○とい (鳥)、 ×とび

△ 音の出だしに、僅かに i をひびかせます。

「𐄌」、「𐄌」の z の上のダッシュは、沖縄語辞典では z の下についていますが、ここではフォントの都合で上につけたものです。

3. [グループ:沖縄文字](#). GlyphWiki. Retrieved 2021-09-03.

4. Thanks again to Daichi Shimabukuro.

Figure №0—Funatsu (2016)

The system proved immediately popular, as the shapes of most of the letters are extremely obvious to any Okinawan speaker literate in Japanese (or even just in hiragana), and led to press attention for Funatsu inside and outside Okinawa. Some of this attention led to the unusual character of Funatsu himself, a university professor from Tokyo who had no obvious connection to Okinawa beyond a short business trip to it. At what must have been not inconsiderable expense in 1987, the *Asahi Shimbun*, as of 2020 the 2nd most circulated newspaper in Japan, even used some of the letters in its writeup of Funatsu:

静岡県松崎町生まれ。東京
都立大学理学部数学科卒業
後34年、総務庁統計局へ入
局。58年から沖縄勤務後、総
務庁統計局総務課長を経て、
同庁北方対策課長。50歳

「サリマンが赴任の方
言に戸惑ったり、興味を持
たりするとはあっても、研
究して論文を発表、専門の学
者をうならせた人は珍しい。
沖縄開発庁沖縄総合事務局次
長として2年間、沖縄に滞在
中に現地の言葉の発音と表記
に驚きをもち、沖縄文字を考
案、11月がえり地方誌とい
う論文をまとめた。

「沖縄は、話されるばかり
でなく、多くの人に書かれ、
読まれることによって伝統を
保つていける。しかも、

独自の工夫で新しい
沖縄文字を考案した
船津好明さん

船津好明さん
あき
よし

沖縄の方言は全体として統
一性に乏しく、これまで、研
究家が各県のやり方で国語の
文字を使って発音、読み方を
と沖縄語は統一していくかも
しれない。「沖縄の
開発という仕事をす
る中で、地方言葉が
滅びていく現実を無
視できなかった。だ
れもが簡単に、分
りやすく書けて、発
音がよく理解でき、
能率的に勉強できる
正書法が統一される
ことが必要だ」
これまでは、「し
ゃ・しゅ・しょ」な
ど、二文字のかな
を組み合わせて使っ
てきた。しかし、こ
れはあくまで便宜上、もとも
とは一音節一文字の原則を守
らなければならぬ。そこ
で、平安時代から慣れ親しん
できた「かな文字」に工夫を
加えた。
「新しい方式を使うと、小
文字を大文字にされて本来の
発音とはまったく違うものに
なることも防げる」
さて、新語だが、一例をあ
げると、「に」と「う」を合
体させて「**にう**」。「へ」と
「**く**」を計二十語
上村雄雄琉球大学教授「国
語でもこの文字を学校教
育で試しては」と評価し
た。
もともと統計調査の専門
家で、著書もある。「現在は
北方の資料が多いので、仕事
のかたわら北海道の地名の研
究もしている」
(江森 陽弘編集委員)

Figure №0—Emori (1987). Note highlighted letters と HIRAGANA LETTER NEW OKINAWAN TU and く HIRAGANA LETTER NEW OKINAWAN KWA, made especially for this story. (Perhaps *Asahi* wanted to be prepared in case they needed to print more stories using them—perhaps they did, but I have no evidence of it if so.)

Also of aid to the spread of the system could have been Funatsu's statement in most charts he authored which bear the letters, such as the 2016 one on the previous page, that:

沖縄文字の使用は自由です。

Use of the Okinawan letters is free.⁵

5. In the sense of freedom, not price; Japanese, like French and Spanish, has different words for the different

0.3 Potential technical issues

0.3.1 Atomicity of い and え

The atomicity of \mathcal{V} and \mathcal{E} is unlikely to be upheld, however, I find it necessary to request it be considered; in any event, I mention it here so users understand why it was not done.

Existing fonts encode the characters atomically (see § Fonts), and, a legacy encoding, known as TRON,⁶ encoded these characters atomically because they also appear in the *Dai Kan-Wa Jiten* [*The Great Kan(ji)-Japanese Dictionary*]. They are located in TRON Plane 9 (TRONコード第9面): ゝ = TRON9-8027; ㇰ = TRON9-802E.

Daisuke Miura (@qvarie) has come up with a de-facto standard that also assumes their atomic encoding; at least one other font is using this encoding as well, and it is mentioned on GlyphWiki as "unstable-nishiki".⁷ い = にしきのF464; え = にしきのF466.

0.3.2 Infrequent disambiguation letters

I have fewer attestations of these letters, but still more than enough for encoding.

These letters are in all fonts I've seen which support this system, including Nishiki-teki (にしきの). They are certainly expected, and they certainly do have a use, it is just that finding inline examples of them is challenging because they are only used in a few words. Especially, as noted, 𐰇, which only has a single example across repertoires, 三日月. There just aren't that many words which have a clear shared etymology with Japanese and begin with 𐰇, *itself* a rare kana, as it is pronounced equally to ず in Standard (Tokyo) Japanese (e.g. in the verb 続く).

0.3.3 Shima Shotai collision

つらぞつばさちびわにれちひそぢクハエバツアゴデホオホシリヨハ
つよざつばかたばるなるヲはせぢキノンドツアゴデグバエバシムヨトホ
ちやづつばあざはれとリヲサセぢキノンドツアゴデグバエバシムヨトホ
ちやづつばあざへるてらふせしじオヌワツツエギトビイビスムオツウ
たもじつうおずふりつふふすしほエニコチツグガテバアバクアホツツイ
そめじほばえじふらつゆんしさペウナレチツグコホルソクバヘチア
せむじべいうじひまちばんしにぶイトルチツグケツペフネウザフチリ
すみざぶごいざはゆちいちさけびアテリダツクチブフヌロザワタギ
しまごびげあそめちやちぢくばこツラソツエキチビワレツヒヂ
しへごびげさねもちとちきほけツラソツエカチバノナルルグハセヂ
しへごびげすぬめけちがかハチユズツイアソホレトリツグスセジ
さぶざべがずしにむくむちかふふちヤジツイアゼヘルテラフセシジ
こふがぶつずしなみきみとんどふよタモジツウオズフリツヨフスシホ
けひみびつあさどまかしんぐひゆソメジボイエジフヲツユンシサベ
くは系ぱつおごでぼおぼしりよはやセムジベイウジヒョチインシコバ
きのんどつあげつええしるよとおシミザブゴイザハユチイチチケバ
かねをでつぎでだぶうびしむおつてえシマゴビゲアソフヤチャチケバ
おぬわづつだぎとびいびしむおつうシホゲバギエセネモヤマトチキホ
えにろちつうがてばあばくくほつうシホゲバギスヌヌメケメチガカハ
うなれちつうこつばるのくぶへちあサフギベガズシニムクムチカバフ
いとるちつてけつべふぬわうふちリコフガブズシチキミトゾドフ
あてりだつちくちぶふぬろうふたぎケヒキビツサドマカマシングヒ

concepts.

6. TRON has very similar aims to Mojikyō: encode characters without Han unification. Both were created by Japanese people.
7. This uses Private Use Area codepoints in Miura's font “Nishiki-teki” (にしきの).

Shima Shotai (しま^{しな}素^そ体^{たい}) is an incompatible system presented by Shinji Ogawa (小^お川^{がわ} 晋^{しん}史^し), Masahiro Yamada (山^{やま}田^だ 真^ま寛^{かん}), Yuka Hayashi (林^{はやし} 由^ゆ華^か), and Hiroto Ueda (上^{うへ}田^だ 寛^{かん}人^{にん}) at ATypI, the typography conference held by the Association Typographique Internationale, in 2019.⁸ It is for the representation of the Ryukyuan languages. I have not as yet been able to find enough community use of this neography to recommend formally the encoding of its characters. The encoding of the New Okinawan Kana does not preclude future encoding of the *Shima Shotai* system, should it be used more widely.

Furthermore, there is no possibility of a name collision between the New Okinawan Kana and the *Shima Shotai*. The only characters missing for the *Shima Shotai* are some small versions of existing hiragana and katakana letters. These have a clear pattern by which their names are derived, and it is already known that they belong in the block Small Kana Extension, which has room to receive them. It is also possible some more diacritics are needed to represent the *Shima Shotai*, but there is also an obvious way to name these diacritics as they are very similar in appearance to Latin typographical diacritics, and if new diacritics are needed, they wouldn't have any specific Script category.

While the authors of the *Shima Shotai* stated in 2019 that their top priority was being encoded in Unicode, no proposal has been submitted as of the date of this paper. Nonetheless, I am confident that the encoding of my requested characters would do nothing to hinder a possible future encoding of theirs should adequate third-party use of their *Shima Shotai* system be documented.

0.4 Evidence

0.4.1 Attestations

Note: Listed below are only attestations in which Funatsu, the creator of the characters, was either not involved, or was not the lead author. If I were to include Funatsu's work this subsection could be neverending, but because the ISO P&P are about proving the existence of a user community, Funatsu's works aren't relevant for proving one.

• 新沖縄文字

さいきんになって琉球語の発音をあらわすために考えられた文字です。

い	え	や	ゆ	よ
て	と	な	ね	ぬ
で	ど	な	ぬ	ず
あ	お	あ	お	ず
あ	く	え	あ	ず
あ	く	え		
あ	あ	あ		
ん				

↓実際に新沖縄文字をつかって単語を書いて見ると・・・

どし(ともだち)
あっちー(ごちそう)
てーだ(太陽)
てきやー(かいこ子)
おなぐ(おんな)

8. See [しまの文字.site](http://shimashotai.site). In the presentation, Ogawa mentions that *Shima Shotai* have existed since 2015, but I could not independently verify this.



[illegible]

そーぢち
いー正月でーびる

城間 朝昌

家人衆打ち揃ー揃ー、
いー正月迎ーみしえーびー
てい。
今年ー龍年んで言びーし
が、うぬ龍んで言しえー、
戦世ぬ終わるるまでー
唐破風ぬ瓦屋ぬ上なかい戴
して、あいびーたん。また、
唐破風ぬ上い口ぬ左と右面
んかい、龍柱ぬ向かて、建っ
ちよーいびーたん。うりか
ら、う龍樋ぬ水ん、龍ぬ口
から走り出じーる如成とー
やびーたしが、一杯冷っ
てーんし旨さ水やいびーた
ん。
うぬ龍んで言しえー、水
ぬ神んで言びーて、しじ高
さぬ、護い神んで言つとー
やびーん。とーち海ぬ中、
小堀んでーんかい龍まで、
時々ー天ぬあまくま飛で歩
ちゅんで言つとーやびーし
が、今年ー、うぬ龍んかい
肖て、御衆様、皆頑丈さし
気張みしえーびり。
東京 沖縄県人会ぬ新聞
「月刊・おきなわの声」ん
どーでん忘りらん如し読で
う賜みしえーびりんち、う
願ーさびら。

ご家族お揃いでよいお正月をお迎えでしょうか。
今年は龍年といいますが、その龍というのは戦争の
終わりの頃までは首里城正殿の壁(いらか)に龍頭が飾られ
てありました。また、正殿へ上る階段の左と右側に龍柱
が向き合って立っていました。それから、龍樋の水も龍の
口から湧き出るようになっていました。とても冷たくて
おいしい水でした。
その龍というのは、水の神といって、素戔嗚尊神と言
われています。いつも海の中や池などに龍り、時には天
空の彼方此方を自由に飛び回ると言い伝えられています
が、今年はその龍にあやかって、皆様方で健康で活躍く
ださい。
東京沖縄県人会の新聞「月刊おきなわの声」も何卒お忘
れなく愛読くださいますようお願いいたします。

Figure №0—Excerpt from おきなわの声 (The Voice of Okinawa Monthly) issue 98, 1988.

This article, entitled **そーぢち いー正月でーびる**, is of unknown authorship. At right is the Okinawan text, at left a Japanese translation.

It's of particular interest that this was published without an explanatory chart, and lends credence to the idea that the letters have shapes that are so obvious to literate Okinawans as to need no explanation. The article is not about the kana themselves, but is rather about the fact that 1988 was the year of the dragon (龍年) in the Chinese Zodiac.

2021年2月2日 投稿者: 小林

沖縄文字と発音

沖縄文字と発音についての問い合わせがありました。

「と」「で」「て」などの扱いや「沖縄文字」との互換についてはどこかでご紹介がないか？

ということです。問い合わせの答えになるかどうか自信がありませんが、分かる範囲でお答えしようと思います。

Figure №0—Kobayashi, Hitoshi [小林ひとし] (2021). 沖縄文字と発音 (Okinawan Kana and Pronunciation). 沖縄語を考える [Thoughts on Okinawan (blog)].

This article is interesting in that it shows documentation of enduring user community demand for these characters. Dr. Kobayashi is a professor emeritus of engineering; he's the author of several

fonts for the characters. In this article he explains why he went to the trouble of using web fonts to get them on his personal blog about Okinawan, because he believes they aid pronunciation.

さんしん
三線で琉歌を歌いたいと思っているひとへのアドバイスです。三線は楽譜として工工四がありますが、歌う場合の発音が問題です。沖縄語には正書法がないので、歌詞を正しく発音するには師匠からの口伝になります。ところが、この「師匠」たるものが問題で、その琉歌が唄われる地方の言葉に精通してないことがあります。また、前にも書きましたが「梅」=「**ん**み」の「**ん**」（「ん」のグロッタル音）ができない師匠も多くいます。聞いていると「うん」とか変に籠らせた「ん」を発声したりしています。師匠の教えは教えとして、正確な発音は古い先人のレコード、たとえばマルフクレコードに収録されているものを参照されるようお勧めします

Figure №0—Kobayashi, Hitoshi [小林ひとし] (2021). 「沖縄語」は話せなくてよい (It's Fine Not to Speak Okinawan). 沖縄語を考える [Thoughts on Okinawan (blog)].

The excerpt above laments the loss of the unique phonemes of Okinawan in colloquial speech, and shows one of the problems Dr. Kobayashi has with using regular hiragana only to write Okinawan: there's no good way to distinguish ん (n) from ん (?n), which can appear word-initial in Okinawan. This leads, he speculates, people to assume that they are the same. As Okinawan is not taught in most schools, the author writes, this has led to them *becoming* the same.

Above, **highlighted** is ん.

うちなー ちどい
沖縄ぬ踊

児玉清子（横浜市港北区）

なま わ たー ちた うちなー
今、我っ達んかい伝わとーる 沖縄ぬ
ちどい うちなー るーちゅー どち うぐしく
踊や、沖縄ぬ琉球やたる時に、御城
ぬ ちどい 踊どっしどじまとーたしど、村々ん
ちた うかみ うさ
かい伝わとーたる御神んかい捧ぎーる
ちどい ぬ あ
踊ぬ合ーさったしやいびーん。
ちどい ちどい
親国ぬ大切な芸能成とーいびーたく
ちどい うたさんしの しひやくにんあま ちどい
と、踊と唄三線ー400年余いぬ間栄
ーやびたん。
どない くに みんなく こーてー じゅーしせー き
隣ぬ国、明国ぬ皇帝や、14世紀ぬ
はじ るーちゅー ちけ ん
初み、琉球んかい使ー出じゃさびたん。

むゆー ちどい じーぬー う さんしんをどい
かい 催さったる芸能や「御冠船踊」
んで言ちゅーいびーたん。くぬ さんしん
ちどい くに あちね たみ いっぺーやく
踊ど国ぬ商ーぬ為なかい一杯役に
た 立ちやびたん。さんしんをどい ちどい ちどい
来ゆーる2、3年前から稽古そーいび
ーたん。あつ達や長一居たくど、踊や
しちかい ちどい ちどい ちどい
7回んかい分きらって催さって、うれ
ー「七宴ぬ式」んで言らっとーいびー
ん。
う さんしんをどい ちどい
御冠船踊んかい出じーるっ人ぬ
ちやー うぐしく ちどい ちどい
達や、御城んかい勤みとーる位ぬ高
さる ちどい じなん さんなん いら
やいびーん。あんし ちどい ちどい ちどい
踊奉行ぬ前をて

Figure №0—Newsletter of the Okinawa Speaker's Association (沖縄語を話す会報), issue 26. Okinawan Edition (うちなーぐちかわら版). 2020-07-04.

All 26 issues of this use the Okinawan kana; the example above is an example of an article in the newsletter by 児玉清子.⁹

現代的表記

5 船^{ふね}の^の罫^か綱^{づな}とく^{とく}とく^{とく} 船^{ふね}子^こい^いさ^さみ^みて^て真^ま帆^ふ引^ひ

さ^さば 風^{かぜ}や^やま^まと^とむ^むに^に午^{みづうし}未^し

6 又^{また}ん^ん廻^{めぐ}り^り逢^あい^い逢^あい^い縁^{えん}と^とで^で ま^まに^にく^く扇^{あふ}や^や三^{さん}重^{じゅう}

城^{ぐすく} 残^{ざん}波^ば岬^{さき}ん^んあ^あど^どに^に見^みて^て

7 伊^い平^{へい}屋^や渡^{わた}立^{たち}つ^つ波^{なみ}う^うし^しす^すい^いで^で 道^{みち}ぬ^ぬ島^{しま}々^々見^み

渡^{わた}し^しば 七^{しち}島^{とう}渡^{わた}中^{なかつ}ん^んだ^だや^やす^すく

8 む^むゆる^{ゆる} 煙^{けむり}や^や硫^{りゅう}黄^{わう}が^が島^{しま} 佐^さ多^たぬ^ぬ岬^{さき}に^には^はい^いな^な

ら^らで^で あ^あり^りに^に見^みゆる^{ゆる}わ^わ御^ご開^{かい}聞^{もん} 富^ふ士^じに^に見^みま^ま

ご^ご一^{いち}楼^{ろう}島^{しま}

この頁の沖縄文字

どニトウでニツイでニテイ、
ふニツイ、んニンの破裂音、
でニツイ、んニンの破裂音、
オニスイ、ドニドウでニテイ。

伝統的表記例

5 船^{ふね}の^の罫^か綱^{づな}とく^{とく}とく^{とく} 船^{ふね}子^こい^いさ^さみ^みて^て真^ま帆^ふ引^ひ

さ^さば 風^{かぜ}や^やま^まと^とも^もに^に午^{みづうし}未^し

6 又^{また}も^も廻^{めぐ}り^り逢^あい^い逢^あい^い縁^{えん}と^とて^て ま^まね^ねく^く扇^{あふ}子^こや^や三^{さん}重^{じゅう}城^{じょう}

残^{ざん}波^ば岬^{さき}も^もあ^あと^とに^に見^みて^て

7 伊^い平^{へい}屋^や渡^{わた}立^{たち}つ^つ波^{なみ}お^おし^しそ^そひ^ひて^て 道^{みち}の^の島^{しま}々^々見^み渡^{わた}せ^せ

ば 七^{しち}島^{とう}渡^{わた}中^{なかつ}や^やな^なだ^だや^やす^すく

8 も^もゆる^{ゆる} 煙^{けむり}や^や硫^{りゅう}黄^{わう}が^が島^{しま} 佐^さ多^たぬ^ぬ岬^{さき}に^には^はい^いな^なら^らで^で

あ^あれ^れに^に見^みゆる^{ゆる}は^は御^ご開^{かい}聞^{もん} 富^ふ士^じに^に見^みま^まが^が岬^{さき}島^{しま}

33

Figure N^o0—Kuniyoshi et al. (2009) p. 33.

This source is particularly valuable because it has inline examples of two of the infrequent disambiguation letters. Because each song in this collection is intended for use detached from the whole, an explanation of the New Okinawan Kana used in the lyrics are on each page. Highlighted are, from right to left, top to bottom, 𐄇 HIRAGANA LETTER NEW OKINAWAN DZI, 𐄈 HIRAGANA LETTER NEW OKINAWA and 𐄉 HIRAGANA LETTER NEW OKINAWAN SI.

「琉球古典音楽」習て、――うちな一ぐちにて――

我んねー、四十八ぬ歳に、「琉球古典音楽」習い始めて、な一、今一、八十ぬ歳成いびたん。

習い始むたる頃一、教室をて、皆んかい珍ささって、又、しーじゃ弟子ぬ御方々から、「珍さる大和ん人ぬ、入っち来よーんどー。」んて、言らりやびたん。

今一、「野村流音楽協会関東支部」ぬ会をてん、沖縄ん人、えーね一、うぬ弟子やかん、大和ん人ぬど、多さいびーる。八割一、超一とーんで、思ーりやびーん。

古典音楽一、歌歌いる際に、肝えーぬ切り目ぬ場所をて、声や、必じ切りりーるむのー、あらんあい、又、色分きて、名詞一、二ちんかい分きらって、うぬたばさなかい、樂子 詞ぬ入りらったいさびーん。

歌ぬ発音一、世間をて、言らつとーる沖縄口ぬ音どやくと、ど一易さるむのー、あいびらん。

歌ぬ発音一、大切やんで思て、「沖縄語を話す会」かい、一年びけーん達たしが、今やてん、大和口し言ーどんしえー、「遠洋の帆」どやいびーる。

古典音楽聴ちよーいね一、眠一ぶいするっ人ん居んでぬ、話一、いきらこ一無一やびらん。

うれ一、あんやる言やいびーしが、一ちぬ考一ぬあて、耳んかい入っち来ゆーる音ぬ、胴体んかい響ぬ伝らつて来ゆーる音ぬど、っ人ぬ命続かち行ちゆる力ぬ、あんでん言らつとーいびーん。うれ一、あんがやら分かいはらんやー。

「新人賞課題曲」ぬ、一ちやいびーしが、伊野波節んかえー、此ぬよーなっ人ぬ命続かする力ぬあいがす分かはらん。

伊野波ぬ坂道から、どーぬ女ぬ親、えーね一、そない、思や一小添て上て、おれとて、別りてんん成ん事言ひんから、後たて

あーかさんだれ一成らん場ぬ事やいびーん。此ぬ事一、どく懐かさぬ、肝痛て出じーる声ど、味あぬある何どんてん言ららん、弦ぬ音んかい応じて、思一じふらーじ、髭り毛立ちするあたゐ氣引ち締みらんだれ一成らんでる思いやいびーん。

年寄いぬ年寄い見一考一する事、見一考一するっ人ん居らんくと、胴独い死ぬる事、うりから、どく見一考一する故に、心勞びけーいっし疲れて、後ぬうじゆめ一、命捨てーる事んでーや、っ人ぬ命んかい係わいる事やて、此れ一、生ちみとど一み、考一らんどんあれ一成らんむんやいびーさ。伊野波節一、此ぬよーな考一とっし、我んね一、憂き止みとーいびーん。此ぬ事一、何がな見一出じやさりーがすら、分からんしが、肝要なむんぬあえーさにんで、思とーいびーん。

我つ達師匠、仲宗根 忠治先生や、何時がやら、くん如つし、言みしえーいびーたん。「いつ達が、ちゃーがなつし、沖縄ぬ文化分かいる如成いる事やさ。」あんやいびーさやー。沖縄ん人ら一さる悟い方、計れ一方一、古典音楽習いる為

9. Reading unknown. (Some Japanese names have multiple possible pronunciations, and unless specified explicitly can only be guessed.)

Figure №0—Gokita, Hideo [五木田 秀夫] (2018). 「琉球古典音楽」習得. [Learning Ryukyuan Classical Music]. Ryūkyū Classical Music Association [琉球古典音楽協会].

(The pixelation of this image is in the original source.)



Figure №0—Ōtsuki, Noriko [大槻紀子] (2011). うちなーライフ in 東京 [Okinawan Life in Tokyo]. *Shima-be* [島へ。] (magazine). 78: 31.

This cute cartoon is of a meeting of the Okinawan Speaker's Association (沖縄語を話す会), a Tokyo group of Okinawan speakers, native and non-native. Highlighted are ぢ HIRAGANA LETTER NEW OKINAWAN DU and て HIRAGANA LETTER NEW OKINAWAN TI.

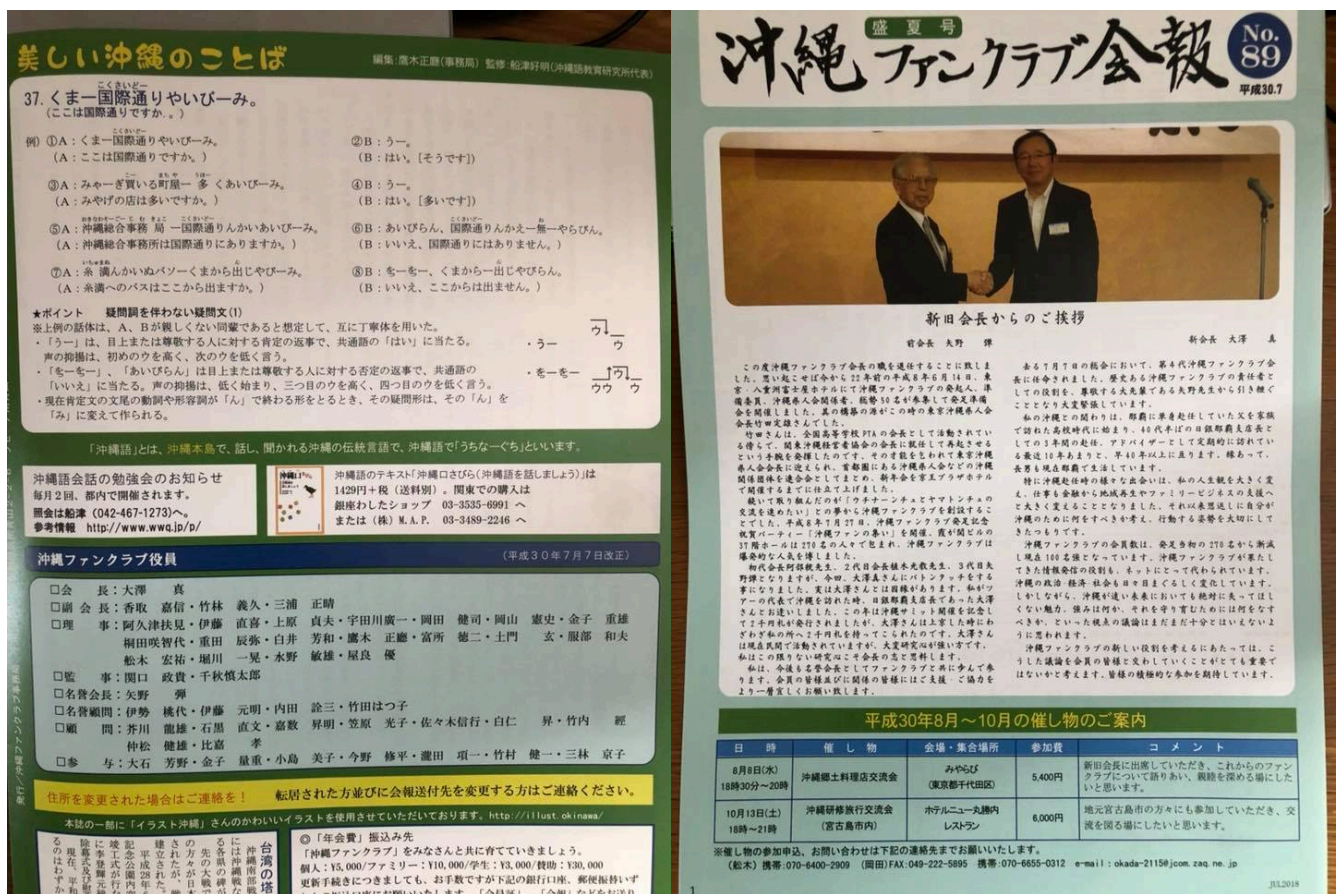
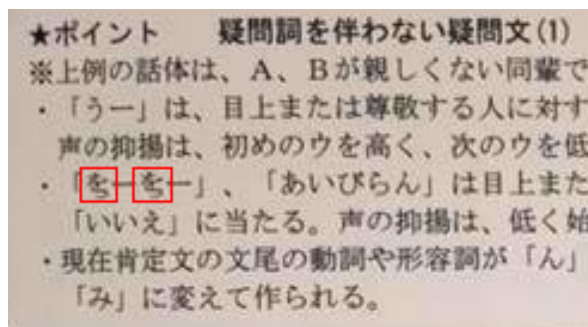


Figure №0—沖縄ファンクラブ会報 [Okinawa Fan Club Newsletter] issue №89 (July 2018)



0.4.2 Fonts

Many fonts have existed for writing this script. As it is not feasible for me to go back and research fonts used in the 80's–00's, listed here are only fonts publicly available for download as of 2021.

Daisuke Miura's **Nishiki-teki** (にしきの)

❖ くんぐち じゅーはちにち しまくとばぬ ひ
い[ji] ち[wu] え[je] や[ʔa] ゅ[ʔu] よ[ʔo]
ゐ[ʔ^wa] ゐ[ʔ^wi] ゑ[ʔ^we] 𐄌[k^wa] 𐄌[g^wa]
𐄌[k^wi] 𐄌[g^wi] 𐄌[k^we] 𐄌[g^we] ず[si] ず[zi]
て[ti] で[di] と[tu] ど[du] 𐄌[tsi] 𐄌[dzi]
ふ[ɸa] ふう[ɸi] ふえ[ɸe] ん[ʔn, ʔm]
あ[ʔa] い[ʔi] う[ʔu] え[ʔe] お[ʔo] を[wo]
じ[dʒi] ち[tʃi] づ[dʒu] ひ[çi] ふ[ɸu] ん[N]

Three Ring Font Shop (参環のフォントショップ)'s **FROkinawaMoji** (明朝体用の沖縄文字フリーフォント)

沖縄語表記のための沖縄文字

と ど て で 𐄌 𐄌 𐄌 𐄌

𐄌 𐄌 𐄌 𐄌 𐄌 𐄌 や ゆ よ ゐ

ゐ 𐄌 ん い を え ず 𐄌 𐄌

Kobayashi Hitoshi's **FKOkinawan** fonts

FA 80	FA 81	FA 82	FA 83	FA 84	FA 85	FA 86	FA 87
と	ど	て	で	𐄌	𐄌	𐄌	𐄌
FA 88	FA 89	FA 90	FA 91	FA 92	FA 93	FA 94	FA 95
𐄌	𐄌	𐄌	𐄌	𐄌	や	ゆ	よ
FA 96	FA 97	FA 98	FA 99	FA 9A	FA 9B	FA 9C	FA 9D
ゐ	ゐ	𐄌	ん	い	を	え	ず

<small>FA 80</small> ち	<small>FA 81</small> ど	<small>FA 82</small> て	<small>FA 83</small> で	<small>FA 84</small> こ	<small>FA 85</small> く	<small>FA 86</small> け	<small>FA 87</small> こ
<small>FA 88</small> え	<small>FA 89</small> げ	<small>FA 8A</small> ふ	<small>FA 8B</small> ふ	<small>FA 8C</small> ふ	<small>FA 8D</small> や	<small>FA 8E</small> ゆ	<small>FA 8F</small> よ
<small>FA 90</small> あ	<small>FA 91</small> あ	<small>FA 92</small> え	<small>FA 93</small> ん	<small>FA 94</small> い	<small>FA 95</small> を	<small>FA 96</small> え	<small>FA 97</small> す
<small>FA 98</small> ず	<small>FA 99</small> り	<small>FA 9A</small> り	<small>FA 9B</small> る	<small>FA 9C</small> る			

0.5 Bibliography

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