

PROPOSAL TO ENCODE  
しんおきなわ もじ  
NEW OKINAWAN KANA (新沖縄文字)  
IN THE UCS

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(フレッド・ブレンナン)  
*copypaste* ☒ kittens.ph ☒

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とどてでるるく  
ぐええすずゞゞ  
ふわふいふねやゆよあ  
あゑんいぢえを  
とどてでるるく  
ぐええすずゞゞ  
ふわふいふねやゆよあ  
あゑんいぢえを

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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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# Chapter I

## Quick summary

I propose the encoding of 27 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, [ut̪ut̪ut̪ut̪tinauti]), although they may be used to write other languages in the Ryukyuan language family. These letters are 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. All 27 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.

### 1.1 UnicodeData.txt

```
1AFD0;HIRAGANA LETTER NEW OKINAWAN TU;Lo;0;L;;;;N;;;;;
1AFD1;HIRAGANA LETTER NEW OKINAWAN DU;Lo;0;L;;;;N;;;;;
1AFD2;HIRAGANA LETTER NEW OKINAWAN TI;Lo;0;L;;;;N;;;;;
1AFD3;HIRAGANA LETTER NEW OKINAWAN DI;Lo;0;L;;;;N;;;;;
1AFD4;HIRAGANA LETTER NEW OKINAWAN KWA;Lo;0;L;;;;N;;;;;
1AFD5;HIRAGANA LETTER NEW OKINAWAN GWA;Lo;0;L;;;;N;;;;;
1AFD6;HIRAGANA LETTER NEW OKINAWAN KWI;Lo;0;L;;;;N;;;;;
1AFD7;HIRAGANA LETTER NEW OKINAWAN GWI;Lo;0;L;;;;N;;;;;
1AFD8;HIRAGANA LETTER NEW OKINAWAN KWE;Lo;0;L;;;;N;;;;;
1AFD9;HIRAGANA LETTER NEW OKINAWAN GWE;Lo;0;L;;;;N;;;;;
1AFDA;HIRAGANA LETTER NEW OKINAWAN HWA;Lo;0;L;;;;N;;;;;
1AFDB;HIRAGANA LETTER NEW OKINAWAN HWI;Lo;0;L;;;;N;;;;;
1AFDC;HIRAGANA LETTER NEW OKINAWAN HWE;Lo;0;L;;;;N;;;;;
1AFDD;HIRAGANA LETTER NEW OKINAWAN YA;Lo;0;L;;;;N;;;;;
1AFDE;HIRAGANA LETTER NEW OKINAWAN YU;Lo;0;L;;;;N;;;;;
1AFDF;HIRAGANA LETTER NEW OKINAWAN YO;Lo;0;L;;;;N;;;;;
1AFE0;HIRAGANA LETTER NEW OKINAWAN WA;Lo;0;L;;;;N;;;;;
1AFE1;HIRAGANA LETTER NEW OKINAWAN WI;Lo;0;L;;;;N;;;;;
1AFE2;HIRAGANA LETTER NEW OKINAWAN WE;Lo;0;L;;;;N;;;;;
1AFE3;HIRAGANA LETTER NEW OKINAWAN N;Lo;0;L;;;;N;;;;;
1AFE4;HIRAGANA LETTER NEW OKINAWAN WU;Lo;0;L;;;;N;;;;;
1AFE5;HIRAGANA LETTER NEW OKINAWAN SI;Lo;0;L;;;;N;;;;;
1AFE6;HIRAGANA LETTER NEW OKINAWAN ZI;Lo;0;L;;;;N;;;;;
1AFE7;HIRAGANA LETTER NEW OKINAWAN TSI;Lo;0;L;;;;N;;;;;
1AFE8;HIRAGANA LETTER NEW OKINAWAN DZI;Lo;0;L;;;;N;;;;;
1AFE9;HIRAGANA LETTER I WITH VOICED SOUND MARK;Lo;0;L;;;;N;;;;;
1AFEA;HIRAGANA LETTER E WITH VOICED SOUND MARK;Lo;0;L;;;;N;;;;;
```

I.2 Chart		U+1AFD0 と HIRAGANA LETTER NEWOKINAWAN TU ligature of とう	
0	1AFD 1AFD0	1AFE U+1AFD1 1AFD0	と HIRAGANA LETTER NEWOKINAWAN DU ligature of どう
1	ど 1AFD1	ど U+1AFD2 1AFE1	ど HIRAGANA LETTER NEWOKINAWAN TI ligature of てい
2	て 1AFD2	て U+1AFD4 1AFD2	て HIRAGANA LETTER NEWOKINAWAN DI ligature of でい
3	て 1AFD3	て U+1AFD5 1AFD3	て HIRAGANA LETTER NEWOKINAWAN KW ligature of くわ
4	く 1AFD4	く U+1AFD7 1AFD4	く HIRAGANA LETTER NEWOKINAWAN GWA ligature of ぐわ
5	く 1AFD5	く U+1AFD8 1AFD5	く HIRAGANA LETTER NEWOKINAWAN GWE ligature of くい
6	く 1AFD6	く U+1AFD9 1AFD6	く HIRAGANA LETTER NEWOKINAWAN GWE ligature of くえ
7	ふ 1AFD7	ふ U+1AFD9 1AFD7	A ふ HIRAGANA LETTER NEWOKINAWAN HWA ligature of ふわ
8	ふ 1AFD8	ふ U+1AFD9 1AFD8	B ふ HIRAGANA LETTER NEWOKINAWAN HW ligature of ふい
9	ふ 1AFD9	い U+1AFD9 1AFD9	C ふ HIRAGANA LETTER NEWOKINAWAN HWE ligature of ふえ
A	み 1AFDC	え U+1AFEA 1AFDC	D ゆ HIRAGANA LETTER NEWOKINAWAN YA → ゆ
B	み 1AFDD		E ゆ HIRAGANA LETTER NEWOKINAWAN YU → ゆ
C	み 1AFDE		F よ HIRAGANA LETTER NEWOKINAWAN YO → よ
D	ゆ 1AFDF		あ HIRAGANA LETTER NEWOKINAWAN WA no relationship to ☒ hentaigana letter mi-5
E	ゆ 1AFDF		ゑ HIRAGANA LETTER NEWOKINAWAN WI → ゑ
F	よ 1AFDF		ゑ HIRAGANA LETTER NEWOKINAWAN WE → ゑ

U+1AFE4 を HIRAGANA LETTER NEWOKINAWAN WU  
ligature of をう

U+1AFE5 す HIRAGANA LETTER NEWOKINAWAN SI  
ligature of すい

U+1AFE6 づ HIRAGANA LETTER NEWOKINAWAN ZI  
ligature of づい

U+1AFE7 つ HIRAGANA LETTER NEWOKINAWAN TSI  
ligature of つい

U+1AFE8 ツ HIRAGANA LETTER NEWOKINAWAN DZI  
ligature of づい

U+1AFE9 ィ HIRAGANA LETTER I WITH VOICED SOUND MARK  
= ィ + ^  
= New Okinawan yi

U+1AFEA ィ HIRAGANA LETTER E WITH VOICED SOUND MARK  
= ィ + ^  
= New Okinawan ye

See § Atomicity of ィ and ィ

See § Infrequent disambiguation letters

## Quick summary

# Chapter 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 21<sup>st</sup> 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.

### 2.1 History

あらうちなー む 潤

The New Okinawan Kana (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 ら than sequences like ろう, which they would mispronounce as [tou].

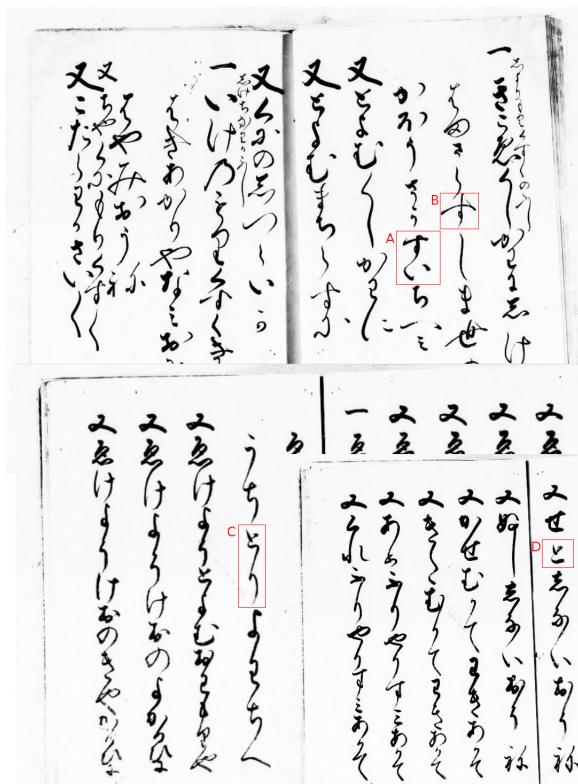


Figure №1—Omoro Sōshi (うむるそーし), NARA A3389

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 16███ 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 す HIRAGANA LETTER NEWOKINAWAN SI and と HIRAGANA LETTER NEWOKINAWAN 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.<sup>1</sup>

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.<sup>2</sup>

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.<sup>3</sup>

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.

There are two repertoirees in current use. The first repertoiree, consisting of all characters up to and including U+IAFE6, 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+IAFE7–U+IAFEA, 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 濟ち around 2004 to mark out a word's origin. For example, both ちち and 濟ち are pronounced equally, as [t̪it̪it̪it̪it̪it̪]. However, because 月 is pronounced in Japanese as つき, the second is used: 月. Likewise, the extremely rare character 濟 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.<sup>4</sup>

The chart:

沖縄文字一覧	
𠂊[tu] とい (鳥)、うぢ (音)、みーど (夫婦)	ゑ[hwe] ふー (南)、にゑーでーびる (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」)
ぢ[du] ぢし (友人)、やぢ (宿)、ぢー (自分)	ゑ?ja]* ゑー (君、お前)、ゑん (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)
ゑ[ti] ゑーち (一つ)、ゑーだ (太陽)、ゑん (天)	ゆ?ju]* ゆん (言う)
て[te] てーく (太鼓)、てーしょ (大切)	ゆ[ju] ゆんたく (おしゃべり)
ゑ[di] ふゑ (筆)、ぬーゑー (喉)、ゑきやー (秀才)	ゑ?jo)* ょーいー (おさな子)
で[de] でーじ (大変なこと)、ちょーでー (兄弟)	よ[jo] よーんない (ゆっくり)
ゐ[kwa] わじ (火事)、わっちー (ごちそう)	ゑ?wa)* わー (豚)、わーちち (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)
ゐ[gwa] にんぐん (念願)、ぐんく (頑固)	ゑ?wi)* わー (上)、ゑーりきさん (面白い)
が[ga] がんちょー (眼鏡)、めがね)、しがた (姿)	ゑ[wi] エー (男)、ゐなぐ (女)
ゑ[kwi] ゑー (声)、さっゑー (咳)、ゑゆん (呉れる)	ゑ?we)* エーきー (金持ち)、ゑんちゅ (ねずみ)
き[ki] きー (木)、きゆん (蹴る)、きぶし (煙)	ゑ[we] ういゑー (お祝い)、わじゃゑー (災い)
ゑ[gwi] ゑーく (越來<地名>)、	ゑ?N)* んみ (梅)、んに (稻)、んなし (うなぎ)
ぎ[gi] かーぎ (容ぼう)	ん[N] んに (胸)、んみ (嶺井<地名>)
ゑ[kwe] ゑー (鍼)、からじゑー (髪きり虫)	い[i]* いん (縁)、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)
ゑ[gwe] ゑーったい (ぬかるみ)	ゑ[u]* ゑど (夫)、ゑーじ (さとうきび)
げ[ge] げー (害)、にげー (願い)	う?u] うど (音)、うーび (帶)
ゑ[hwa] ゑー (葉)、なーゑー (那嘲)	ゑ[e]*△ ゑーま (八重山)、ゑーじ (八重洲)
は[ha] はる (烟)、はぎもー (荒地)	え?e]△ ゑーさち (挨拶)、ゑーじ (合図)
ゑ[hwi] ゑーじやー (左)、ゑーど (いるか)	お?o] おーじ (扇)、おーさん (青い)
ひ[hi] ひやみかすん (えい、と言う)	ゑ[o] をーじ (王子)、をーれー (往来)
以下の4文字は文語専用	
ヰ[gi] ヰむん (済む)、ぐヰく (城)	ヰ[zi] ヰんぶん (知恵)、しづか (静か)
ヰ[gi] ヰち (月)、まーヰ (松)	ヰ[zi] みかヰち (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)、×ぢい

△ 音の出だしに、僅かに i をひびかせます。

「ヰ」、「ヰ」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。

Figure №2—Funatsu (2016)

3. グループ:沖縄文字. GlyphWiki. Retrieved 2021-09-03.

4. Thanks again to Daichi Shimabukuro.

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 2 $\blacksquare\blacksquare$  most circulated newspaper in Japan, even used some of the letters in its writeup of Funatsu:



Figure №3—Emori (1987). Note highlighted letters 𩖥 HIRAGANA LETTER NEWOKINAWAN TU and 𩖦 HIRAGANA LETTER NEWOKINAWAN 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.<sup>5</sup>

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



# Chapter 3

## Potential technical issues

### 3.1 Atomicity of 𠁷 and 𠁸

The atomicity of 𠁷 and 𠁸 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,<sup>1</sup>

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): 𠁷 = TRON9-8027; 𠁸 = 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".<sup>2</sup>

𠁷 = にしき的F464; 𠁸 = にしき的F466.

### 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 (にしき的). 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, 𠁻, 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 𠁻, itself a rare kana, as it is pronounced equally to づ in Standard (Tokyo) Japanese (e.g. in the verb 続く).

1. TRON has very similar aims to Mojikyō: encode characters without Han unification. Both were created by Japanese people.

2. This uses Private Use Area codepoints in Miura's font "Nishiki-teki" (にしき的).

### 3.3 Shima Shotai collision

おがわ しんじ  
しまれ! 『』  
つらぞつぱきちびわにれテひそぢクハエバツアゴテボオルシリゴハヤ「  
つよぜつばかたばるなるテはせぢキノンドツアゲツヅエベシルゴトオヲ  
ちゆすつばあぞほれとリテそすじカネラデツエグタブウブシムオテエ  
ちやじつばあゼヘるてらふせしじオヌワツツエギトビピスムオツウギ  
たもじつうおずふりうふすしほエニロヂツウガテバアバクフホツイブ  
そめじぼえじふらうゆんしさぶウナレヂツヴコツボルンクブヘチアロ  
せむじべいうじひよちいんしにぶイトルヂツツケツベフネワツフナリ  
すみざぶごいざはゆぢいきせびアテリダツツケツブフヌロツフタギリレ  
しまごびげあそわやたやちちくばこツラゾツエキチビワニレツヒソチホ  
しほばばぐいせねもこもとちきほけツヨゼツエカタバロナルハセヂホラ  
しへぐばぎすすぬめあけめちがかへかチユツツイアゾホレトリツソジヒ  
さふぎべがすしにむくむちかふふわチヤジツアゼヘルテラフセシジ  
こふがふつてしまみとんどふよタモジツウオズフリツヨウシボヌ  
けひあびあさどまかましんぐひゆソメジボイエジフラツユンシサベ  
くはゑはつあごでぼおぼしりよはやセムジベイウジヒヨヂインシコバツ  
きのんどつあげづべえべしるよとおスミザブゴイザハユヂイチサケビ  
かねをでつぞでだぶうぶしもがてえシマゴビケアンソヤタヤチヂカバ  
おぬわづびえぎとびいびすもおうラシホガバグダイセモヨモトア牛休  
えにわづがてあばくほつしシヘグボギススヌメケチサケビ  
うなれぢつてばあるめくぶへちあサフギベガズスムケチサケビ  
いとるぢつけつてふねろうすぶちリコギベガズスムケチサケビ  
ちぶふぬろうすぶちケヒキガブツツツサシニムカミクムチカミトゾンシ  
ありコギベガズスムケチサケビ  
ヒヰガブツツツサシニムカミクムチカミトゾンシ  
カカマシントゾンシムカミクムチカミトゾンシ  
シシツツツサシニムカミクムチカミトゾンシ  
ヒヰカツツツサシニムカミクムチカミトゾンシ  
しまれ! 『』

*Shima Shotai* (しま素体) is an incompatible system presented by Shinji Ogawa (小川 晋史), Masahiro Yamada (山田 真寛), Yuka Hayashi (林 由華), and Hiroto Ueda (上田 寛人) at ATypI, the typography conference held by the Association Typographique Internationale, in 2019.<sup>3</sup>

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.

<sup>3.</sup> See しまの文字.site. In the presentation, Ogawa mentions that *Shima Shotai* have existed since 2015, but I could not independently verify this.







# Chapter 4

## Evidence

### 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 section 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	あ	え	や	ゆ	は
て	と		ね	ゑ	な
で	ど		め	ゑ	な
あ	あ	ゑ	す	ず	す
く	く	く	マ	マ	マ
ぐ	ぐ	ぐ			
あ	あ	あ	ア	ア	ア
ん					

↓実際に新沖縄文字をつかって単語をかいて見ると・・・

どし(ともだち)  
カチー(ごちそう)  
てーだ(太陽)  
てきやー(かにい子)  
わなぐ(おんな)



Figure №4—Tamaki, Yumi [玉城 裕美] (2009). ウチナークトゥバ：琉球語 [Okinawan: A Language of Ryūkyū]. Kid's Seminar 2009 [きっずせみなあ 2009]. Chubu University Center for the Study of Foreign Languages [中部大学語学センター].

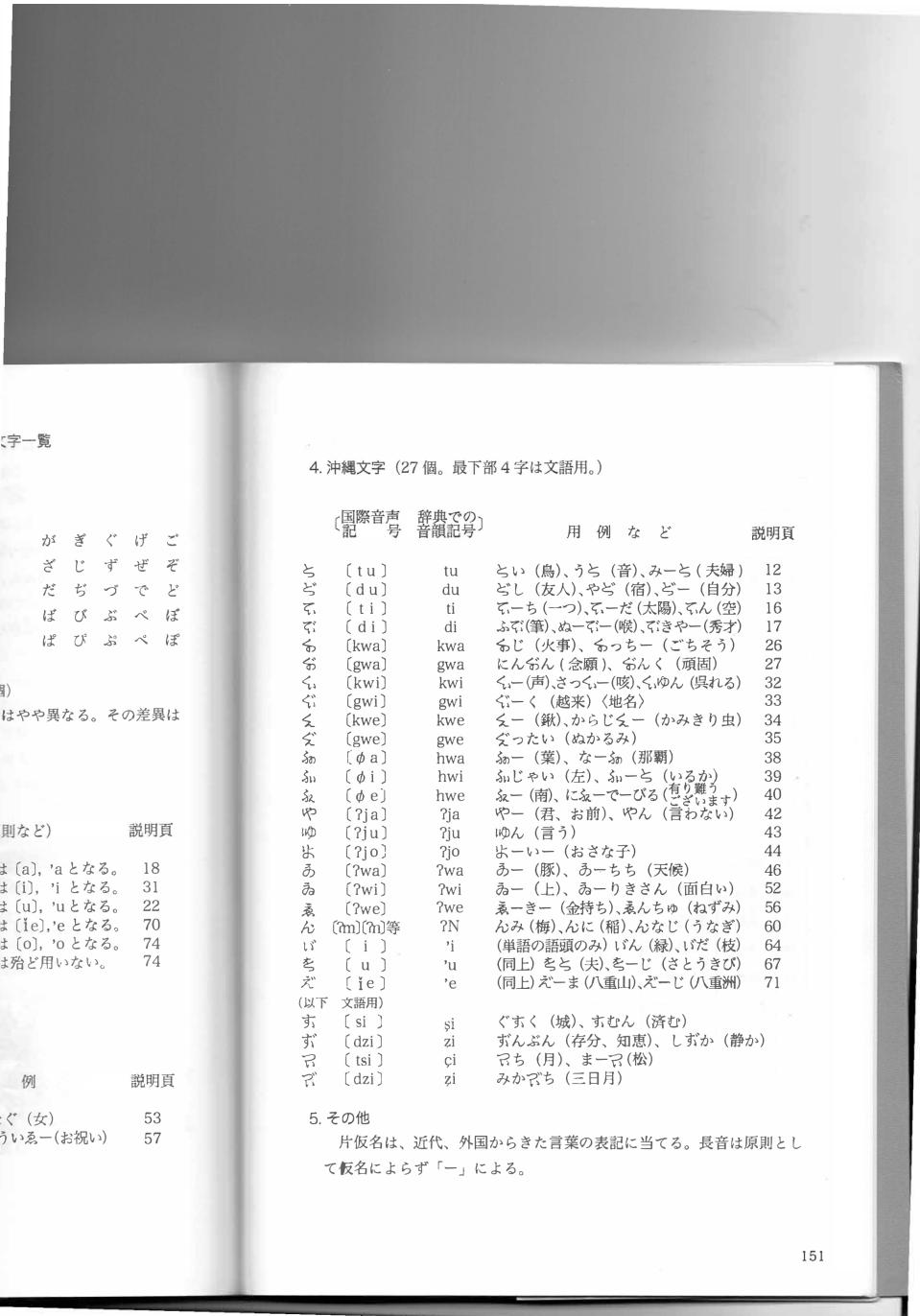


Figure №5—Nakamatsu, Takeo [中松 竹雄]; Funatsu, Yoshiaki [船津 好明] (2010). 沖縄口さびら [Let's Speak Okinawan]. Naha: Ryūkyū Shimpo Publishing House [琉球新報社]. p. 151.

1988年1月15日(金)

## 月刊 おきなわの声

(昭和55年8月13日)  
第三種郵便物認可

第98頁

ご家族をお拘りでよいお正月をお迎えでしょうか。  
今年は龍年ということですが、その龍というのは戦争の  
終わり頃までは曾里城正殿の臺（いらか）に龍頭が飾られ  
てありました。まだ、正殿へ上が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、龍頭の水も龍の  
口から湧き出るようになつて、ましたが、とても冷たくて  
おいしい水でした。

その龍といふのは、水の神どもって、素戔鳴守護神と言  
われています。いつで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ひ伝えられています  
が、今年はその龍におやかく、皆様から連呼で活躍くだ  
さい。

東京沖縄県への新聞「日刊わきなわの声」も同率お祝  
いなくして愛読くださいますよろお願いいたします。

いー正月でーびる  
そーちぢら  
今年一龍年んで言ひーし  
が、うぬ龍んで言しえー、  
戦世ぬ終わるぐるまでー  
唐破風ぬ上屋ぬ上なかい戴  
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、龍柱ぬ向かて建つ  
ちょーいびーたん。うりか  
ら、う龍楓ぬ木ん、龍ぬ口  
から走い出じーる如成とー  
やびーたしが、一杯冷つ  
てーんし旨さ水やいびーた  
人衆打ち揃ー揃ー、  
いー正月迎ーみしえーびー  
て、い。  
うぬ龍んで  
ぬ神んで言ひ  
さぬ、護い神か  
やびーん。と  
小唄んでーん  
が、今年ー、  
時々ー天ぬあ  
肖て、御衆様  
氣張みしえー  
「月刊・おき  
東京沖縄  
どーでん忘れ  
う賜みしえー  
願ーさびら。

Figure №6—Excerpt from おきなわの声 (*The Voice of Okinawa Monthly*) issue 98, 1988.

This article, entitled 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 №7—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くんくんしがありますが、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 №8—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 (𠀤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.

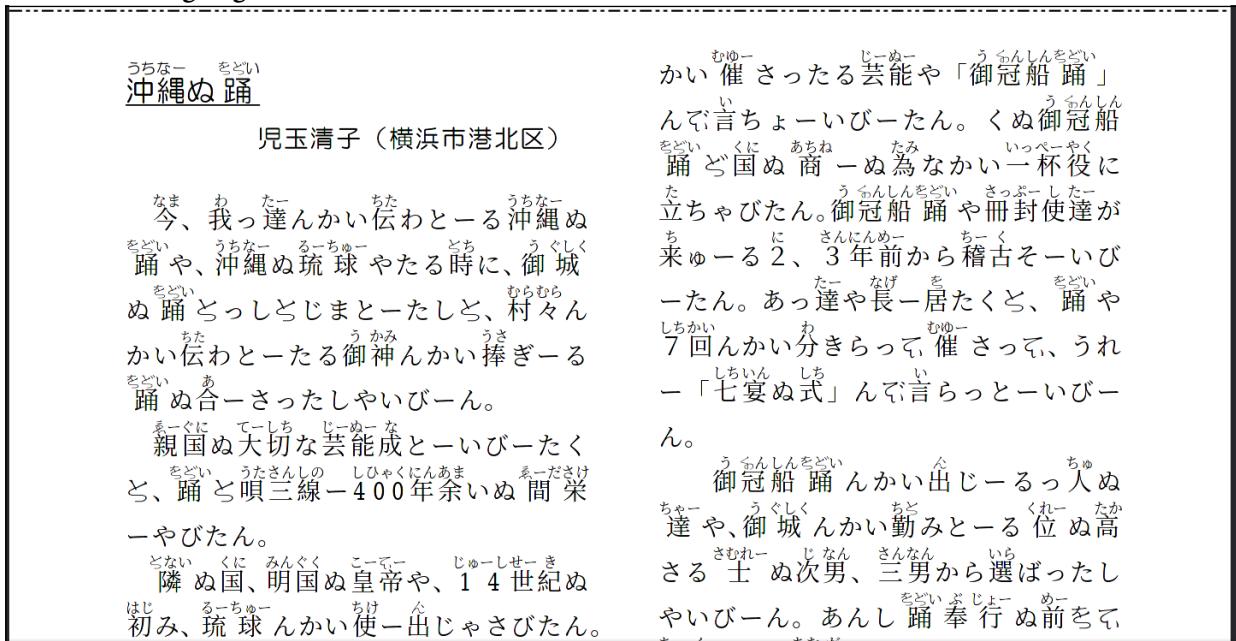


Figure №9—Newsletter of the Okinawa Speaker's Association (沖縄語を話す会会報), issue 26. Okinawan Edition (うちなーぐちかわら版). 2020-07-04.

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.<sup>1</sup>

This figure shows a page from the Okinawa Speaker's Association newsletter featuring a modern transcription guide. The left margin has the heading "伝統的表記例". The right side contains a grid of Okinawan words with their corresponding hiragana and Romanized pronunciations. Some characters in the Romanized versions are highlighted in yellow, matching the highlighted "ん" in the previous figure. The page number 33 is at the bottom right.

5	6	7	8	9
船の艤綱とくとくと ば 風やまともに午未	又ん廻り逢御縁とて らで ありに見ゆるわ御開聞	伊平屋渡立つ波うしすいで ご一桜島 渡しまんなだや	むゆる煙や硫黄が島佐多ぬ らで ありに見ゆるわ御開聞	船ぬ艤綱とうとうくと きば 風やまとむに午未
5 船の艤綱とくとくと ば 風やまともに午未	6 又ん廻り逢御縁とて らで ありに見ゆるわ御開聞	7 伊平屋渡立つ波うしすいで ご一桜島 渡しまんなだや	8 むゆる煙や硫黄が島佐多ぬ らで ありに見ゆるわ御開聞	5 船ぬ艤綱とうとうくと きば 風やまとむに午未
5 船の艤綱とくとくと ば 風やまともに午未	6 又ん廻り逢御縁とて らで ありに見ゆるわ御開聞	7 伊平屋渡立つ波うしすいで ご一桜島 渡しまんなだや	8 むゆる煙や硫黄が島佐多ぬ らで ありに見ゆるわ御開聞	5 船ぬ艤綱とうとうくと きば 風やまとむに午未
5 船の艤綱とくとくと ば 風やまともに午未	6 又ん廻り逢御縁とて らで ありに見ゆるわ御開聞	7 伊平屋渡立つ波うしすいで ご一桜島 渡しまんなだや	8 むゆる煙や硫黄が島佐多ぬ らで ありに見ゆるわ御開聞	5 船ぬ艤綱とうとうくと きば 風やまとむに午未

<sup>1</sup> Reading unknown. (Some Japanese names have multiple possible pronunciations, and unless specified explicitly can only be guessed at.)

Figure №10—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, ツ HIRAGANA LETTER NEWOKINAWAN DZI, ヽ HIRAGANA LETTER NEWOKINAWAN TSI, and ん HIRAGANA LETTER NEWOKINAWAN SI.

「琉球古典音楽」書く　---うちなーぐちにて---

我んねー、四十八ぬ歳に、「琉球古典音楽」習い始みて、なー、今一、八十ぬ歳成いびたん。  
 習い始みたる頃一、教室をて、皆んかい珍さって、又、レージャ弟子ぬ御方おとこからー、「珍さる大和ん人ぬ、入っち来よーんどー。」んで、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、えーねー、うぬ弟子やかん、大和ん人ぬど、參さいびーる。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、肝きもえーぬ切り自ぬ場所をて、声や、必じ切らりーるむのー、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、難子詞なんしぬ入りらったいさびーん。  
 歌ぬ発音一、世間をて、言らっとーる沖縄口ぬ音どやくど、どー易さるむのー、あいびらん。  
 歌ぬ発音一、大切やんて思て、「沖縄語を話す会」かい、一年びけーん通たしが、今やそん、大和口だいわくちっし言ーどんしえー、「遠洋の帆」どやいびーる。  
 古典音楽聴ちょーいねー、眠ーぶいするつ入ん居んでぬ、話一、いきらこー無ーやびらん。  
 うれー、あんやる苦やいびーしが、一ちぬ考ーぬあで、耳んかい入っち来ゆーる音ぬ、胴体んかい響ひびきぬ伝ーらって来ゆーる音ぬど、つ入ぬ命統めいとうかち行ちゆる力ぬ、あんぐん言らつーいびーん。うれー、あんがやら分かいびらんやー。  
 「新人賞課題曲」ぬ、一ちやいびーしが、伊野波節いのはんかえー、此ぬよーなっぬ命統かする刀ぬあいがすら分かいびらん。  
 伊野波ぬ坂道から、どーぬ女めのぬ難むず、えーねー、ぞない、思や一小添おのづーぐ上あで、あんし、んまとて、別りらんだれー成らん事情じごう「例れー、くんちゃー成たる故に隔てあーかさんだれー成らん場」ぬ事やいびーん。此ぬ事一、どく嘆かさぬ、肝病かんびょうで出じーる声ど、味ゑーぬある何どんてん言ららん、弦げんぬ音んかい応じおうじ、意ーじふらーじ、舞り毛立ちするあたい氣引ち締しみらんだれー成らんてん思いとーい。  
 年寄いぬ年寄い見一考ーする事、見一考ーするつ入ん居らんくど、胴獨だくいしめる事、うりから、どく見一考ーする故に、心劳びけーいっし疲りて、後ぬうじゆめー、命捨めいすてーる事んでーや、つ入ぬ命んかい係わいる事やで、此れー、生ちみどーみ、考ーらんどんあれー成らんむんやいびーさ。伊野波節一、此ぬよーな考ーどっし、我んねー、蔓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て、思とーい。  
 我つ達師匠わかつたししょく、仲宗根忠治先生や、何時がやら、くん如おっし、言みしぇーいびーたん。「いつ達が、ちゃーがなっし、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。沖縄ん人らーさる悟ごい方かた、計けい一芳一、古典音楽習いる為ためねー、此りどん、忘てー成らんえーさにんて、思とーる次第やいびーん。

沖縄文字の読み方：「文中に出ている沖縄文字は、すべて一音で読みます。」  
 例えば「ツ」は、「guwa」(ぐわ)にならないように一音で、「gwa」と読みます。

ツ=トウ (tu)、ヽ=ティ (ti)、ヽ=ヲウ (' u) ('う' の不破裂音)、  
 ヽ=ディ (di)、ヽ=くわ (kwa)、ヽ=ドウ (du)、ヽ=クイ (kwi)、  
 ヽ=フエ (hwe)、ヽ=フイ (hwi)、ヽ=フウ (hwa)、ヽ=グワ (gwa)、  
 ヽ=「ん」(' N) の破裂音、ヽ=「や」(' ja) の破裂音。

Figure №11—Gokita, Hideo [五木田 秀夫] (2018). 「琉球古典音楽」習て. [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 №12—Ōtsuki, Noriko [大槻紀子] (2011). うちなーライフ in 東京 [Okinawan Life in Tokyo]. *Shima-he* [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 ど HIRAGANA LETTER NEWOKINAWA and て HIRAGANA LETTER NEWOKINAWAN TI.

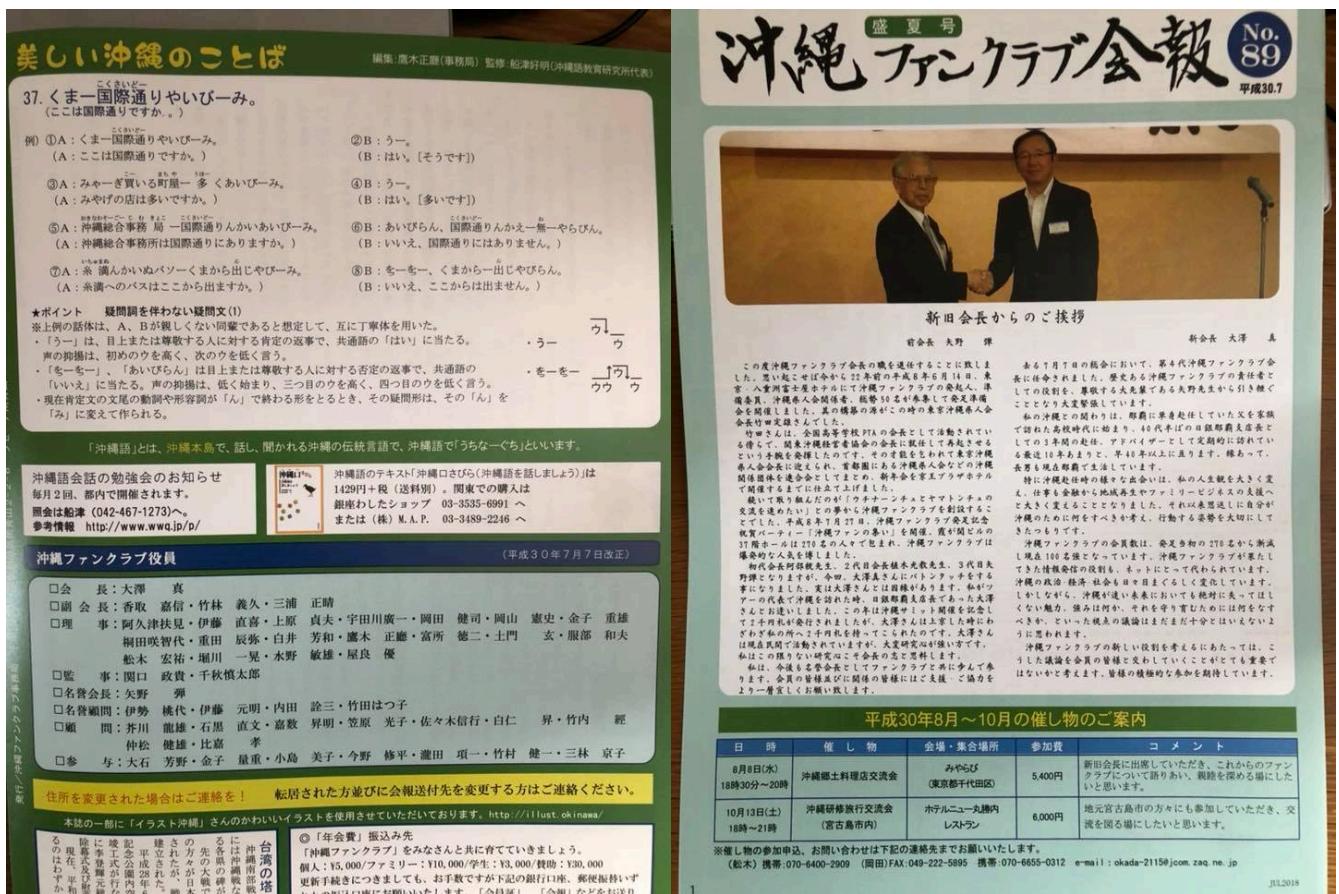


Figure №13—沖縄ファンクラブ会報 [Okinawa Fan Club Newsletter] issue №89 (July 2018)

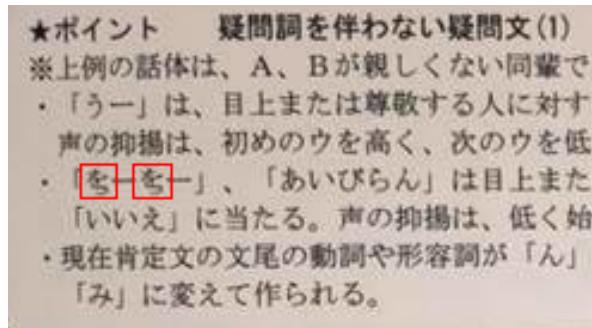


Figure №14—Above newsletter, closeup of the HIRAGANA LETTER NEWOKINAWAN WU

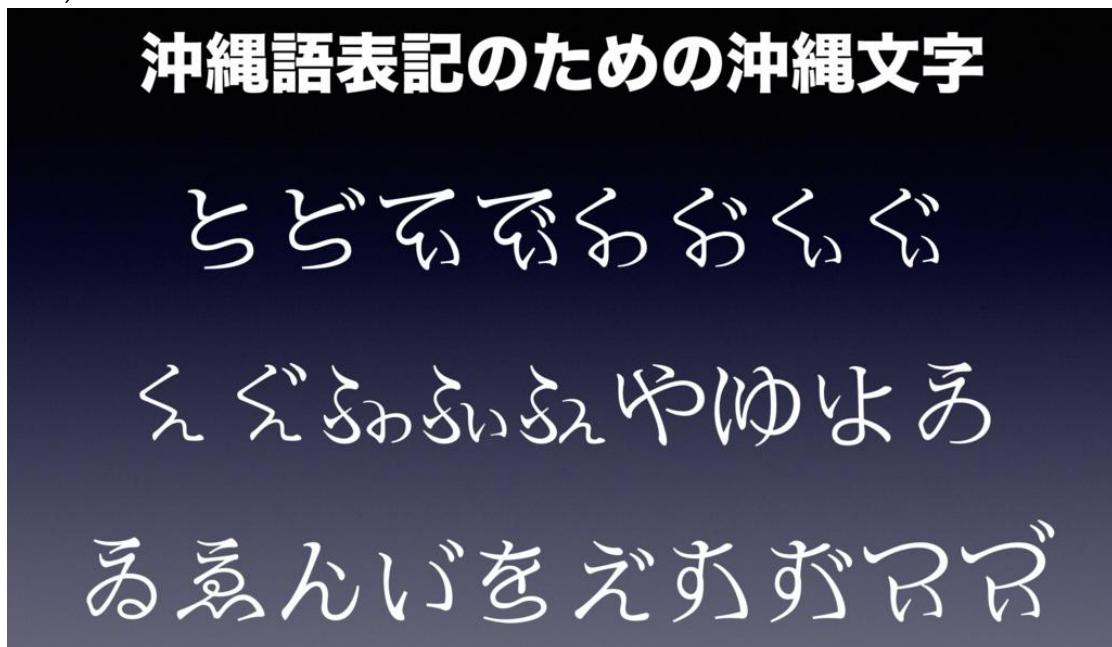
## 4.2 Fonts

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-90's, listed here are only fonts publicly available for download as of 2021.

Daisuke Miura's [Nishiki-teki](#) (にしき的)

❖くんぐち じゅーはちにち しまくとばぬ ひ  
 い[ji] ウ[wu] イ[je] ヲ[?j'a] ヲ[?j'u] ヲ[?j'o]  
 あ[?w'a] あ[?w'i] え[?w'e] く[k>w'a] く[g>w'a]  
 く[k>w'i] ぐ[g>w'i] く[k>w'e] ぐ[g>w'e] す[si] す[zi]  
 て[ti] で[di] と[tu] ど[du] て[tsi] て[dzi]  
 ム[ɸa] ム[ɸi] ム[ɸe] ム[?n, ?m]  
 あ[?a] い[?i] う[?u] え[?e] お[?o] を[wo]  
 じ[ç'i] ち[ç'i] づ[çzu] ひ[ç'i] ム[ɸu] ム[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)



Kobayashi Hitoshi's [FKOkinawan](#) fonts





# Chapter 5

## Bibliography

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- Otsuka, Satoru [大塚聰] (2010). アイヌ語用仮名文字：新沖縄文字（拡張ひらがな・拡張カタカナ・を探せ!!） [Ainu Specialized Kana and New Okinawan Kana (hunting for extended hiragana/katakana!!)].
- Funatsu, Yoshiaki [船津好明] (2016). 沖縄文字一覧 [Okinawan Kana Chart].



# Chapter A

## Alternative version of § 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, [ut̚ut̚ut̚ut̚tinauti]), 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.

### A.A 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;;;;;
```

## A.B Chart U+1AFD0 と HIRAGANA LETTER NEWOKINAWAN TU

	1AFD	1AFE	ligature of とう may receive と ⇒ と
0	と 1AFD0	U+1AFD1 お 1AFE0	HIRAGANA LETTER NEWOKINAWAN TI ligature of てい may receive て ⇒ て
1	ど 1AFD1	U+1AFD2 お 1AFE1	HIRAGANA LETTER NEWOKINAWAN KWA ligature of くわ may receive く ⇒ く
2	て 1AFD2	U+1AFD3 ゑ 1AFE2	HIRAGANA LETTER NEWOKINAWAN KW ligature of くい may receive く ⇒ く
3	で 1AFD3	U+1AFD4 ゑ 1AFE3	HIRAGANA LETTER NEWOKINAWAN KWE ligature of くえ may receive く ⇒ く
4	ゑ 1AFD4	U+1AFD5 ゑ 1AFE4	HIRAGANA LETTER NEWOKINAWAN HWA ligature of ふわ may receive ふ ⇒ ふ
5	ゑ 1AFD5	す 1AFE5	HIRAGANA LETTER NEWOKINAWAN HW ligature of ふい → す
6	ゑ 1AFD6	す 1AFE6	HIRAGANA LETTER NEWOKINAWAN HWE ligature of ふえ → す
7	ゑ 1AFD7	や 1AFE7	HIRAGANA LETTER NEWOKINAWAN YA → や
8	ゑ 1AFD8	よ 1AFE8	HIRAGANA LETTER NEWOKINAWAN YU → よ
9	ゑ 1AFD9	い 1AFE9	HIRAGANA LETTER NEWOKINAWAN YO → よ
A	ゑ 1AFDC	え 1AFEA	HIRAGANA LETTER NEWOKINAWAN WA no relationship to ミ hentaigana letter mi-5
B	ゑ 1AFDD		HIRAGANA LETTER NEWOKINAWAN WI → ゐ
C	ゑ 1AFDE		HIRAGANA LETTER NEWOKINAWAN WE no relationship to ユ hentaigana letter u-3
D	ゑ 1AFDF		HIRAGANA LETTER NEWOKINAWAN WN → ゐ
E	ゑ 1AFDF		HIRAGANA LETTER NEWOKINAWAN NW ligature of をう → ゐ
F	ゑ 1AFDF		HIRAGANA LETTER NEWOKINAWAN SI ligature of すい may receive す ⇒ す
			HIRAGANA LETTER NEWOKINAWAN TSI ligature of つい may receive つ ⇒ つ
			frequent disambiguation letters

U+3044 U+3099 𢃂 N/A  
= 𢃂 + 𢃁  
= New Okinawan yi

U+3048 U+3099 𢃃 N/A  
= 𢃃 + 𢃁  
= New Okinawan ye

See § Atomicity of 𢃂 and 𢃃

