

ISO/IEC JTC1/SC2/WG2 N4610

Title: Comments on Nushu in ISO/IEC 10646:2014 PDAM2 (WG2 N4569)

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Date: 2014-09-02

Action: For consideration by JTC1/SC2/WG2 and Nushu experts

Type: Individual Contribution

Abstract

In this document, the cross section of PDAM2 character set and Orié Endo's "He Yanxin glyph list", as the first step to define the stable set "supported by all sources" agreed in resolved in Nushu ad-Hoc meeting in WG2 #62 (see WG2 N4561). The proposal for better collation is still in discussion, the status is also reported.

1. Items to be Discussed Before Technical Reviews

During the evaluation of the cross section of PDAM2 and "He Yanxin glyph list", it was found that a few fundamental technical issues should be resolved before closing the technical review. The items are:

- A) The unification rule in Professor Zhao's studies should be clarified (see the ad-Hoc meeting report WG2 N4561).
- B) The stroke counting rule in Professor Zhao's studies and how they were arrived at should be clarified (see section 3).
- C) The possibility of the shape-based collation and an artificial radical system for Nushu should be discussed (see section 3).

Without the consensus on these fundamental issues, more technical changes could be considered in the development of Nushu character set for ISO/IEC 10646.

2. Proposed Change of the Character Set

As written in the meeting report, **Nushu ad-Hoc group decided to evaluate the stable character set supported by all sources.** Japanese experts started with Orié Endo's "He Yanxin glyph list" (ISBN 978-4-625-48300-4, p.252-332) plus supplementary survey including He Yanxin's review for the mapping table in WG2 N4533 (see Appendix A and B for detail).

2.1. Rationale to Start with He Yanxin Materials

The reasons why Japanese experts had chosen He Yanxin's material are following:

- Her character set is rather smaller than other elder successors, so appropriate to discuss "the first core set" for Nushu.
 - The variety of the characters for same phonetic value but (possibly) different semantics is narrower than other elder successors. Such concentration to smaller character set clarifies the contrast between the popularly used (thus stable) characters and the rarely used (thus

possibly unstable or non-portable) characters.

- The variety of the glyphic variations for same phonetic value and semantics is also narrower than other elder successors. It is useful to keep from the difficult evaluation which the glyph shape is most appropriate for the representative glyphs.
- She is the successor who we could make some interviews, although it is not easy. The elder experts (at least, 3 known successors in Professor Zhao's collection "Zhongguo Nushu Heji") had passed away.
 - It would be possible to make the glyph design consistent by her review.

However, in the evaluation of the cross section, some characters that He Yanxin could not identify are included if there are sufficient evidences (see Appendix B for detailed criteria). In addition, Japanese experts added no glyphs missing in PDAM2, even if He Yanxin used.

Of course, the consensus in the Nushu ad-Hoc group was "supported by all sources", not the cross section of PDAM2 and "He Yanxin glyph list". Thus, this is just the first step. Anyway, **"He Yanxin glyph list" might be one of the most compact sources, so the cross section between PDAM2 and it would be useful to reduce the future works for the stabilization.**

2.2. Detail of the Legends for Result Table

The characters to be changed from PDAM2 are annotated in the chart in Appendix A. The annotation marks proposing the changes are 3 types:

- F:** Fix the representative glyph for consistent design policy.
- V:** Postpone for future discussion with the variation (so it should not be included in Amd. 2). There are 2 cases; A) He Yanxin could identify the proposed glyph, but she prefers other glyphs that the shape difference is not negligible, B) He Yanxin gave no objection to the unification of the glyphs (preliminary proposed by WG2 N4533 mapping table) with similar shapes in PDAM, even if PDAM proposed them as different characters. To process these glyphs, the unification rule about the Nushu characters is needed.
- D:** Delete from Amd. 2, because He Yanxin could not identify. To process these glyphs, the discussion is needed to stabilize the criteria how "wrongly shaped character" should be detected.

In summary, there are 21 characters to be fixed (F), 16 characters to be postponed (V) and 17 characters to be deleted (D). Thus, the total number of the problematic glyphs (54) might be more than 10% of the character set. It should be noted that the stability evaluation by Japanese experts is only done by the comparison between PDAM2 character set and the glyph collection for only 1 Nushu successor. If we consider more materials to evaluate the cross section for better safety, the number of the problematic glyphs would be more than 10%.

3. Discussion on the Collation

Considering that the character names are immutable, Nushu ad-Hoc group resolved to remove the phonetic values from the character names in WG2 #62. However, there is no arguable alternative to

determine the code positions for Nushu characters, PDAM2 code positions are again drafted by the total stroke count and the phonetic value proposed by Professor Zhao.

Japanese experts agree to use the total stroke count as the major key, and discuss about the minor key to collate Nushu characters without the assumptions about the phonetic value or corresponding Hanzi. There are a few Nushu glyph lists using the glyph shape in the ordering (e.g. Gong Zhebing's "Nushu Zubian" glyph list published in 1991, Orié Endo's "He Yanxin glyph list" published in 2002, Xie Zhiming's "Zhongguo Nuzi Zidian" published in 2009), but the clear definition of the radical system is only found in Xie's work. Suzuki tried to apply Xie's radical system to PDAM2 character set, but it was found that Xie's rule to select a radical is too unclear, especially for the radicals whose total stroke count is one or two. Considering that Tangut experts decided to use the schematic selection rule to pick a radical regardless of their semantics, further discussion is needed to form the consensus about the shape based collation for Nushu.

Also the rule to count the total stroke should be clarified. There are almost same glyphs with different total stroke counts:

U+1B120  (SC=4) versus U+1B167  (SC=5), and

U+1B193  (SC=6) versus U+1B1B2  (SC=7).

4. Acknowledgement

The discussion for the criteria for safer character set is extremely helped by Orié Endo and Deborah Anderson. The interview with He Yanxin to review WG2 N4533 mapping table is processed by Liu Ying. This work is supported by JSPS KAKENHI grant number 24500116, 26330377.

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Appendix A: Unsafe Characters in Nushu code chart in ISO/IEC 10646:2014 PDAM2

	1B10	1B11	1B12	1B13	1B14	1B15	1B16	1B17	1B18	1B19	1B1A	1B1B	1B1C
0			V		V	V	D			(UU009)	V	F	
	1B100	1B110	M032 1B120	1B130	M063 1B140	M076 1B150	M090 1B160	1B170	1B180	(UU009) 1B190	M146 1B1A0	M159 1B1B0	1B1C0
1								M105		F			M172
	1B101	1B111	1B121	1B131	1B141	1B151	1B161	M105 1B171	1B181	M134 1B191	1B1A1	1B1B1	M172 1B1C1
2							M092	M106				V	(UU016)
	1B102	1B112	1B122	1B132	1B142	1B152	M092 1B162	M106 1B172	1B182	1B192	1B1A2	M136 1B1B2	(UU016) 1B1C2
3				M050				M107	V	M136			
	1B103	1B113	1B123	M050 1B133	1B143	1B153	1B163	M107 1B173	M115 1B183	M136 1B193	1B1A3	1B1B3	1B1C3
4					(UU003)				F	D		M162	(UU017)
	1B104	1B114	1B124	1B134	(UU003) 1B144	1B154	1B164	1B174	M123 1B184	UU010 1B194	1B1A4	M162 1B1B4	(UU017) 1B1C4
5		M022	V				(UU007)			M053		M163	F
	1B105	M022 1B115	M037 1B125	1B135	1B145	1B155	(UU007) 1B165	1B175	1B185	M053 1B195	1B1A5	M163 1B1B5	UU018 1B1C5
6				M053		(UU006)							
	1B106	1B116	1B126	M053 1B136	1B146	(UU006) 1B156	1B166	1B176	1B186	1B196	1B1A6	1B1B6	1B1C6
7					(UU004)	M082	V			(UU011)			M255
	1B107	1B117	1B127	1B137	(UU004) 1B147	M082 1B157	M096 1B167	1B177	1B187	(UU011) 1B197	1B1A7	1B1B7	M255 1B1C7
8		D	(UU002)		M069	M082							(UU019)
	1B108	M025 1B118	(UU002) 1B128	1B138	M069 1B148	M082 1B158	1B168	1B178	1B188	1B198	1B1A8	1B1B8	(UU019) 1B1C8
9	F				F			M113	(UU008)				F
	M010 1B109	1B119	1B129	1B139	UU005 1B149	1B159	1B169	M113 1B179	(UU008) 1B189	1B199	1B1A9	1B1B9	UU020 1B1C9
A					F						M156		
	1B10A	1B11A	1B12A	1B13A	M070 1B14A	1B15A	1B16A	1B17A	1B18A	1B19A	M156 1B1AA	1B1BA	1B1CA
B				F	M071			M115	V			(UU014)	F
	1B10B	1B11B	1B12B	M058 1B13B	M071 1B14B	1B15B	1B16B	M115 1B17B	M129 1B18B	1B19B	1B1AB	(UU014) 1B1BB	M177 1B1CB
C				F									
	1B10C	1B11C	1B12C	M059 1B13C	1B14C	1B15C	1B16C	1B17C	1B18C	1B19C	1B1AC	1B1BC	1B1CC
D	M014								M131		D	(UU015)	(UU021)
	M014 1B10D	1B11D	1B12D	1B13D	1B14D	1B15D	1B16D	1B17D	M131 1B18D	1B19D	UU012 1B1AD	(UU015) 1B1BD	(UU021) 1B1CD
E			M045								F	M156	D
	1B10E	1B11E	M045 1B12E	1B13E	1B14E	1B15E	1B16E	1B17E	1B18E	1B19E	M159 1B1AE	M156 1B1BE	1B1CE
F		(UU001)				F					F	M170	(UU022)
	1B10F	(UU001) 1B11F	1B12F	1B13F	1B14F	M089 1B15F	1B16F	1B17F	1B18F	1B19F	UU013 1B1AF	M170 1B1BF	(UU022) 1B1CF

F: representative glyph should be fixed
V: to be postponed for future discussion on the variations
D: to be deleted because He Yanxin could not identify

	1B1D	1B1E	1B1F	1B20	1B21	1B22	1B23	1B24	1B25	1B26	1B27	1B28
0	 1B1D0	 1B1E0	 1B1F0	 1B200	 1B210	 1B220 M242	 1B230	 1B240 M264	 1B250	 1B260 M286	 1B270	 1B280
1	 1B1D1 (UU023)	 1B1E1	 1B1F1 M206	 1B201 (UU028)	 1B211	 1B221 UU036	 1B231	 1B241	 1B251 UU049	 1B261	 1B271	 1B281
2	 1B1D2 M177	 1B1E2	 1B1F2	 1B202	 1B212	 1B222	 1B232 M254	 1B242	 1B252 (UU050)	 1B262	 1B272 (UU058)	 1B282
3	 1B1D3	 1B1E3 (UU025)	 1B1F3	 1B203	 1B213 (UU032)	 1B223 M244	 1B233 M255	 1B243 (UU044)	 1B253 M276	 1B263 (UU053)	 1B273 (UU059)	 1B283
4	 1B1D4	 1B1E4 M195	 1B1F4	 1B204	 1B214 M234	 1B224 UU037	 1B234 M217	 1B244	 1B254 (UU051)	 1B264 (UU054)	 1B274	 1B284
5	 1B1D5	 1B1E5	 1B1F5 UU027	 1B205 (UU029)	 1B215	 1B225 (UU038)	 1B235	 1B245	 1B255	 1B265	 1B275 (UU060)	 1B285
6	 1B1D6 M184	 1B1E6	 1B1F6	 1B206 (UU030)	 1B216	 1B226	 1B236	 1B246 (UU045)	 1B256	 1B266	 1B276 (UU061)	 1B286 (UU063)
7	 1B1D7	 1B1E7 (UU026)	 1B1F7	 1B207 (UU031)	 1B217	 1B227	 1B237	 1B247 (UU046)	 1B257	 1B267	 1B277	 1B287 M313
8	 1B1D8	 1B1E8 M195	 1B1F8	 1B208	 1B218	 1B228 M234 (JB226)	 1B238	 1B248	 1B258	 1B268 (UU055)	 1B278	 1B288
9	 1B1D9	 1B1E9	 1B1F9 M199	 1B209	 1B219 (UU033)	 1B229 (UU040)	 1B239	 1B249	 1B259	 1B269 (UU056)	 1B279	 1B289 M315
A	 1B1DA	 1B1EA M199	 1B1FA	 1B20A	 1B21A UU034	 1B22A M247	 1B23A	 1B24A (UU047)	 1B25A M146	 1B26A	 1B27A (UU062)	 1B28A
B	 1B1DB	 1B1EB	 1B1FB	 1B20B	 1B21B	 1B22B	 1B23B	 1B24B	 1B25B	 1B26B	 1B27B M276	 1B28B
C	 1B1DC (UU024)	 1B1EC	 1B1FC	 1B20C	 1B21C M131	 1B22C UU041	 1B23C (UU042)	 1B24C	 1B25C	 1B26C	 1B27C	 1B28C M313
D	 1B1DD M163	 1B1ED	 1B1FD	 1B20D	 1B21D M240	 1B22D	 1B23D M247	 1B24D (UU048)	 1B25D	 1B26D (UU057)	 1B27D	 1B28D
E	 1B1DE	 1B1EE	 1B1FE M217	 1B20E	 1B21E (UU035)	 1B22E	 1B23E	 1B24E M273	 1B25E UU052	 1B26E	 1B27E M305	 1B28E
F	 1B1DF	 1B1EF	 1B1FF	 1B20F	 1B21F M241	 1B22F	 1B23F UU043	 1B24F	 1B25F	 1B26F	 1B27F	 1B28F

F: representative glyph should be fixed

V: to be postponed for future discussion on the variations

D: to be deleted because He Yanxin could not identify

Appendix B: He Yanxin’s review on WG2 N4533 Mapping between PDAM1 and “HYX glyph list”, and background of proposed changes to PDAM2

Via the interview of Liu Ying (Seijo University, Tokyo, Japan), He Yanxin, the native successor of Nushu, reviewed the mapping table in WG2 N4533 (map between ISO/IEC 10646:2014 PDAM1 and Orié Endo’s “He Yanxin glyph list”) and gave many comments. This list summarizes the comments from HYX. The wording rules in this list follows:

- In the discussion, several abbreviations are used for the references.
 - “Endo2002” is the list at p.252 – 332 of “中国女文字研究 (Chuugoku Onna Moji Kenkyu)” by 遠藤織枝 (Endo Orié), 2002, ISBN 978-4-625-48300-4.
 - “Yongzi Bijiao” is “女書用字比較 (Nushu Yongzi Bijiao)” by 趙麗明 (Zhao Liming), 2006, ISBN 7-80198-261-4.
 - “Zhou2002” is “女書字典 (Nushu Zidian)” by 周碩沂 (Zhou Shouyi), 2002, ISBN 978-7-80665-234-3
 - “Xie2009” is “中国女字字典 (Zhongguo Nuzi Zidian)” by 謝志民 (Xie Zhiming), 2009, ISBN 978-7-105-09963-4
 - “Gong1991” is the list at p. 317-337 of “女書 - 世界唯一的女性文字 (Nu shu : shi jie wei yi de nu xing wen zi)” by 宮哲兵 (Gong Zhebing), 1991, ISBN 978-9-579-27505-7.
- The number in the most left cell is the ID for the mapping table. The first alphabet means the type of map. The following number is a simple sequence number. “M” and “UU” items are sorted by PDAM1 code position, “UH” items are sorted by the item number in HYX glyph list.
 - M means “mappable items”
 - UU means “Unmappable UCS character” (character found in PDAM1 only)
 - UH means “Unmappable HYX glyph” (glyph found in HYX glyph list only)
- The name “PDAM U+1Bxxx” is used to point the representative glyph in ISO/IEC 10646:2014 PDAM1 (exactly same with that in PDAM2) at the codepoint U+1Bxxx.
- The name “HYX-ddd” is used to point the glyph in Endo2002, the number (ddd) is the index number in the list sorted by the total stroke number (Endo2002 has another list sorted by the phonetic value)
- When Endo2002 shows multiple glyphs for same row (see Figure 1), the name “HYX-dddA” “HYX-dddB” etc are used. The most left glyph is “HYX-dddA”, the right neighborhood of A is B, etc.

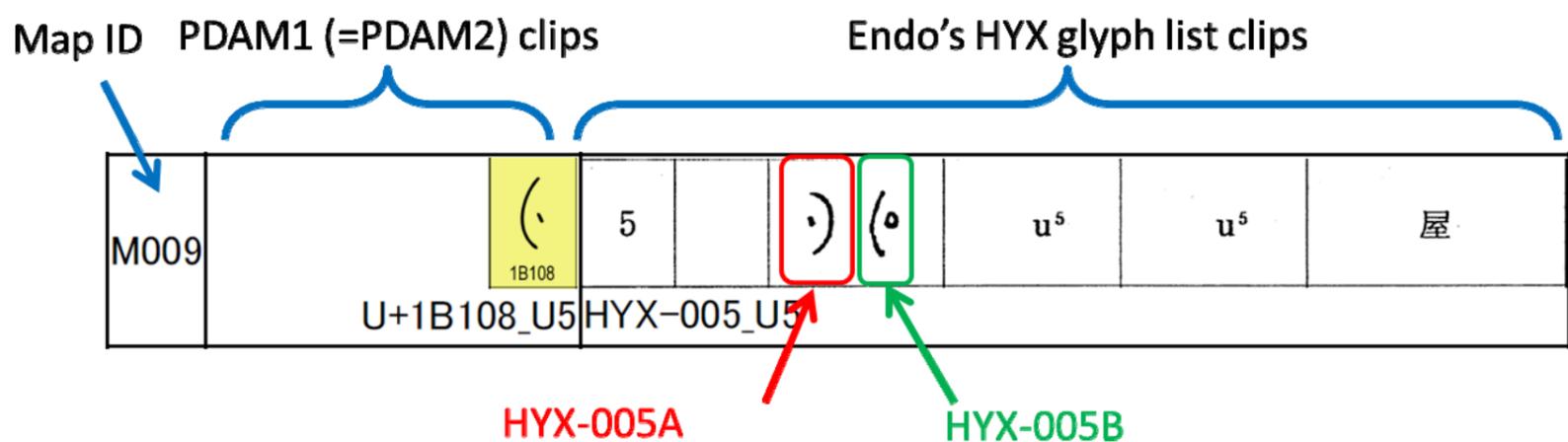


Figure 1: HYX glyph numbering rule in HYX review comment

- In the discussion, Yongzi Bijiao often quoted to discuss whether the character is widely used by many Nushu users (see Figure 2). For shorter reference, the column is referred by the author of the material, like, “anonymous”, “Gao” etc. Exceptionally, “He Yanxin” is noted as HYX to disambiguate.
 - “all named Nushu successors” means the columns from Gao Yinxian to He Yanxin.
 - “all users” means the columns from anonymous to He Yanxin.

Phonetic Value	Corresponding Hanzi identified by Zhao	Glyphs sampled from anonymous materials	Glyphs sampled from Gao Yinxian (高銀仙)	Glyphs sampled from Yi Nianhua (義年華)	Glyphs sampled from Yang Huanyi (陽煥宜)	Glyphs sampled from He Yanxin (何艷新)
ai ⁴⁴	恩	恩 21 恩 12 恩 8 恩 4	恩 38 恩 6	恩 26 恩 1	恩 7 恩 5	恩 1 恩 5

Figure 2: Yongzi Bijiao table structure

- Most comments from HYX were very short, so the analysis note by suzuki toshiya are added. The bold text is the comment by HYX, and regular text after “NOTE” or “Discussion” is not (see Figure 3).

WG2 N4533 Clips reviewed by HYX

HYX review comment

M014		12	3		ts'w ²¹	ts'wə ²¹	次
U+1B10D_Tchye5 HYX-012_Tswe21							

M014·U+1B10D → HYX-012 → **The pair are different characters, should not be unified.**

NOTE: HYX could identify both glyphs, and gave the objection to the unification. Because HYX could identify it, **PDAM U+1B10D is acceptable to keep in the first core set for Nushu,** although its portability is not so wide (Yang did not use it). HYX-012 or similar glyphs in Tshwe35 of Yongzi Bijiao should be discussed in future extension.

tc'ya ⁵	尺				
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Review analysis by suzuki toshiya **Proposed change to PDAM2**

Figure 3: HYX review comment and proposed change to PDAM2

- In the note by suzuki toshiya, the evaluation “keep in the first core set of Nushu, or postpone to the future extension of Nushu” is decided by the cross sectional policy. More studies and discussions are needed to decide the inclusion of the characters which used by a small number of the users. If the standardization is needed

before such discussion, the standardization with a “core” set of the characters interchanged by many users would be safe. The distillation of the “core” set by the mapping table and HYX review comment is following.

- Rules for UH glyphs (which exists in Endo2002 but not in PDAM)
 - ✧ UH glyphs are not included at all.
- Rules for UU glyphs (which exists in PDAM but not in Endo2002)
 - ✧ If HYX could identify it in the interview, it is processed in the same way with the glyphs included in Endo2002.
 - ✓ If HYX did not give different glyph as more preferred glyph, the identified UU glyph is acceptable to keep in the first core set for Nushu. **EXAMPLE: U+1B11F (UU001, no mark for proposed change)**
 - ✓ If HYX gave different glyph as more preferred one but the shape difference is not so significant and not coded separately, the UU character is acceptable to keep in the first core set for Nushu, but the representative shape of the UU glyph should be replaced by the glyph preferred by HYX. **EXAMPLE: U+1B1C5 (UU018, marked as “F”)**
 - ✓ If HYX gave different glyph as more preferred one and the shape difference is significant, the UU glyph is acceptable to keep in the first core set for Nushu. **EXAMPLE: U+1B251 (UU049, no mark for proposed change)**
 - ✧ If HYX could not identify an UU glyph in the interview, its existence in HYX column in Yongzi Bijiao is not regarded as a sufficient evidence to include it in the first core set of Nushu. In most cases, such glyphs are found at low frequency and there is a possibility that HYX wrote a wrong glyph.
 - ✓ If all columns including the corresponding Hanzi have similar glyphs at recognizable frequency (> 10), then the glyph is regarded as portable and stable. In this case, the glyph is acceptable to keep in the first core set of Nushu, even if Endo2002 lacks and HYX could not identify. **No example**
 - ✓ If a similar glyph is found in HYX column of Yongzi Bijiao, the PDAM character is acceptable to keep in the first core set for Nushu, but the representative shape of the PDAM glyph should be replaced by the glyph found in HYX column of Yongzi Bijiao. **EXAMPLE: U+1B149 (UU005, marked as “F”)**
 - ✓ If the evidence is regarded as insufficient (too few evidence or too many different glyphs), the UU character is postponed for future extension. **EXAMPLE: U+1B194 (UU010, marked as “D”)**
- Rules for M glyphs (mappable relationship is considered between PDAM2 and Endo2002)
 - ✧ If HYX could identify the mapped glyphs (in Mddd item), gave no objection with the mapping and the shape difference is not so significant, PDAM character is acceptable to keep in the first core set of Nushu. **EXAMPLE: U+1B12E (M045, no make for proposed change)**
 - ✓ If HYX gave a preference (e.g. HYX-ddd is preferred), HYX preference is prioritized for the consistent design policy. **EXAMPLE: U+1B13B (M058, marked as “F”)**

- ✧ If HYX could identify the mapped glyphs (in Mddd item), and gave no objection with the mapping, but the shape difference is remarkably significant, it should be postponed until the stabilization of the shape unification rule for Nushu. **EXAMPLE: U+1B125 (M037, marked as “V”)**
 - ✓ Exceptionally, if PDAM glyph is commented as “preferred” or “more portable”, PDAM glyph is accepted to keep in the first core set for Nushu. **EXAMPLE: U+1B133 (M050, no mark for proposed change)**
- ✧ If HYX could identify the mapped glyphs, but gave an objection to unify them (e.g. their semantics are different), PDAM glyph is acceptable to keep in the first core set of Nushu, as far as sufficient number of the evidences are found in Yongzi Bijiao. **EXAMPLE: U+1B171 (M105, no mark for proposed change)** but HYX glyph is postponed for future extension. **EXAMPLE: HYX-100 (M105)**
 - ✓ If the evidences in Yongzi Bijiao are too few to discuss the semantics, PDAM glyph is postponed for future extension. **EXAMPLE: U+1B150 (M076, marked as “V”)**
- ✧ If HYX could not identify some glyphs in the mapping (in Mddd item), the identified glyph is dealt as UU or UH glyph.
 - ✓ If sufficient evidence is found in Yongzi Bijiao, PDAM glyph is acceptable to keep in the first core set for Nushu. If HYX glyph is given or found in HYX column of Yongzi Bijiao, the representative glyph for PDAM character should be replaced by HYX glyph. **EXAMPLE: U+1B1BF (M170, marked as “F”)**
 - ✓ If sufficient evidence is not found in Yongzi Bijiao, PDAM glyph is postponed for future extension. **EXAMPLE: U+1B173 (M107, marked as “V”)**

M010		15		cya ³⁵	cya ³⁵	水 冷~
U+1B109_Cya35 HYX-015_Cya35						

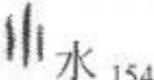
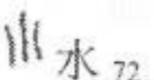
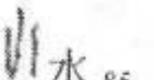
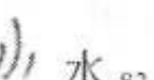
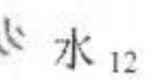
M010 U+1B109 HYX-015 The curling direction like PDAM U+1B109 is preferred.

NOTE: HYX could identify both glyphs, and gave no objection to the unification of them. In the interview, HYX

gave a sample of preferred glyph as



. Thus, the representative glyph of U+1B109 should be modified to align all 3 curls.

cya ³⁵	水	 水 30	 水 154	 水 72	 水 85	 水 83
cya ³³	睡 迷 瑞					 水 12

Nushu characters with phonetic values Cya35 in Yongzi Bijiao

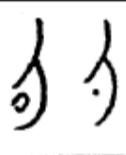
M014		12	3		ts'w ²¹	ts'wə ²¹	次
U+1B10D_Tchye5		HYX-012_Tswe21					

M014 U+1B10D HYX-012 The pair are different characters, should not be unified.

NOTE: HYX could identify both glyphs, and gave the objection to the unification. Because HYX could identify it, PDAM U+1B10D is acceptable to keep in the first core set for Nushu, although its portability is not so wide (Yang did not use it). HYX-012 or similar glyphs in Tshwe35 of Yongzi Bijiao should be discussed in future extension.

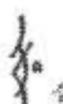
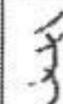
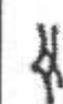
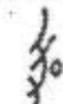
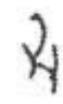
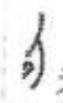
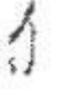
tc'yə ⁵	尺	 尺 ₄	 尺 ₄	 尺 ₄	 尺 ₇	
ts'wə ³ 5	齿 耻 侈 此	 此 ₄₆	 此 ₇₅	 此 ₃₂	 此 ₈₅	 此 ₄₂ 齿 ₃
		 此 ₁₂	 齿 ₄	 齿 ₁		
		 此 ₂	 耻 ₁			
		 此 ₁				
		 此 ₁				

Nushu characters with phonetic values Tchye5 and Tshwe35 in Yongzi Bijiao

M022		43		k'au ³⁵	k'ou ³⁵	可 ~以
U+1B115_Khau21		HYX-043_Khou35				

M022 U+1B115 HYX-043 HYX-043A is different character (k'au⁵: 确)

NOTE: HYX could identify all 3 glyphs. Endo had originally thought the shape difference between the circle (in HYX-043A) and the dot (PDAM U+1B115, HYX-043B), but HYX commented HYX-043A and B have different semantics and should not be unified. However, no objection is given to the unification of PDAM U+1B115 and HYX-043B, PDAM U+1B115 is acceptable to keep in the first core set of Nushu. However, it should be noted that PDAM U+1B115 is not the most frequent shape to note the pronunciation Khau21, according to Yongzi Bijiao. The glyph looking like PDAM U+1B115 is found only twice in the anonymous materials. On the other hand, the entries Khau35, Khou35 and Khou5 include more evidences for U+1B115 shapes.

k'au ²¹	靠 铐 □ (~鸭, 杂 交鸭)	 靠 14  靠 2  靠 1	 靠 26  靠 1  靠 1	 靠 52  靠 8	 靠 17  靠 1  靠 1  靠 1	 靠 14  靠 1
k'au ³⁵	考 烤	 考 1	 考 7  考 3	 考 2	 考 2  考 1	 考 7  考 1  考 2
k'ou ³⁵	可 口 (文 读)	 可 148  可 85  可 15	 可 160	 可 156	 可 225	 可 136

Nushu characters with phonetic values Khau21, Khau35 and Khou35 in Yongzi Bijiao

k'ou ⁵	确壳扩 霍霍□ (穿得阔 气)		 确 ₃ 扩 ₁  壳 ₁	 确 ₃  扩 ₁		 确 ₄  壳 ₁₁
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Nushu characters with phonetic value Khou5 in Nushu Yongzi Bijiao

M025		10		liɔŋ ³³	liɔŋ ⁴⁴	钉 ~子
U+1B118_Liang35 HYX-010_Liong44						

M025 U+1B118 HYX-010 PDAM U+1B118 is unknown

NOTE: HYX could not identify PDAM U+1B118. According to Yongzi Bijiao, PDAM U+1B118 is used by all Nushu users. However, most Nushu users used U+1B118 quite rarely (Yi often used PDAM U+1B118 exceptionally). There might be a few possibilities; the glyph design of PDAM U+1B118 in PDAM2 is out of the acceptable variant for HYX, or, some contextual information is needed for HYX to identify PDAM U+1B118. In summary, PDAM U+1B118 should be postponed for future extension.

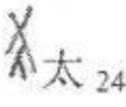
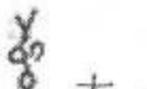
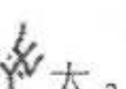
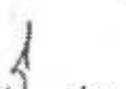
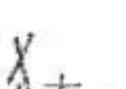
lian ³⁵	两 (几~ 几钱)	 两 ₈₁	 两 ₁₅₁	 两 ₁₆₄	 两 ₅₈	 两 ₇₅
		 两 ₁₁	 两 ₂₁	 两 ₆₈	 两 ₈	 两 ₅₁
			 两 ₂			 两 ₃
			 两 ₁			

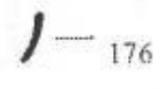
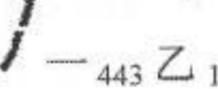
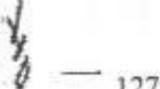
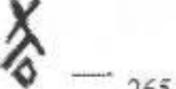
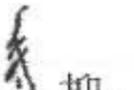
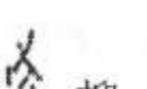
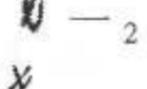
Nushu characters with phonetic value Liang35 in Yongzi Bijiao

M032		36	4		t'ɔ ²¹	t'ø ²¹	太
U+1B120_Thoe21		HYX-036_Thoe21					

M032 U+1B120 HYX-036 PDAM U+1B120 means “one (一)”, but HYX-036 glyph is different.

NOTE: HYX could identify both glyphs, and gave the objection to the unification of them. According to Yongzi Bijiao, no Nushu successors used the circle for HYX-036 shape with phonetic value Thoe21. On the other hand, PDAM U+1B120 glyph is found in the entry for phonetic value I5. Although PDAM U+1B120 glyph is not found in anonymous materials, all named Nushu successors used PDAM U+1B120 glyph to mean “one (一)”, and they always use the circle.

t'ø ²¹	太 态 泰		 太 ₃₄	 太 ₂₄	 太 ₁₀	 太 ₁₀
			 太 ₉		 太 ₆	 太 ₄
			 太 ₁		 太 ₁	 太 ₂
					 太 ₁	 太 ₁

i ⁵	一 抑 乙 揖 逸 译 奕 液 醅	 一 ₁₇₆	 一 ₄₁₂	 一 ₄₄₃ 乙 ₁	 一 ₂₄₉	 一 ₄₂₇ 乙 ₁
		 一 ₁₂₇	 一 ₃₉₀ 乙 ₁	 一 ₂₆₅	 一 ₁₉₇	 一 ₈₅
		 抑 ₁₀	 抑 ₁	 抑 ₁	 抑 ₆	 抑 ₁
		 抑 ₇				
		 抑 ₄	 揖 ₁			
		 一 ₂				
		 一 ₁				
		 抑 ₁				
		 抑 ₁				

Nushu characters with phonetic values Thoe21 and I5 in Yongzi Bijiao

It should be noted that PDAM U+1B120 glyph is not found for I5 in anonymous materials, but found for Liang33. All named Nushu successors never used PDAM U+1B120 glyph for Liang33. There might be a concern that Yongzi Bijiao used inconsistent transliteration or statistic processing rule. In summary, it is difficult to determine immediately which glyph (U+1B120 or HYX-036) is more stable. Thus PDAM U+1B120 should be postponed for further discussion about the stable and portable glyph shape.

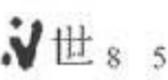
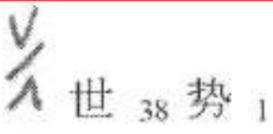
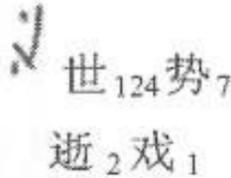
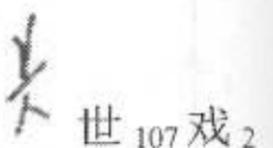
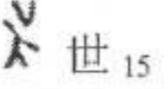
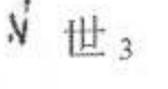
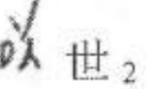
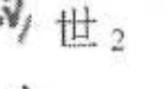
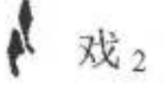
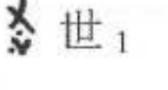
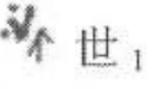
lian ³³	亮 谅 量 (数~)	 谅 43  亮 5  亮 2  量 31	 量 39  亮 13  谅 19  亮 11  亮 1	 量 45  亮 4  亮 3  谅 11	 亮 8  亮 5  谅 9  量 1	 量 28  亮 13  亮 6  谅 6  量 1
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Nushu characters with phonetic value Liang33 in Yongzi Bijiao

M037		229		ci ²¹	ci ²¹	世~界、戏、势
	U+1B125_Ci21	HYX-229_Ci21				

M037 U+1B125 HYX-229 **HYX-229B is more popular than PDAM glyph.**

NOTE: HYX could identify all 3 glyphs, and find no semantic difference. According to Yongzi Bijiao Ci21 entry, HYX uses HYX-229B only, but Yang used PDAM U+1B125 glyph. Gao used both, but Yi used yet another shape looking like a conjunct shape of PDAM U+1B125 and HYX-229B. Apparently more discussion is needed to determine the most representative glyph for Ci21 meaning “世”, or encoding all shapes separately, or introduce variation selector. Thus, PDAM U+1B125 should be postponed for further discussion about the stable and portable glyph shape.

ci ²¹	世 戏 势 逝	 世 ₈ 5	 世 ₃₈ 势 ₁ 戏 ₁₃	 世 ₁₃₆ 戏 ₄ 势 ₁	 世 ₁₂₄ 势 ₇ 逝 ₂ 戏 ₁	 世 ₁₀₇ 戏 ₂
		 世 ₁₅	 世 ₉₇			
		 世 ₃				
		 世 ₂				
		 世 ₂				
		 戏 ₂				
		 世 ₁				
		 世 ₁				

Nushu characters with phonetic value Ci21 in Yongzi Bijiao

M045	 U+1B12E_Liou33	Not listed in Endo 2002, but found in recent survey
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M045 U+1B12E (missing) PDAM U+1B12E is known.

NOTE: Although PDAM U+1B12E is missing in Endo2002, Endo sampled a glyph looking like PDAM U+1B12E as the character meaning “six (六)”. It is consistent with Yongzi Bijiao’s Liou33 entry, PDAM U+1B12E was also used by HYX. Thus, PDAM U+1B12E is acceptable to keep the first core set of Nushu.

liou ³³	六略陆 掠	 六 ₃₃ 略 ₂	 六 ₁₁₉ 略 ₁	 六 ₁₃₁ 略 ₄  陆 ₂	 六 ₁₄₀	 六 ₆₇
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Nushu characters with phonetic value Liou33 in Yongzi Bijiao

M050		172		van ⁴²	van ⁴²	亡
U+1B133_Vang42 HYX-172_Vang42						

M050 U+1B133 HYX-172 PDAM U+1B133 is preferred.

NOTE: HYX could identify both glyphs and gave no objection with the unification of PDAM U+1B133 and HYX-172. HYX comment is consistent with Yongzi Bijiao; HYX-172 glyph is found in Yi, but not in HYX materials. In summary, PDAM U+1B133 is acceptable to keep the first core set for Nushu. However, the glyph shape of U+1B133 is slightly different from any glyphs in Yongzi Bijiao; it looks like as an intermediate shape between Gao's third (or Yi's second) and HYX's third glyph, and the portability of PDAM U+1B133 is questionable.

van ⁴²	頑玩亡 忘	 亡 ₂  忘 ₁	 玩 ₂  玩 ₁  亡 ₇  亡 ₂  忘 ₁  忘 ₃  忘 ₁	 忘 ₉  亡 ₄  亡 ₁	 亡 ₁	 玩 ₂  忘 ₃ 亡 ₁  亡 ₁ 忘 ₁  忘 ₁  忘 ₁
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Nushu characters with phonetic value Vang42 in Yongzi Bijiao

M053			34		t'əŋ ³³	t'əŋ ⁴⁴	天 ~上
	U+1B136_Theng44 U+1B195_Uow33		HYX-034_Tsheng44				

M053 U+1B136,U+1B195 HYX-034 PDAM U+1B195 means “万”, should not be unified with PDAM U+1B136 nor HYX-034

NOTE: HYX could identify all 3 glyphs, and gave no objection to the unification of PDAM U+1B136 and HYX-034. Therefore, PDAM U+1B136 is acceptable to keep in the first core set for Nushu.

According to Yongzi Bijiao Uow33 entry, the most preferred glyph for “万 (ten thousand, innumerable)” is dependent with the authors, but no Nushu successors could not identify PDAM U+1B195. Therefore PDAM U+1B195 is acceptable to keep in the first core set for Nushu. However, Yang’s shape is slightly different from PDAM U+1B195, so further discussion is needed if there is a requirement to encode such variants separately.

t'əŋ ⁴⁴	天添					

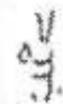
uouu ³³	万□ (床 栏) □ (椅~, 掌)					

Nushu characters with phonetic values Theng44 and Uow33 in Yongzi Bijiao

M058	 1B13B	226		tɕ'ya ³³	tɕ'ya ⁴⁴	吹
U+1B13B_Tchya44 HYX-226_Tchya44						

M058 U+1B13B HYX-226 HYX-226 glyph is preferred.

NOTE: HYX could identify both glyphs and gave no objection to the unification of PDAM U+1B13B and HYX-226. According to Yongzi Bijiao Tcya44 entry, PDAM U+1B13B glyph is different from any of most preferred glyph by named Nushu successors. HYX and Gao prefer HYX-226, Yi and Yang prefer yet another shape. Counting the frequency, HYX/Gao's most preferred glyph is the most frequent (13+3+34=50), Yi/Yang's most preferred glyph is the second frequent (4+18=22), and PDAM U+1B13B is the third frequent (5+1+3+2+1=12). As far as the glyph shape difference is insufficient to encode each glyph separately, the representative glyph for PDAM U+1B13B should be replaced by HYX-226 for consistent design policy.

tɕ'ya ⁴⁴	吹炊	 吹 5	 吹 13  吹 2  吹 1  吹 1	 吹 4  吹 3  吹 3	 吹 18  吹 4  吹 2  吹 1  吹 1	 吹 34  吹 1  吹 1
tɕ'ya ⁴⁴	昆昆					

Nushu characters with phonetic value Tchya44 in Yongzi Bijiao

M059		85		ɕya ⁵	ɕya ⁵	出
U+1B13C_Cya5		HYX-085_Cya5				

M059 U+1B13C HYX-085 HYX-085 glyph is preferred.

NOTE: HYX could identify both glyphs and gave no objection to the unification of them, although the glyph shapes of PDAM U+1B13C and HYX-085 are not so clear to take as unifiable. In fact, according to Yongzi Bijiao Cya5 entry, this character is often rotated and the most preferred shape is dependent with the authors. As far as the glyph shape difference is insufficient to encode them separately, the representative glyph for PDAM U+1B13C should be replaced by HYX-085 for consistent glyph design policy. Also it should be noted that current glyph shape for U+1B13C is questionable whether the total stroke count is clearly 5 (the total stroke count for HYX-085 is clearly 5). In fact, Gong1991 counts the total stroke number of current representative glyph for U+1B13C as 7.

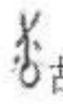
ɕya ⁵	出成	 出 1 25	 出 245	 出 224	 出 175	 出 111
		 出 14	 出 6	 出 8	 出 3	 出 65
			  出 4	 出 4	 出 1	 出 23
			 出 3	 出 2		 出 2
			 出 1	 出 2		 出 2
			 出 1			 出 1

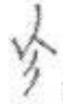
Nushu characters with phonetic value Cya5 in Yongzi Bijiao

M063		69		ku ²¹	ku ²¹	顾
U+1B140_Tchie44 HYX-069_Ku21						

M063 U+1B140 HYX-069 HYX-069 glyph is preferred.

NOTE: HYX could identify both glyphs and gave no objection to the unification of them. However, according to Yongzi Bijiao Ku21 and Tchie44 entries, the distinction between PDAM U+1B140 and HYX-069 seems to exist even in HYX materials. It is supposed that HYX evaluated the glyph shape from the viewpoint for the character to mean “願”. Anyway, the preferred glyph shape for Tchie44 is dependent with the authors (there is a possibility that Yi and Yang could not identify PDAM U+1B140 as Tchie44) and the frequency of Tchie44 is low, PDAM U+1B140 should be postponed to future extension. Also, HYX-069 should be postponed either, because HYX-069 is used by Yi and HYX.

ku ²¹	过 顾 故 固 雇	 过 166 顾 8 故 1	 过 109  过 95 顾 5 故 4 雇 1 顾 4 过 2  顾 3 过 1 顾 3  故 1 固 1 过 1  过 1  过 1	 过 172 故 1 雇 1  顾 62  过 14  顾 2  过 1  过 1  顾 1	 过 255 故 2 顾 5	 过 153  顾 6  故 2 顾 5  顾 2  故 1  顾 1
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tc'ie ⁴⁴	钦称 (~ 重量)	 称 4  称 1	 称 1  称 1  称 1	 称 2	 称 2
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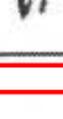
Nushu characters with phonetic values Ku21 and Tchie44 in Yongzi Bijiao

M069		113		t'əu ³³	t'əu ⁴⁴	他
	U+1B148_Twe33			t'u ³³	t'u ⁴⁴	
HYX-113_Thew44+Thu44						

M069 U+1B148 HYX-113 **HYX-113 glyph is preferred.**

NOTE: HYX could identify both glyphs and gave no objection to the unification of them. According to Yongzi Bijiao Twe33, Thu44 and Thew44, PDAM U+1B148 or HYX-113 glyphs are used by all Nushu users, and the shapes are almost interchangeable. For the consistent glyph design policy, the representative glyph for U+1B148 should be replaced by HYX-113.

tue ³³	他	 他 ₁₄	 他 ₁₁₆	 他 ₁₁₀	 他 ₉₇	 他 ₈₅
		 他 ₃				
		 他 ₁				

t'u ⁴⁴	他(文读)	 他 ₇₉	 他 ₁₀₇	 他 ₉₇	 他 ₈₉	 他 ₈₀
		 他 ₃₈				 他 ₄
		 他 ₁₁				
		 他 ₉				
		 他 ₈				
		 他 ₄				
		 他 ₂				

t'əu ⁴⁴	拖		 拖 ₁		 拖 ₁	 拖 ₁
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Nushu characters with phonetic values Twe33 and Thew44 in Yongzi Bijiao

M070		179	6		suw ⁴²	suw ⁴²	时
U+1B14A_Swe42		HYX-179_Swe42					

M070 U+1B14A HYX-179 HYX-179A is preferred.

NOTE: HYX could identify all 3 glyphs, and gave no objection to the unification of them. HYX commented HYX-179A as most preferred. In Yongzi Bijiao, HYX-179A is found in anonymous and Yi's materials too. If the glyphic difference (different number of the stroke) is not too distinctive to encode them separately (there is a possibility that Gao and Yang could not identify HYX-179 as Swe42), the representative glyph for U+1B14A should be replaced by HYX-179 for the consistent design policy. It should be noted that the replacement changes the stroke number of the character from 5 to 6.

suw ⁴²	时匙	 时 100	 时 250	 时 215	 时 221 匙 4	 时 128
		 时 86				
		 时 30				
		 时 8				
		 时 1				

Nushu characters with phonetic values Swe42 in Yongzi Bijiao

M071	 U+1B14B_Swe13	Not listed in Endo 2002, but found in recent survey
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M071 U+1B14B (missing) PDAM U+1B14B glyph is known.

NOTE: HYX could identify PDAM U+1B14B in the interview. According to Yongzi Bijiao, PDAM U+1B14B was found in all named Nushu successors and anonymous materials, without significant glyph difference, although the semantics is sometimes different (Gao never used PDAM U+1B14B to mean “是”). Therefore, PDAM U+1B14B is acceptable to keep in the first core set for Nushu.

sue ¹³	是 氏 士 仕	 是 291  是 22  是 3  是 2	 是 484  氏 149 士 11 仕 1	 是 361 氏 38 士 1 仕	 是 500 氏 22 士 5	 是 276 氏 47 士 1 仕 2
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Nushu characters with phonetic value Swe13 in Yongzi Bijiao

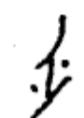
M076		238		ŋi ³³	ŋiu ³³	尿
	U+1B150_Njiu33 HYX-238_Njiu33					

M076 U+1B150 HYX-238 **The pair are different characters, should not be unified.**

NOTE: HYX could identify both glyphs and gave an objection to the unification because of semantic difference. According to Yongzi Bijiao, PDAM U+1B150 is used only by Gao and Yi. HYX gave no objection against the relationship between HYX-238 and its semantics “尿” (supposed by Endo). There is a possibility that HYX used PDAM U+1B150 for different semantics. Anyway, the frequency of (and the number of the authors using) PDAM U+1B150 is insufficient to discuss the stability of the character identity, PDAM U+1B150 should be postponed for future extension.

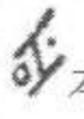
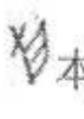
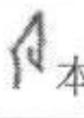
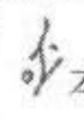
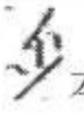
ŋiu ³³	尿		 尿 ₂	 尿 ₁		
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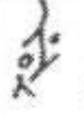
Nushu characters with phonetic value Njiu33 in Yongzi Bijiao

M082	 U+1B158_Pai35-A U+1B157_Pai35		62	5	 HYX-062_Pai35	pi ³⁵	pai ³⁵	本

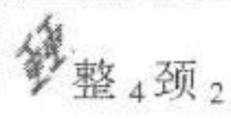
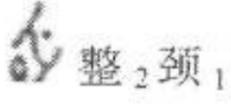
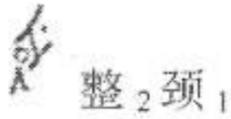
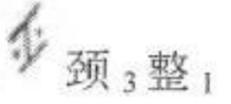
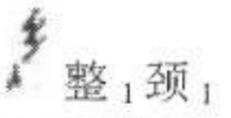
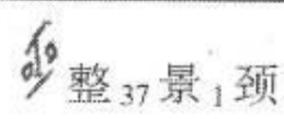
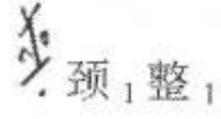
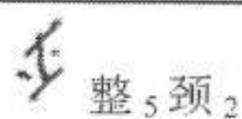
M082 U+1B157 HYX-062 PDAM U+1B157 is unknown.

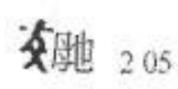
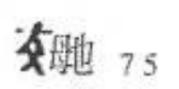
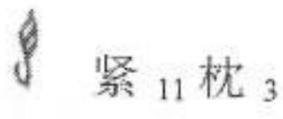
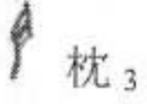
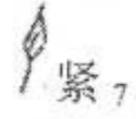
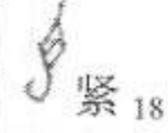
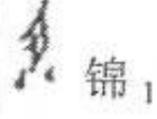
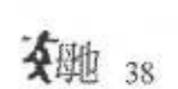
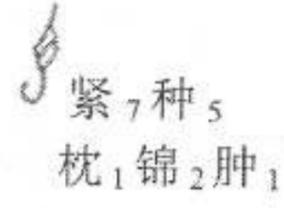
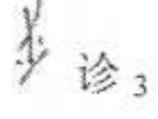
NOTE: HYX could identify PDAM U+1B158 and HYX-062 and gave no objection to the unification, but could not identify PDAM U+1B157. In Yongzi Bijiao Pai35 entry, PDAM U+1B157 is only found in anonymous materials, and no semantic distinction from PDAM U+1B158 is found. According to Nushu Duben, the possible phonetic values for PDAM U+1B157 are Pai35, Piu35, Tcie35. Strangely, no PDAM U+1B157 is found in Yongzi Bijiao Piu35 entry. In Tcie35 entry, U+1B157 is found in Yi and HYX materials. However, considering that other glyphs for Tciong35 are almost same with Pai35, it is suspicious whether PDAM U+1B157 and PDAM U+1B158 are intentionally distinguished. Considering the low frequency (< 5), there is a possibility that Yongzi Bijiao sampled unintentionally malformed glyphs. In summary, PDAM U+1B158 is acceptable to keep in the first core set for Nushu, but PDAM U+1B157 should be postponed for future extension.

pai ³⁵	本乘稟 □(下陷)	 本 63  本 34	 本 57  本 35  本 9  本 1  本 1	 本 91  本 10	 本 71	 本 50  本 11  本 2
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piu ³⁵	表錶裱 婁	 表 15	 表 1
		 表 1	
		 表 1	

Nushu characters with phonetic values Pai35 and Piu35 Yongzi Bijiao

tcioŋ ³⁵	整颈景	 整 3	 整 4 颈 2  整 2 颈 1  整 2 颈 1  颈 3 整 1  整 1 颈 1	 整 37 景 1 颈 1  颈 1 整 1  整 1	 整 5 颈 2  整 1  颈 1	 整 5  整 1  整 1  颈 1
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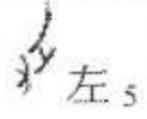
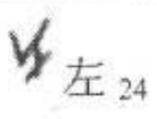
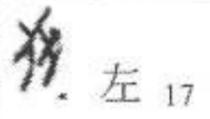
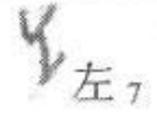
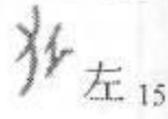
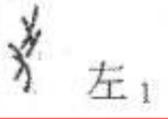
tcie ³⁵	驰紧枕 诊锦 种(~类) 肿谨检 冢	 驰 2 05  紧 18 种 3	 驰 7 5  紧 11 枕 3 锦 2 肿 1 种 1  枕 3  诊 1  肿 1	 驰 6 9  紧 7 枕 2 肿 2 种 1 谨 1  种 1	 驰 11 2  紧 18  锦 1  诊 1  种 1	 驰 3 8  紧 7 种 5 枕 1 锦 2 肿 1  诊 3  诊 1
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Nushu characters with phonetic values Tciong35 and Tcie35 in Yongzi Bijiao

M089	 1B15F	74		tsəm ³⁵	tsəm ³⁵	左
U+1B15F_Tsew35 HYX-074_Tsem35						

M089 U+1B15F HYX-074 (no comment is given by HYX)

NOTE: HYX could identify both glyphs and gave no objection to the unification, although the shape difference is not so subtle (the position of the left component is slightly different). When HYX is asked to write the character PDAM U+1B15F, she wrote as HYX-074. According to Yongzi Bijiao Tsew35 entry, the glyphs looking like HYX-074 is more popular than the glyphs looking like PDAM U+1B15F. The representative glyph for PDAM U+1B15F should be replaced by HYX-074.

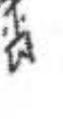
tsəu ³⁵	左佐	 左 5	 左 24	 左 17	 左 7	 左 15
		 左 1	 左 1	 左 1		

Nushu characters with phonetic value Tsew35 in Yongzi Bijiao

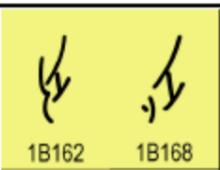
M090		33		tsa ²¹	tsəu ¹³	坐
	U+1B160_Tsew21 HYX-033_Tsew13					

M090 U+1B160 HYX-033 U+1B160 is unknown.

NOTE: HYX could identify HYX-033 but could not identify PDAM U+1B160. The glyphic difference between PDAM U+1B160 and HYX-033 is similar to the case of M059 (Cya5). But the variations in the glyphs for same author are quite narrow in comparison with Cya5. It should be noted that Nushu Duben counts the contrast of the frequencies for PDAM U+1B160 versus HYX-033 as 156:144 for Tsew21, 144:114 for Tsew13 (thus, Nushu Duben chosen PDAM U+1B160 glyph shape as the most frequent one). Checking Yongzi Bijiao, the frequencies counted in Nushu Duben are wrong. For Tsew21, the contrast is (18+126=144):(30+113=143). For Tsew13, (61+83=144):(142+128=270). There is no clear rationale to prioritize PDAM U+1B160 shape than HYX-033. Considering that HYX could not identify PDAM U+1B160 and the unification rule is not defined yet, PDAM U+1B160 should be postponed for future extension of Nushu character set.

tsəu ²¹	做	 做 65	 做 69	 做 126	 做 141	 做 113
		 做 18	 做 30			 做 1
		 做 1	 做 7			
		 做 1				
tsəu ¹³	坐	 坐 61	 坐 142	 坐 83	 坐 150	 坐 128
		 坐 61				

Nushu characters with phonetic values Tsew35 and Tsew13 in Yongzi Bijiao

M092	 U+1B162_Huow42 U+1B168_Tciang35	72	5		ha ⁴²	huow ⁴²	行、衡
		HYX-072_Huow42					

M092 U+1B162,U+1B168 HYX-072 U+1B168 is different character and should not be unified.

NOTE: HYX could identify all 3 glyphs and gave an objection to the unification of PDAM U+1B162 and U+1B168. But no objection is given to the unification of PDAM U+1B162 glyph and HYX-072. In Yongzi Bijiao Huow42 and Tciang35, PDAM U+1B162 (or HYX-072) glyph is found in HYX materials, but Endo2002 has it and HYX could identify, therefore PDAM U+1B162 is acceptable to keep the first core set of Nushu. On the other hand, although PDAM U+1B168 is not found in anonymous materials, all named Nushu successors used it as the most frequent glyph for Tciang35. Thus PDAM U+1B162 is also acceptable to keep the first core set of Nushu. According to Yongzi Bijiao, confusion between PDAM U+1B162 and U+1B168 occurred in Yi material, but only once.

huow ⁴² 2	闲还 (~ 原) 环藩 烦矾恒 衡行 (~ 为)	 行 128  烦 10 还  6 闲 2  还 6 烦  衡 1  烦 19  环 2	 行 228 闲 6  烦 13  环 2  环 1  烦 4  行 9 衡 1  行 1	 行 149  烦 17 闲 2  环 1  行 1	 行 74 烦 5  闲 1 烦 3  行 57 烦  烦 4  行 2	 行 106 烦 10  闲 1 衡 1  环 3
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tcian ³⁵	讲 长(生~)	 讲 2	 讲 29 长 6 掌	 长 55 讲 46	 讲 23	 讲 27 长 12
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	涨掌	 长 2	 涨 1  掌 3	 掌 1	 长 61  掌 8	 涨 1
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Nushu characters with phonetic values Huow42 and Tciang35 in Yongzi Bijiao

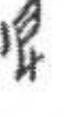
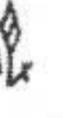
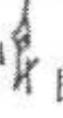
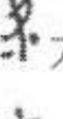
M096	 U+1B167_Liang33	66	 HYX-066_Liang42+Liang33	lianj ⁴²	lianj ⁴²	凉亮
				lianj ²¹	lianj ³³	

M096 U+1B167 HYX-066 U+1B167 means “one (一)”, but HYX-066 is different.

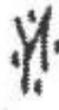
NOTE: HYX could identify both glyphs, and gave the objection with the unification, because PDAM U+1B167 means “one (一)” but HYX-066 means “cool (凉)” or “bright (亮)”. It should be noted that PDAM U+1B167 with the phonetic value Liang33 is only found in the anonymous material. For all named Nushu successors prefer PDAM U+1B208 or HYX-066 glyph for Liang33 or Liang42.

As HYX commented, more frequent usage of (a glyph looking like) PDAM U+1B167 is found in I5 (the dialectic phonetic value for “one (一)”) entry of Yongzi Bijiao; all named Nushu successors used (a glyph looking like) PDAM U+1B167 to mean “one”, but it is not found in anonymous materials. There is a concern that the glyph identification rule for the frequency counting in Yongzi Bijiao is different between anonymous and named Nushu successors. Anyway, more discussion is needed the needed character is PDAM U+1B167, or HYX-066, or both of them at separated codepoints. In summary, PDAM U+1B167 should be postponed for future extension.

lianj ³³	亮凉量 (数~)	 凉 43  亮 5  亮 2  量 31	 量 39  亮 13  凉 19  亮 11  亮 1	 量 45  亮 4  亮 3  凉 11	 亮 8  亮 5  凉 9  量 1	 量 28  亮 13  亮 6  凉 6  量 1
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lianj ⁴²	良量龙 粮凉梁 梁(~长短) 隆	 量 31  良 29  龙 22  梁 19  凉 6	 良 47 量  梁 26  凉 25  粮 18  龙 6	 量 45 良  龙 23  粮 22  凉 10  梁 2  龙 1	 粮 40  龙 28  量 26  良 19  梁 8  凉 2	 良 31 凉 29  龙 29 量 28 梁 19  粮 10 隆 1  龙 2  粮 1  量 1
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Nushu characters with phonetic values Liang33 and Liang42 in Yongzi Bijiao

i ⁵	一抑乙 揖逸译 奕液醅	丿 — 176  — 127  — 10  抑 7  抑 4  — 2  — 1  抑 1  抑 1	 — 412  — 390 乙 1  抑 1  揖 1	 — 443 乙 1  — 265  抑 1	 — 249  — 197  抑 6	 — 427 乙 1  — 85  抑 1
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Nushu characters with phonetic value I5 in Yongzi Bijiao

M105	 1B171	100		tɕie ³⁵	tɕie ³⁵	锦、肿、种~子
U+1B171_Tɕie35		HYX-100_Tɕie35				

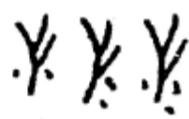
M105 U+1B171 HYX-100 The pair are different characters, should not be unified.

NOTE: HYX could identify both glyphs, and gave the objection with the mapping of them, because their semantics are different. According to Yongzi Bijiao, PDAM U+1B171 glyph is found in all materials, and nobody confused PDAM U+1B171 with a glyph looking like HYX-100. Therefore, PDAM U+1B171 is acceptable to keep in the first core set for Nushu. By the way, it should be noted that the glyph for PDAM U+1B171 is exactly duplicated in all columns, so there is a concern that Yongzi Bijiao mixed the glyphs with similar shape and we could not discuss how each authors wrote the glyph shape exactly.

tɕie ³⁵	馳紧枕 诊锦 种(~类) 肿谨检 豕	 馳 205  紧 18 种 3	 馳 75  紧 11 枕 3 锦 2 肿 1 种 1  枕 3  诊 1  肿 1	 馳 69  紧 7 枕 2 肿 2 种 1 谨 1  种 1	 馳 112  紧 18 锦 1 诊 1 种 1	 馳 38  紧 7 种 5 枕 1 锦 2 肿 1 诊 3 诊 1
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ci ³⁵	起喜	 起 129 喜 15	 起 369 喜 54	 起 287 喜 68	 起 368 喜 30	 起 270 喜 22
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Nushu characters with phonetic values Tɕie35 and Ci35 in Yongzi Bijiao

M106		82		sie ³⁵	sie ³⁵	写
U+1B172_Sie35 HYX-082_Sie35						

M106 U+1B172 HYX-082 HYX-082B is mistakenly designed.

NOTE: HYX could identify all 4 glyphs, and gave no objection to the unification of them. But HYX commented HYX-082B is not correctly shaped. According to Yongzi Bijiao, HYX had ever used HYX-082B once, but her most frequent shape is PDAM U+1B172 (almost same with HYX-082C). Thus, PDAM U+1B172 is acceptable to keep the first core set for Nushu.

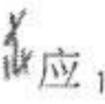
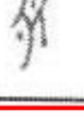
sie ³⁵	写 □ (吓~,小 儿惊风)	 写 ₃₃	 写 ₃₁	 写 ₄₀	 写 ₂₁	 写 ₃₀
		 写 ₃	 写 ₂₄	 写 ₄	 写 ₇	 写 ₁₃
		 写 ₂	 写 ₁	 写 ₃	 写 ₆	 写 ₁
			 写 ₁	 写 ₁	 写 ₂	
			 写 ₁	 写 ₁	 写 ₁	
					 写 ₁	

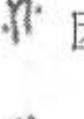
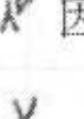
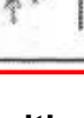
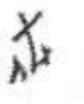
Nushu characters with phonetic value Sie35 in Yongzi Bijiao

M107		213		ie ³³	ie ⁴⁴	阴落~, 去世
U+1B173_Ie21-AHYX-213_Ie44						

M107 U+1B173 HYX-213 PDAM U+1B173 glyph is unknown.

NOTE: HYX could identify HYX-213, but could not identify PDAM U+1B173. Nushu Duben gave 2 phonetic values to PDAM U+1B173 (Ie21 or Phoe35), but U+1B173 is not found in both entries in Yongzi Bijiao. The representative glyph in Nushu Duben for PDAM U+1B173 might be sampled from Ie13 in anonymous material, but the semantics and the frequency are remarkably different. Zhou2002 has HYX-213 and its phonetic value and semantics are consistent with Endo2002. Xie2009 has both of PDAM U+1B173 and HYX-213, but their phonetic values and semantics are inconsistent with Nushu Duben and Endo2002. In summary, the identity of U+1B173 is too unclear; PDAM U+1B173 should be postponed to the future extension.

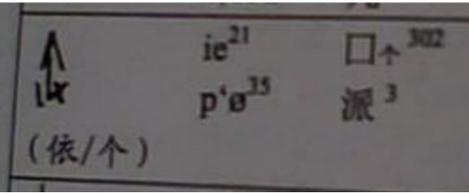
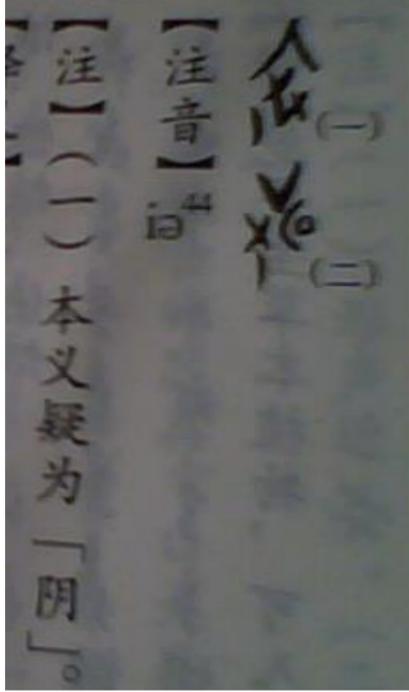
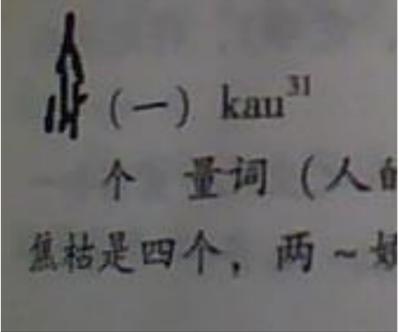
ie ²¹	应印	 应 ₁	 应 ₉  应 ₄  应 ₄  应 ₄  应 ₁	 应 ₆  应 ₁  应 ₁		 应 ₇  应 ₂  应 ₁  印 ₁
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ie ⁴⁴	阴因音 姻殷	 阴 ₂₃ 音 ₄ 因 ₁₅	 阴 ₈₅ 因 ₄₉ 音 ₂ 姻 ₆ 殷 ₂  音 ₁  因 ₁  因 ₁  阴 ₁	 阴 ₁₄₅ 因 ₃₂ 音 ₄ 姻 ₁₂ 殷 ₁  因 ₁	 阴 ₂₁ 音 ₉ 因 ₅ 姻 ₁  音 ₇ 因 ₂₁ 姻 ₂ 阴 ₁₈	 阴 ₆₁ 因 ₂₇ 音 ₁₆ 姻 ₇  因 ₁  阴 ₁  阴 ₁
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Nushu characters with phonetic values Ie21 and Ie44 in Yongzi Bijiao

ie ¹³	口 / 台 「我，白 读」引 28	引 (我， 白读) 28 引 2	引 17 引 1 引 1	引 19		引 6
p'ø ³⁵	派口 (扒 拉开)		派 1 派 1 派 1	派 2 派 1 派 1	派 2 派 1	派 3 派 2 派 1

Nushu characters with phonetic values ie¹³ and Phoe³⁵ in Yongzi Bijiao

		
Nushu Duben (p. 42)	Zhou2002 (p.638)	Xie2009 (p.109, p.113)

PDAM U+1B173 and HYX-213 like glyphs in other Nushu dictionaries

M113		363		k'uo ²¹	k'ø ²¹	快、块、会
	U+1B179_Khuoe21		HYX-363_Khoe21			

M113 U+1B179 HYX-363 HYX-363B is mistakenly designed.

NOTE: HYX could identify all 3 glyphs, gave no objection to the unification of them, but commented HYX-363B is mistakenly designed. In fact, HYX-363B is not found in HYX column of Yongzi Bijiao. If there is no concern on the unification of PDAM U+1B179 and HYX-363A, the representative glyph for PDAM U+1B179 should be replaced by HYX-363A for the consistent design policy. The total stroke count is changed from PDAM U+1B179's 6 to HYX-363A's 10, thus the code point would be changed.

The total stroke number of PDAM U+1B179 glyph was counted as 6, but the representative shape shows is 4 strokes and 3 dots. It seems that inconsistent total stroke count, 6, came from the slightly different glyph in Yongzi Bijiao and Nushu Duben.

k'uo ²¹	块快刂 会(~计)	 快 15	 快 4	 快 12	 快 8
		 块 2	 块 2	 块 2	 块 2
		 刂 2	 刂 1		 刂 1
		 会 1	 会 1		
			 刂 1		

Nushu characters with phonetic value Khuoe21 in Yongzi Bijiao

M115	 	116		pu ³³	puə ³³	白
	U+1B17B_Pwe33 U+1B183_Pw13	HYX-116_Pwe33				

M115 U+1B17B, U+1B183 HYX-116 (HYX gave no comment)

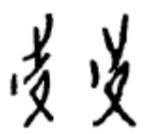
NOTE: HYX could identify all 3 glyphs and gave no objection to unify them, although PDAM U+1B17B and U+1B183 are proposed as the semantically different characters (PDAM U+1B17B means “white (白)” but U+1B183 is means “wife (婦)”). In Yongzi Bijiao, it is difficult to assure that the shape difference between PDAM U+1B17B and U+1B183 is sufficiently stable and shared by every Nushu users. In fact, although HYX-116 is semantically corresponding to PDAM U+1B17B, it is looking like PDAM U+1B183. But HYX redraw HYX-116 in

the interview, the result was  , similar to PDAM U+1B17B. It is difficult to determine which glyph should be postponed. Considering that the usage to mean “white” (PDAM U+1B17B) is more stable and portable, and the latest glyph drawn by HYX is similar to PDAM U+1B17B, it would be safer to postpone PDAM U+1B183. In summary, PDAM U+1B183 should be postponed for future discussion for the unification.

puə ³³	白吧	 白 6 吧 96	 白 70 吧 16	 白 48 吧 36	 白 46 吧 36	 白 48 吧 2
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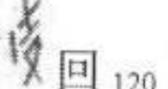
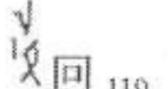
pu ¹³	妇倍	 妇 3	 妇 21  妇 14  妇 1  妇 1  妇 1	 妇 98  妇 26	 妇 21  妇 15	 妇 20  妇 12  倍 1
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Nushu characters with phonetic values Pwe33 and Pw13 in Yongzi Bijiao

M123		212		fu ²¹	fu ²¹	回
U+1B184_Fw42 HYX-212_Fw21						

M123 U+1B184 HYX-212 HYX-212B is mistakenly designed.

NOTE: HYX could identify all 3 glyphs, and gave no objection to the unification of them, but commented that HYX-212B is mistakenly designed. According to Yongzi Bijiao, most users (except of Yang) could identify both of PDAM U+1B184 (=HYX-212B) and HYX-212A. If there is no concern for the unification of PDAM U+1B184 glyph and HYX-212A, the representative glyph shape for U+1B184 should be replaced by HYX-212A (it changes the total stroke count from 6 to 7).

fu ⁴²	回茴	 回 116  回 1	 回 120  回 65  回 1	 回 186  回 8	 回 119  回 1  回 1  回 1	 回 88  回 36  回 1  回 1
fu ²¹	悔晦贿 吠	 悔 1	 悔 1  晦 1	 悔 3	 悔 1	 悔 1

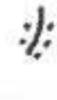
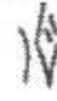
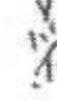
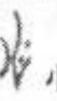
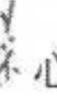
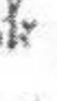
Nushu characters with phonetic values Fw42 and Fw21 in Yongzi Bijiao

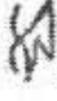
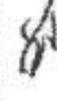
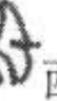
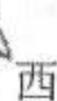
M129		79		si ³³	sai ⁴⁴	心
U+1B18B_Sai44-BHYX-079_Sai44						

M129 U+1B18B HYX-079 PDAM U+1B18B glyph is unknown, HYX-079 means “west (西)”.

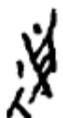
NOTE: HYX could not identify PDAM U+1B18B. It is consistent with the statistics in Yongzi Bijiao; HYX never used PDAM U+1B18B, at least for the phonetic value Sai44. In addition, PDAM U+1B18B glyph is found in anonymous and Yang material only (too mean “heart (心)” or “new (新)”), and its frequency is not the highest.

PDAM U+1B18A glyph  is the most frequently used. In summary, PDAM U+1B18B should be postponed for future extension, because its interchangeability is questionable.

sai ⁴⁴	心新辛 参(人~) 僧删薪 森	 心 171  心 128 新 5 辛 1  心 58	 心 381 新 20 森 1 辛 11  新 1  删 1  僧 1  僧 1  僧 1	 心 578 新 32 辛 17  心 12  新 10  新 1  新 1  新 1	 心 195 新 9 辛 7  心 66 新 4 辛 2  心 59 新 2  心 2 新 1  心 1  心 1	 心 314 辛 13 新 13  心 9 辛 1 新 18  心 1  心 1  参 1  删 1
					 辛 1	

si ⁴⁴	西犀	 西 11  西 3  西 2	 西 48 犀 2	 西 20	 西 25	 西 28  犀 2
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Nushu characters with phonetic values Sai44 and Si44 in Yongzi Bijiao

M131	 	320		lau ²¹	lau ²¹	到
	U+1B18D_Lau21 U+1B21C_Ie13	HYX-320_Lau21				

M131 U+1B18D,U+1B21C HYX-320 The pair are different characters, should not be unified.

NOTE: HYX could identify all 3 glyphs, but commented PDAM U+1B21B should not be unified with others because of different semantics. According to Yongzi Bijiao, HYX had ever used PDAM U+1B21C (≡ HYX-320) to mean Lau21 (“reach (到)”) only once, and she used PDAM U+1B18D more frequently. All named Nushu successors used PDAM U+1B18D for Lau21. In anonymous materials, the frequency of PDAM U+1B18D for Lau21 is the second rank. In summary, PDAM U+1B18D is acceptable to keep in the first core set of Nushu. On the other hand, HYX-320 glyph is the most preferred glyph shape to mean Ie13 (“pull (引)”) for all authors, thus PDAM U+1B21C is acceptable to keep in the first core set of Nushu. However, the representative glyph shape for U+1B21C should be replaced by HYX-320, for the consistent design policy (the total stroke count is same, the differences are only crossing or touching)

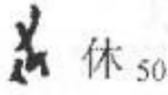
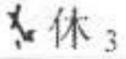
lau ²¹	到	 到 170	 到 377  到 7	 到 405	 到 338  到 35	 到 236  到 36
			 到 47  到 1  到 1  到 1		 到 3  到 2	 到 4  到 2  到 1  到 1
ie ¹³	口 / 台 + 我, 西 (引) 引 塋	 □ (我, 白读) 28  引 2	 引 17  引 1  引 1	 引 19		 引 6

Nushu characters with phonetic values Lau21 and Phoe35 in Yongzi Bijiao

M134		177		ɕiau ³³	ɕiou ⁴⁴	收、休
U+1B191_Ciou44 HYX-177_Ciou44						

M134 U+1B191 HYX-177 HYX-177B is mistakenly designed.

NOTE: HYX could identify all 3 glyphs, and gave no objection to the unification of them, but commented HYX-177B is mistakenly designed. HYX comment is consistent with the statistics for Ciou44 in Yongzi Bijiao, because no glyph looking like HYX-177B is found (not only in HYX column, but also in other authors' columns). In summary, PDAM U+1B191 is acceptable to keep in the first core set of Nushu. The representative shape of U+1B191 should be replaced by HYX-177A for the consistent design policy.

ɕiou ⁴⁴	收休	 休 50  休 3	 收 41 休 45	 收 26 休 16	 收 25 休 45	 收 27 休 10
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Nushu characters with phonetic value Ciou44 in Yongzi Bijiao

M136	 		167	6		la ³³	ləu ⁴⁴	多
	U+1B1B2_Oe44 U+1B193_Lew44		HYX-167_Lew44					

M136 U+1B1B2, U+1B193 HYX-167 (HYX gave no comment)

NOTE: HYX could identify all 3 glyphs and gave no objection to unify them, although PDAM U+1B1B2 and U+1B193 are proposed as the semantically different characters; PDAM U+1B1B2 means “cloth (衣)” and U+1B193 means “many (多)”. Apparently PDAM U+1B193 (Lew44) is more stable and portable from the statistics in Yongzi Bijiao. In summary, PDAM U+1B1B2 should be postponed for future discussion on the unification.

o ⁴⁴	衣	 衣 ₁	 衣 ₈₀	 衣 ₃₆	 衣 ₂₆	 衣 ₅₇
ləu ⁴⁴	多囉	 多 ₁₂₈  多 ₂  多 ₁	 多 ₁₅₅  多 ₅	 多 ₁₄₀	 多 ₁₁₀	 多 ₁₃₉

Nushu characters with phonetic values Oe44 and Lew44 in Yongzi Bijiao

M146	  1B25A 1B1A0	388		təŋ ⁴²	təŋ ⁴²	田、甜、填
	U+1B25A_Teng42 U+1B1A0_Teng42-A	HYX-388_Teng42				

M146 U+1B25A, U+1B1A0 HYX-388 (HYX gave no comment)

NOTE: HYX could identify all 3 glyphs and gave no objection to the unification of them. Either HYX did not give her preference which glyph is better. In Yongzi Bijiao, it is difficult to find their shape difference is portable and stable to write the semantic difference. It should be noted that the glyph images for Teng42 (the most frequent one) and Teng33 in anonymous materials are exactly duplicated. There is a concern that the editors did not crop the image from the actual evidence and Yongzi Bijiao is inappropriate resource to discuss the subtle shape difference for different semantics. In summary, PDAM U+1B1A0 should be postponed for future discussion on the unification.

təŋ ⁴²	甜田填 恬	 填 4 恬 18  填 1	 田 55 甜 4 填 4 恬 9  填 2	 田 75 填 14 甜 6	 田 32 甜 2 填 1 恬 9	 田 58 填 7 甜 4 恬 1
təŋ ³³	电殿奠 垫	 殿 1	 殿 38  电 7 垫 2	 殿 1  垫 1  殿 1 垫 1		 电 2 殿 1  垫 2

Nushu characters with phonetic values Teng42 and Teng33 in Yongzi Bijiao

M156	 	188		kua ³³	kua ⁴⁴	归
	U+1B1AA_Kua44 U+1B1BE_PhW21	HYX-188_Kua44				

M156 U+1B1AA,U+1B1BE HYX-188 PDAM U+1B1BE is unknown.

NOTE: HYX could identify PDAM U+1B1AA and HYX-188, and gave no objection to the unification of them, but could not identify PDAM U+1B1BE. According to Yongzi Bijiao, PDAM U+1B1BE glyph is supposed to be a modified version of Yi's second most frequent glyph for Phw21, but sometimes PDAM U+1B1AA and U+1B1BE could be confused (see the column for anonymous material for Phw21). HYX used a glyph looking like PDAM U+1B1BE for Phw21. It is supposed that the inappropriate design of the glyph disturbed the identification, but it is not easy which the difference caused the problem. In summary, PDAM U+1B1AA is acceptable to keep in the first core set for Nushu. On the other hand, PDAM U+1B1BE should be postponed for future extension, because the current glyph design might not be stable.

kua ⁴⁴	归 规 龟 窺 奎	 归 140 规 2  规 2	 归 144 规 7 龟 1	 归 128 规 6  归 1  归 1  奎 1	 归 102 规 3  归 12  归 3  归 1	 归 97  归 1
kua ³⁵	归 归 归					

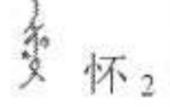
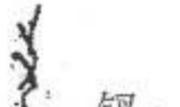
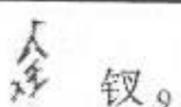
p'u ²¹	配 佩 譬 譬	 配 4 譬 5  配 2 譬 1	 配 36 佩 1  配 3  配 2	 配 27  配 15	 配 16  配 2	 配 30
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Nushu characters with phonetic values Kua44 and Phw21 in Yongzi Bijiao

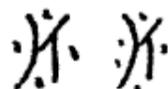
M159			221		fø ⁴²	fø ⁴²	怀、槐
	U+1B1AE_Foe42 U+1B1B0_Tshoe44		HYX-221_Foe42				

M159 U+1B1AE, U+1B1B0 HYX-221 The pair are different characters, should not be unified.

NOTE: HYX could identify all 4 glyphs, and gave the objection to the unification of PDAM U+1B1AE (=HYX221A) and U+1B1B0 (=HYX-221B). HYX comment is consistent with Yongzi Bijiao for Foe42 and Tshoe44; no confusion of PDAM U+1B1AE and U+1B1B0 is found in HYX column. However, the confusion is found in Gao and Yi materials. From the cross-sectional viewpoint, PDAM U+1B1AE and U+1B1B0 are acceptable to keep in the first core set of Nushu, but the representative shapes of PDAM U+1B1AE and U+1B1B0 should be replaced by HYX-221A and HYX-221B for the consistent glyph policy. It should be noted that the interchangeability of U+1B1B0 is questionable, because Gao and Yang have not used them for Tshoe44.

fø ⁴²	怀槐淮		 怀 ₅	 怀 ₂		 怀 ₁₃
			 怀 ₃	 怀 ₁		 怀 ₂
			 怀 ₂	 怀 ₁		
			 怀 ₁			
ts'ø ⁴⁴	钗差猜 腮鳃		 钗 ₁₂	 钗 ₁₃	 钗 ₈	 钗 ₉
			 差 ₁	 差 ₂	 差 ₄	 差 ₂
			 差 ₃			
						 猜 ₁
						 钗 ₁
						 钗 ₁
						 腮 ₁

Nushu characters with phonetic values Foe42 and Tshoe44 in Yongzi Bijiao

M162		195		fua ³³	fua ⁴⁴	花
	U+1B1B4_Fwe44 HYX-195_Fwe44					

M162 U+1B1B4 HYX-195 PDAM U+1B1B4 is preferred.

NOTE: HYX could identify all 3 glyphs and gave no objection to the unification of them. Although Endo2002 did not include PDAM U+1B1B4 glyph for Fwe44, HYX commented that the preferred shape for Fwe44 (to mean “flower (花)”) is PDAM U+1B1B4. Thus, PDAM U+1B1B4 is acceptable to keep in the first core set of Nushu.

fua ⁴⁴	花 蝦 发 (又读fa ⁵)	 花 44	 花 228	 蝦 3 花 181	 蝦 4 花 185	 蝦 5 花 182
		 花 11	 蝦 2	 发 15	 发 14	 发 24
		 花 1	 发 21			
		 花 1				

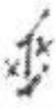
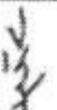
fua ⁴⁴	话 画 夏 厦		 夏 3 话 91	 话 34	 夏 1	 话 48 画 7
			 画 10	 画 1		 夏 1 厦 1

Nushu characters with phonetic value Fwe44 in Yongzi Bijiao

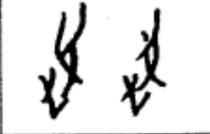
M163	 1B1DD	 1B1B5	260		kuə ³³	kuə ⁴⁴	家
	U+1B1DD_Kue44 U+1B1B5_Tswe33		HYX-260_Kue44				

M163 U+1B1DD, U+1B1B5 HYX-260 The pair are different characters, should not be unified.

NOTE: HYX could identify all 3 glyphs, and gave no objection to the unification of PDAM U+1B1DD (=HYX-260) and U+1B1B5. HYX comment is consistent with Yongzi Bijiao; no confusion of PDAM U+1B1DD and U+1B1B5 is found in HYX column. Thus, both of PDAM U+1B1DD and U+1B1B5 are acceptable to keep in the first core set for Nushu at separated code positions. Although Endo2002 did not include PDAM U+1B1B5, Yongzi Bijiao shows that it is the most preferred shape for every Nushu users and used at remarkable frequency (> 50).

kuə ⁴⁴	家加瓜 佳嘉痲 枷傢	 家 310 加 10  家 2  家 2	 家 540 加 18 瓜 20 佳 4	 家 584 加 13  家 5 加 1	 家 414 加 15 瓜 1  嘉 2	 家 376 加 15 瓜 4 佳 1
tsuə ³³	自字特 寺姪	 自 108 字 11  自 1  字 5  姪 2	 自 125 字 74 寺 3	 自 142 字 21 寺 2	 自 93 字 51 寺 4	 自 97 字 32 寺 2

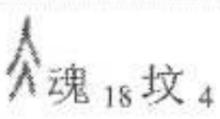
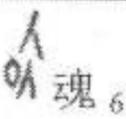
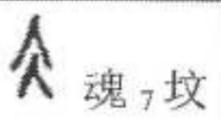
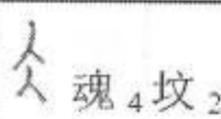
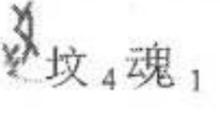
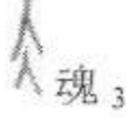
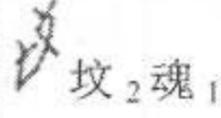
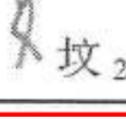
Nushu characters with phonetic values Kue44 and Tswe33 in Yongzi Bijiao

M170		231		fi ⁴²	fai ⁴²	坟、魂
U+1B1BF_Fai42 HYX-231_Fai42						

M170 U+1B1BF HYX-231 PDAM U+1B1BF is unknown.

NOTE: HYX could identify HYX-231A and B, but could not PDAM U+1B1BF. It seems that the glyphic difference of the left component disturbed the identification. According to Yongzi Bijiao, PDAM U+1B1BF is supposed to be based from Gao's second frequent glyph, but the printing quality of Yongzi Bijiao is too poor to determine correct shape of the left component. For consistent design policy, the representative glyph for PDAM U+1B1BF should be

replaced by HYX-231A. HYX gave the most preferred shape as  during the interview. However, Yi and Yang did not use PDAM U+1B1BF to mean “坟”, so the interchangeability of this glyph is unclear.

fai ⁴²	魂坟焚	 魂 ₁	 魂 ₁ 8 坟 ₄	 魂 ₆	 魂 ₇ 坟 ₁	 魂 ₄ 坟 ₂
			 坟 ₄ 魂 ₁	 魂 ₃		 坟 ₂ 魂 ₁
			 坟 ₂	 坟 ₁		 坟 ₁

Nushu characters with phonetic value Fai42 in Yongzi Bijiao

M172	 U+1B1C1_Lou42	Not listed in Endo 2002, but found in recent survey
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M172 U+1B1C1 (missing) PDAM U+1B1C1 is known.

NOTE: Although Endo2002 did not include a glyph looking like PDAM U+1B1C1, but Endo's later survey in her thesis includes similar glyph. Also PDAM U+1B1C1 glyph is found in HYX column in Yongzi Bijiao too (not only in HYX column, but also in every column), and HYX could identify it. In summary, PDAM U+1B1C1 is acceptable to keep in the first core set for Nushu.

lou ⁴²	楼	 楼 266  楼 1	 楼 123	 楼 78	 楼 175	 楼 77
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Nushu characters with phonetic value Lou42 in Yongzi Bijiao

M177	 	219		paŋ ²¹	paŋ ²¹	半、伴
	U+1B1CB_Pang44 U+1B1D2_Iang42	HYX-219_Pang21				

M177 U+1B1CB,U+1B1D2 HYX-219 PDAM U+1B1D2 is unknown

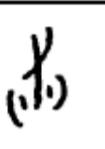
NOTE: HYX could identify PDAM U+1B1CB and HYX-219, and gave no objection to the unification of PDAM U+1B1CB and HYX-219. Therefore, it is acceptable to keep in the first core set for Nushu, but the representative glyph of PDAM U+1B1CB should be replaced by HYX-219 for consistent design policy. It should be noted that Yongzi Bijiao assigned Pang13 to PDAM U+1B1CB glyph, but Nushu Duben assigned Pang44.

On the other hand, HYX could not identify U+1B1D2. According to Yongzi Bijiao, PDAM U+1B1D2 glyph is only found in anonymous or Gao materials (see both of Pang13 and Iang42). Apparently their frequencies are not high (< 10) and not the top in any authors, the interchangeability is questionable. Thus, PDAM U+1B1D2 should be postponed for future extension.

paŋ ¹³	伴拌棒 蚌□(胎 盘)	 伴 39  伴 9	 伴 35  伴 1  伴 1  伴 1	 伴 15  伴 9  伴 2  伴 1  伴 1	 伴 46  伴 2	 伴 20
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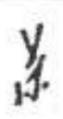
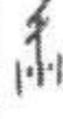
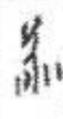
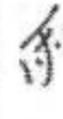
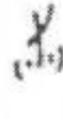
iaŋ ⁴²	阳羊容 洋杨扬 疡庸戎 融蓉茸 绒	 容 5 阳 12  容 1  容 1  阳 5  阳 1	 阳 58 羊 24 容 23 杨 9 扬 7 蓉 1	 容 17 阳 13 羊 7 洋 2 杨 4 扬 1 蓉 1	 阳 51 羊 10 杨 3  容 12  洋 2 扬 2	 阳 26 容 9 羊 7 洋 3 杨 3 绒 2 融 1 扬 2  杨 3 扬 2
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Nushu characters with phonetic values Pang13 and Iang42 in Yongzi Bijiao

M184			151		ciŋ ³⁵	ciŋ ³⁵	险、显
	U+1B1D6_Cing35 HYX-151_Cing35						

M184 U+1B1D6 HYX-151 PDAM U+1B1D6 is unknown.

NOTE: HYX could identify HYX-151, but could not identify PDAM U+1B1D6. According to Yongzi Bijiao, PDAM U+1B1D6 glyph is based on the top frequency glyph for Cing35 in HYX column. It is unclear why HYX could not identify PDAM U+1B1D6; the glyphic design could be inappropriate, or the surrounding context is needed to identify. In addition, the frequencies of PDAM U+1B1D6 and HYX-151 glyphs in HYX column of Yongzi Bijiao are insufficient (<10) to decide whether these glyphs are semantically distinguished. In summary, PDAM U+1B1D6 should be postponed for future extension, because the identity of the character is still unclear.

ciŋ ³⁵	显 掀 陕 闪 险	 显 4  显 1	 闪 3  显 3 险 2	 显 10 闪 1  显 1	 险 1	 显 4 掀 1  闪 4 掀 2
				 显 1		
ciŋ ³³	现		 现 1  现 1	 现 1		 现 4

Nushu characters with phonetic values Cing35 and Cing33 in Yongzi Bijiao

M195			269		tci ²¹	tci ²¹	记、寄、季
	U+1B1E8_Tci21 U+1B1E4_Thi5		HYX-269_Tci21				

M195 U+1B1E8, U+1B1E4 HYX-269 (HYX gave no comment)

NOTE: HYX could identify all 3 glyphs and gave no objection to the unification of them, although PDAM U+1B1E8 and U+1B1E4 are proposed as semantically different characters; PDAM U+1B1E8 means “record (記)”, U+1B1E4 means “iron (鉄)”. Although PDAM U+1B1E4 is sufficiently portable out of Gao’s material (Yi’s semantics might be different), the glyphs looking like PDAM U+1B1E4 are found in other dictionaries (it should

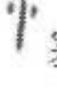
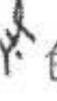
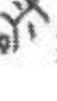
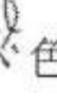
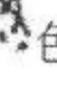
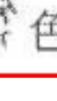
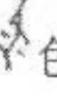


be noted that the confusion with PDAM U+1B185  is reported in Gong1991). In summary, both of PDAM U+1B1E4 and U+1B1E8 are acceptable to keep in the first core set for Nushu. However, further discussion is needed to improve the representative glyph to prevent the confusion.

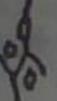
tci ²¹	记 计 寄 季 制 稚 既 继 滞 展 技 妓 痣 剂	 记 15 计 2 寄 2 季 4  记 5  记 1  制 10  制 3  制 2  既 1  既 1	 记 31 计 11 寄 7 季 4 既 1  记 17 既 3 寄 4 计 7  制 3  记 2  制 1  制 1	 记 25 计 1 寄 4 制 1 继 1  记 1 计 1  季 2  制 2  制 2  记 1  稚 1  技 1  继 1  继 1	 记 13 计 4 寄 3 季 2  制 9  稚 2	 记 21 计 8 寄 6 季 3 既 1  记 2 季 1  记 11  制 1
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Nushu characters with phonetic value Tci21 in Yongzi Bijiao

ti ⁵	铁贴惕		 铁 ₁₂ 贴 ₁  铁 ₁  贴 ₁  贴 ₁	 贴 ₁		 铁 ₁
-----------------	-----	--	--	--	--	--

suw ⁵	色 塞 (木~) □ (歌 le ⁵ ~, 休 息)	 色 ₄₁	 色 ₄₅  塞 ₁	 色 ₃₁  塞 ₂	 色 ₃₁  色 ₂  色 ₁	 色 ₃₃
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Nushu characters with phonetic values Thi5 and Sw5 in Yongzi Bijiao

 səw ⁵⁵ 失濕(失) thai ⁵⁵ 鐵	 (一) [注] (一) 女书中有当作「湿」义用者。 [释义] 贴: 粘贴; 方言谓将不用汤煮的食品在热「贴本」。 铁: 一种金属元素。	 (一) thi ⁵⁵ 掉 互换, 更换: 若是人。 -20/20 - 21 (二) thi ³⁵ (二) thu ⁵⁵ 铁 金属元素, 灰色或银白色, 主要材料: 又叫手下人两个, -链锁 (四) thu ⁵⁵ 踢 抬起腿用脚撞去: 鲤鱼长 门。 三18/9 - 10  thu ⁵⁵ 铁 金属元素, 灰色或银白色, 主要材料: 糕饼糖饼不离手, 还防
Gong1991 (p. 325)	Zhou2002 (p.164)	Xie2009 (p. 242-243)

PDAM U+1B1E4 in other Nushu dictionaries

M199			281		pu ²¹	pu ²¹	布 婆 铺
	U+1B1EA_Pu33 U+1B1F9_Tshau35					pu ⁴²	
HYX-281_Pu21+Pu42+Phu21					p'u ²¹	p'u ²¹	

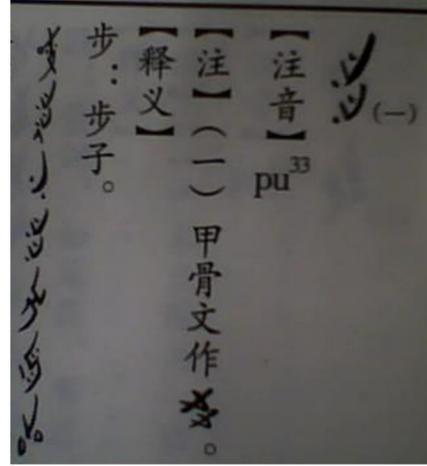
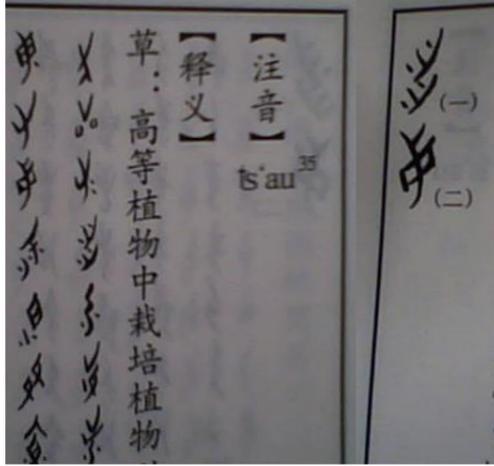
M199 U+1B1EA, U+1B1F9 HYX-281 (HYX gave no comment)

NOTE: HYX could identify all 3 glyphs and gave no objection to the unification of them, although PDAM U+1B1EA and U+1B1F9 as semantically different characters; PDAM U+1B1EA means “walk (步)”, U+1B1F9 means “grass (草)”. Some references show similar distinction (like v:y contrast) in the glyph shapes (e.g. Zhou2002) but others do not (e.g. Xie2009). Also there is a possibility that PDAM U+1B1F9 representative glyph design is insufficient for HYX to aware the distinction. In summary, PDAM U+1B1EA is acceptable to keep in the first core set for Nushu, but PDAM U+1B1F9 should be postponed for future extension.

pu ³³	步薄 (~ 荷)	 步 37	 步 47	 步 41	 步 60	 步 23
		 薄 56	 薄 1	 薄 14	 步 2	 薄 12

ts'au ³⁵	草	 草 14	 草 2	 草 2	 草 17
				 草 2	 草 2
				 草 1	
				 草 1	

Nushu characters with phonetic values Pu33 and Tshau35 in Yongzi Bijiao

 <p>步: 步子。 【释义】 【注】(一) 甲骨文作 。 【注音】 pu³³</p>	 <p>草: 高等植物中栽培植物 【释义】 【注】 ts'au³⁵</p>	<p>pu⁴⁴ :  [步薄晴附服缚波玻]</p> <p>pu⁵¹ :  [婆瓠]。</p>
Zhou2002 (p.51, p.566-567)	Xie2009 (p. 666, p. 704-705)	

Walk/Grass Contrast in Zhou2002 and Xie2009

M206	U+1B1F1_Pw5	 1B1F1	Not listed in Endo 2002, but found in recent survey
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M206 U+1B1F1 (missing) PDAM U+1B1F1 is known.

NOTE: HYX could identify PDAM U+1B1F1. Endo2002 did not include a glyph looking like PDAM U+1B1F1, but Endo's later survey in her thesis included a similar glyph (to mean "north (北)"). During the interview, HYX gave

the preferred shape as . In summary, PDAM U+1B1F1 is acceptable to keep in the first core set for Nushu.

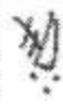
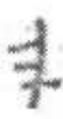
pu ⁵	北 拔 鉢 斧	 拔 ₄ 鉢 1  拔 ₁  拔 ₁	 北 ₂₁ 拔 ₃  斧 ₆  斧 ₁	 北 ₉ 拔 ₃ 斧 ₁  拔 ₁ 北 ₁  斧 ₂	 北 ₅ 拔 ₃  拔 ₃  北 ₂  北 ₁	 北 ₈  拔 ₃  斧 ₂  北 ₂  北 ₁
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Nushu characters with phonetic value Pw5 in Yongzi Bijiao

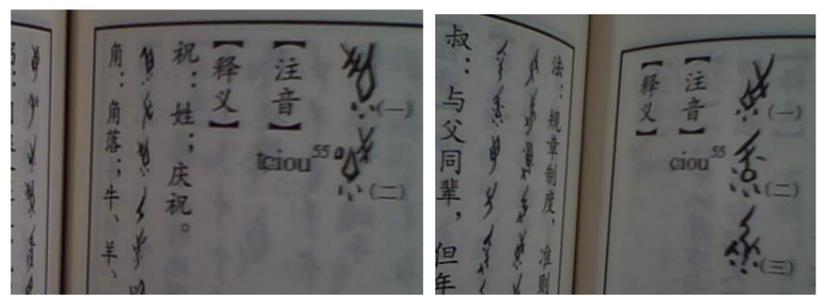
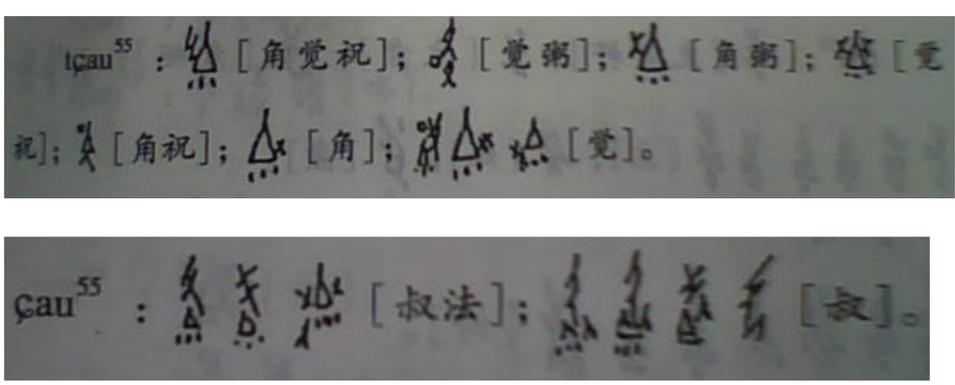
M217			347		tɕiau ⁵	tɕiou ⁵	祝、粥、角
	U+1B1FE_Tciou5 U+1B234_Ciou5						

M217 U+1B1FE, U+1B234 HYX-347 (HYX gave no comment)

NOTE: HYX could identify all 3 glyphs and gave no objection to the unification of them, although PDAM U+1B1FE and U+1B234 are proposed as semantically different characters; PDAM U+1B1FE means “celebrate (祝)” or “conscious (觉)”, and U+1B234 means “father’s younger broder (叔)”. There is a possibility that the representative glyph design for PDAM U+1B234 is insufficient for HYX to distinguish it from PDAM U+1B1FE. It should be noted that the glyph shape contrast for PDAM U+1B1FE and U+1B234 is not found in Yongzi Bijiao; PDAM U+1B1FE is based on Gao’s glyph, and U+1B234 is based on anonymous glyph. Also it is difficult to find the stable shape distinction in other Nushu dictionaries. In summary, for consistent design policy, the representative glyph shape of PDAM U+1B1FE should be replacted by HYX-347, and PDAM U+1B234 should be postponed for future extension.

tciou ⁵	觉(知~) 祝粥角		祝 ₂₄ 觉 ₁₅ 粥 ₂ 角 ₁₂		觉 ₁₁ 粥 ₄ 角 ₃ 祝 ₁	  	觉 ₄ 祝 ₁₁ 角 ₃	  	祝 ₂₁ 角 ₁₁ 觉 ₅ 觉 ₁		
ciou ⁵	法叔□ (果壳)		叔 ₈ 法 ₁		叔 ₂₂ 法 ₁₁		叔 ₈₀ 法 ₄		叔 ₁₀		叔 ₂₁ 法 ₉

Nushu characters with phonetic value Pw5 in Yongzi Bijiao

	
Zhou2002 (p.372, p. 462)	Xie2009 (p.713, p.721)

Contrast of PDAM U+1B1FE, U+1B234 like glyphs in other Nushu dictionaries

M234		311	9		cy ⁵	cy ⁵	说
U+1B214_Cing42		HYX-311_Cy5					

M234 U+1B214 HYX-311 The group includes different characters, should not be unified.

NOTE: HYX could identify all 4 glyphs, and gave the objection to the unification of them. Although HYX had not commented which glyph should be distinguished, it seems that; PDAM U+1B214 and HYX-311C could be unified, HYX-311A and B could be unified, but PDAM U+1B214 should be disunified from HYX-311A and B. It is consistent with HYX's usage of these glyphs in Cing42 and Cy5 in Yongzi Bijiao. HYX-311A could be unified with



U+1B228 (PDAM1 assigned phonetic value Cy5). On the other hand, Endo2002 shows a different glyph for Cing42 (UH126, HYX-409).

Considering the glyph shapes for Cing42 in Yongzi Bijiao, the glyph shapes in the materials by anonymous and Yang are unclear to assure the representative shape of PDAM U+1B214 is shared by all Nushu users. Thus, PDAM U+1B214 should be postponed for future extension. On the other hand, PDAM U+1B228 is acceptable to keep in the first core set for Nushu.

cin ⁴²	嫌 蝉 禅 贤 形 刑 型	 贤 14 形 14 嫌 1	 嫌 35 贤 26 形 15 刑 2  贤 1  贤 1	 嫌 18 贤 8 形 8  贤 1	 谦 18 贤 6 形 6  贤 1  谦 1  谦 1	 嫌 17 形 7 贤 6  贤 1
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Nushu characters with phonetic value Cing42 in Yongzi Bijiao

cy ⁵	说雪血 □(～酒, 小口喝酒)	人 说 54 雪 8 人 说 18 雪 2 人 说 1	人 说 132 雪 6 血 2 人 说 117 血 10 雪 10 人 说 1 尸 说 1 白 说 1	人 说 112 雪 14 血 5 人 说 32 雪 4 血 1 人 说 1	人 说 82 雪 23 血 3 人 说 15 雪 1 人 说 1 人 说 1	人 说 97 雪 17 血 10 人 说 9 雪 3 人 说 2 人 说 1
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Nushu characters with phonetic value Cy5 in Yongzi Bijiao

UH126	409			çiq ⁴²	çiq ⁴²	刑、嫌
	HYX-409_Cing42					

UH126: HYX-409

M240		322	9		ai ³³	ai ⁴⁴	恩
U+1B21D_Moe13HYX-322_Ai44							

M240 U+1B21D HYX-322 PDAM U+1B21D is preferred.

NOTE: HYX could identify both glyphs, and gave no objection to the unification of them. However, from a comparison of the entries Moe13 and Ai44 in Yongzi Bijiao, this pair would be semantically distinguished, although PDAM did not include the glyph corresponding to HYX-322. In summary, PDAM U+1B21D is acceptable to keep in the first core set for Nushu, although the unification of PDAM U+1B21D and HYX-322 should be postponed for future discussion.

mo ¹³	买尾	 买 ₁  尾 ₁₂	 买 ₁₂ 尾 ₁₀  买 ₂ 尾 ₃  买 ₂ 尾 ₂  尾 ₃  买 ₂  买 ₂  买 ₁	 买 ₁₂ 尾 ₁₅  买 ₁ 尾 ₁  买 ₁  买 ₁  尾 ₂	 买 ₂ 尾 ₂  尾 ₂	 买 ₁₀ 尾 ₁₀  买 ₆ 尾 ₆  买 ₂  买 ₂
mo ³³	买					

ai ⁴⁴	恩	 恩 ₂₁  恩 ₁₂  恩 ₈  恩 ₄	 恩 ₃₈  恩 ₆	 恩 ₂₆  恩 ₁	 恩 ₇  恩 ₅	 恩 ₁  恩 ₅
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Nushu characters with phonetic values Moe13 and Ai44 in Yongzi Bijiao

M241		266		ts'iou ⁵	ts'iau ⁵	畜
U+1B21F_Tchye44 HYX-266_Tshiau5						

M241 U+1B21F HYX-266 PDAM U+1B21F is preferred.

NOTE: HYX could identify both glyphs, and gave no objection to the unification of them. However, from a comparison of Tchye44 and Tshiau5 entries in Yongzi Bijiao, this pair would be semantically distinguished, although PDAM did not include the glyph corresponding to HYX-266. In summary, PDAM U+1B21F is acceptable to keep in the first core set for Nushu, although the unification of PDAM U+1B21F and HYX-266 should be postponed for future discussion.

tc'ya ⁴⁴	村春车 椿	 村 8  村 1	 春 49 村 33 车 6	 村 67 春 48 车 4	 村 53 春 39 车 2	 春 34 村 18 车 8
ts'iou ⁵	雀畜蓄 筑		 雀 2  畜 3  畜 1	 畜 2 蓄 1		 畜 1

Nushu characters with phonetic values Tchye44 and Tshiou5 in Yongzi Bijiao

M242		348		pei ³³	pi ³³	别
U+1B220_Pi33 HYX-348_Pi33						

M242 U+1B220 HYX-348 PDAM U+1B220 is preferred.

NOTE: HYX could identify both glyphs, and gave no objection to the unification of them. HYX commented PDAM

U+1B220 is preferred shape. But the example given by HYX in the interview  is slightly different from PDAM U+1B220. This shape is almost same with the glyphs in the entry La42 of Yongzi Bijiao. From the statistics in Yongzi Bijiao, it is quite difficult to determine whether there is a semantic distinction between Pi33 and La42 glyphs. If there is no concern in the unification of Pi33 and La42 glyphs, PDAM U+1B220 is acceptable to keep in the first core set of Nushu. But the representative shape of PDAM U+1B220 should be modified by the glyphs

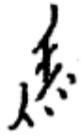
given in the interview , for consistent design policy.

pi ³³	别	 别 7	 别 97	 别 56	 别 4	 别 45
		 别 7			 别 1	
		 别 6				
		 别 4				
		 别 1				
		 别 1				

Nushu characters with phonetic value Pi33 in Yongzi Bijiao

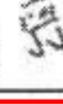
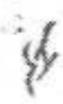
la ⁴²	离 篱 璃 厘 狸 累 (劳~)	 离 60  离 41  离 35  离 21  离 20  离 4	 离 39 厘 7 篱 4 璃 1  离 12  离 6  离 3  离 1	 离 43 篱 1 狸 1  离 3  离 1  璃 1	 离 39 篱 2  离 4  离 3	 离 18 篱 2 厘 4  离 9 厘 1  离 3  璃 1
		 离 3				

Nushu characters with phonetic value La42 in Yongzi Bijiao

M244		358	9		tsai ³³	tsiu ⁴⁴	焦、椒
U+1B223_Tsiu44		HYX-358_Tsiu44					

M244 U+1B223 HYX-358 PDAM U+1B223 is preferred.

NOTE: HYX could identify both glyphs, and gave no objection with the unification of them. However, from a comparison of Tsiu44 and Hai42 entries in Yongzi Bijiao, this pair is often confused but could be semantically distinguished, although PDAM did not include the glyph corresponding to HYX-358. In summary, PDAM U+1B223 is acceptable to keep in the first core set for Nushu. But the unification of PDAM U+1B223 and HYX-358 should be postponed for future discussion.

tsiu ⁴⁴	焦蕉椒	 焦 118	 焦 20 蕉 7	 焦 11 椒 1	 焦 32	 焦 19 椒 1
			 焦 1	 焦 3 椒 1	 焦 5	 焦 2
			 焦 1 蕉 1	 焦 1	 焦 3	 焦 2
			 椒 1		 焦 1	 焦 1
					 焦 1	
hai ⁴²	还痕弘 宏红洪 鸿虹(文 读)冯	 红 49	 红 81	 红 85	 红 73	 红 71
		 红 15	洪 1	 还 8	 还 20	 还 22 红 4
			还 22	红 2	 还 4	 还 1
			红 4	洪 1	 还 4	 还 1
			红 16	 红 1	 红 5	 红 17
			还 7			 红 5
						 红 1

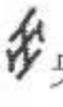
Nushu characters with phonetic values Tsiu44 and Hai42 in Yongzi Bijiao

M247			342		k'w ⁵	k'w ⁵	刻、克
	U+1B22A_Khw5 U+1B23D_lang44		HYX-342_Khw5				

M247 U+1B22A, U+1B23D HYX-342 (HYX gave no comment)

NOTE: HYX could identify all 3 glyphs and gave no objection to the unification of them, although PDAM U+1B22A and U+1B23D are proposed as semantically different characters; PDAM U+1B22A means “engrave (刻)” and U+1B23D means “rice seedling (秧)”. However, PDAM U+1B23D is used only by Gao twice. Thus, PDAM U+1B23D should be postponed for future extension.

k'w ⁵	克刻	 刻 38	 刻 18	 刻 16	 刻 16	 刻 10
		 刻 7			 刻 1	
		 刻 3			 刻 1	

iaŋ ⁴⁴	央秧殃 雍		 央 10 殃 6	 央 2	 央 3	 央 7
			 秧 2			 秧 1

Nushu characters with phonetic values Khw5 and lang44 in Yongzi Bijiao

M254		246		tsiau ³⁵	tsiou ³⁵	酒
U+1B232_Tsiou33-A HYX-246_Tsiou35						

M254 U+1B232 HYX-246 The pair are different characters, should not be unified.

NOTE: HYX could identify both glyphs, and gave the objection to the unification because they have different semantics. However, in Yongzi Bijiao, a confusion of PDAM U+1B232 and HYX-246 is found, and no significant distinction of them is found. Considering that HYX could identify PDAM U+1B232 (although she used it seldom), PDAM U+1B232 is acceptable to keep in the first core set for Nushu. However, the unification of PDAM U+1B232 and HYX-246 should be discussed in future.

tsiou ³³	就袖轴	 就 110	 就 107  袖 1	 就 87	 就 145	 就 66 袖 2
tsiou ³⁵	酒	 酒 38	 酒 8  酒 3  酒 1	 酒 8	 酒 32  酒 1  酒 1	

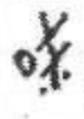
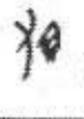
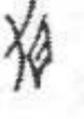
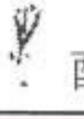
Nushu characters with phonetic values Tsiou33 and Tsiou35 in Yongzi Bijiao

M255		186		hau ²¹	hou ²¹	后、口有
U+1B233_Njiou13 HYX-186_Hou21						

M255 U+1B233 HYX-186 PDAM U+1B233 is preferred.

NOTE: HYX could identify both glyphs, and gave no objection to the unification of them. According to Nushu Yongzi Bijiao, a confusion is found in Yi material. Considering that the portable usage of the glyph HYX-186 would

be a glyph to mean Iou13 (see PDAM U+1B1C7 ). The unification of PDAM U+1B233 and HYX-186 could be unsafe. In summary, both of PDAM U+1B233 and U+1B1C7 are acceptable to keep in the first core set for Nushu.

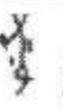
njou ¹³	咬		 咬 ₁	 咬 ₂  咬 ₁		 咬 ₆
iou ¹³	友酉有 (文读) 诱	 有 ₂₀₂	 有 ₄₈₂ 友 ₆ 酉 ₄	 有 ₃₄₇ 友 ₁₁	 有 ₃₄₁ 友 ₃	 有 ₂₅₇ 友 ₅ 酉 ₃
			 酉 ₁	 酉 ₂		

Nushu characters with phonetic values Njiou13 and iou13 in Yongzi Bijiao

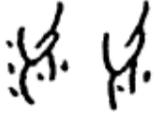
M264		336		lai ⁵	liu ⁵	着~衣, 穿衣
U+1B240_Tchiong44 HYX-336_Liu5						

M264 U+1B240 HYX-336 PDAM U+1B240 is preferred.

NOTE: HYX could identify both glyphs, and gave no objection to the unification of them, and commented PDAM U+1B240 glyph shape is preferred. Thus, PDAM U+1B240 is acceptable to keep in the first core set for Nushu. However, the decipherment of this glyph is inconsistent between Yongzi Bijiao and Endo2002 (see the difference of the corresponding Hanzi; “light weight (輕)” versus “reach (着)”).

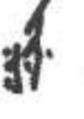
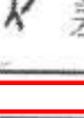
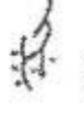
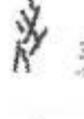
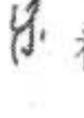
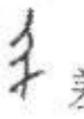
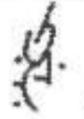
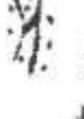
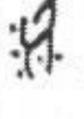
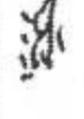
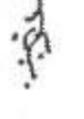
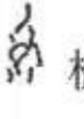
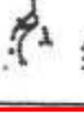
tcion ⁴⁴	轻卿	 轻 65	 轻 36  轻 2	 轻 80 卿 1	 轻 50  轻 1	 轻 25
liu ⁵	着 (~ 衣, 穿)		 着 2  着 1  着 1			

Nushu characters with phonetic values Tciong44 and Liu5 in Yongzi Bijiao

M273	 1B24E	401		ts'u ³³ su ³³	ts'u ⁴⁴ su ⁴⁴	初 梳
U+1B24E_Tshu35 HYX-401_Tshu44+Su44						

M273 U+1B24E HYX-401 HYX-401B is different character “balance (衡)”, should not be unified.

NOTE: HYX could identify all 3 glyphs, and gave an objection to the unification of HYX-401A and HYX-402B because of the different meanings. PDAM U+1B24E (=HYX-401A) is used as the most frequent glyph for Tshu44 and Su44 (it should be noted that Yongzi Bijiao assigned Tshu44 for dialectic pronunciation of the Hanzi “初”, but Nushu Duben assigned Tshu35 to same Hanzi). In summary, PDAM U+1B24E is acceptable to keep in the first core set for Nushu.

ts'u ⁴⁴	初粗叉 差杈岔 □(~人, 骂人)	 初 7  初 1 粗 16	 初 29 粗 22 差 11  差 4  初 1  差 1	 初 33  粗 18 差 1  差 2  初 1	 初 21 粗 22  差 4  初 1	 初 17 粗 9 差 2  叉 1
su ⁴⁴	梳疏沙 纱蓑□ (~味, 漱 □) 苏酥 痧杉蔬	 疏 8  疏 1 梳 1	 梳 34 疏 12 沙 3 纱 8 蔬 1 杉 1 蓑 1  苏 1	 梳 16 疏 3 蔬 1	 梳 10 疏 3 纱 4 沙 2 杉 1  梳 3  纱 1	 沙 3 纱 9 杉 1 梳 11 疏 2

Nushu characters with phonetic values Tshu44 and Su44 in Yongzi Bijiao

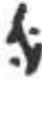
huou ⁴ 2	闲还(~ 原)环藩 烦矾恒 衡行(~ 为)	 行 128  烦 10 还  6 闲 2  还 6 烦 6  衡 1  烦 19  环 2	 行 228 闲 6  烦 13  环 2  环 1  烦 4  行 9 衡 1  行 1	 行 149  烦 17 闲 2  环 1  行 1	 行 74 烦 5  闲 1 烦 3  行 57 烦 8  烦 4  行 2	 行 106 烦 10  闲 1 衡 1  环 3
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Nushu characters with phonetic value Huow42 in Yongzi Bijiao

M276			431			tɕioŋ ³³	tɕioŋ ⁴⁴	京、惊
	U+1B253_Thou21 U+1B27B_Mang13		HYX-431_Tciong44					

M276 U+1B253, U+1B27B HYX-431 PDAM U+1B253, U+1B27B are unknown.

NOTE: HYX could identify HYX-431A, B, but could not identify PDAM U+1B253 and U+1B27B. In addition, HYX gave no objection to the unification of HYX-431A and HYX-431B. However, a glyph looking like HYX-431A is found at recognizable frequency in Mang13 entry of Yongzi Bijiao. Also a glyph looking like HYX-431B is found at recognizable frequency in Thou21 entry. Similar shape contrast (HYX-431A and B) is found in other materials, thus the unification of them is unsafe. In addition, HYX commented HYX-432 (mapped to PDAM U+1B27E) should be unified with HYX-431 either. Contrary, no significant glyphic difference is found between PDAM U+1B253 and HYX-431B, but HYX could not identify PDAM U+1B253. In summary, the distinction of them and appropriate glyph design need more discussion. Thus PDAM U+1B253, U+1B27B and U+1B27E should be postponed for future extension.

tɕioŋ ⁴⁴	京 惊 荆 鲸 征 正 (~月)	 惊 27  荆 1  正 29	 京 35  惊 11 荆 2 正 4  惊 2 正 2  惊 1 征 3  惊 1	 惊 9 京 1 荆 3 正 3  惊 1 正 1  征 9  正 6	 京 9 惊 6 荆 3 正 9	 京 21 惊 10 正 8  惊 1  正 4
				 正 1		

t'ou ²¹	透	 透 15  透 4	 透 1  透 2  透 2		 透 3	 透 32  透 2  透 1
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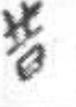
man ¹³	满 莽 蟒 网	 满 60	 满 79 网 1	 满 143 网 1	 满 59	 满 71
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Nushu characters with phonetic values Tciong44, Thou21 and Mang13 in Yongzi Bijiao

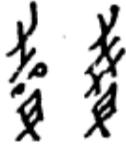
M286		442	12		t'u ⁵	t'u ⁵	秃、脱、突
U+1B260_Tshie5 HYX-442_Thu5							

M286 U+1B260 HYX-442 HYX-442 is preferred.

NOTE: HYX could identify both glyphs, and gave no objection to the unification of them, and commented HYX-442 is preferred shape. In Yongzi Bijiao, no sample for Tshie5 in HYX material, but similar shape is found in Gao material at the top frequency. Thus, the representative glyph for U+1B260 should be replaced by HYX-442. The frequencies of the glyphs for Tshie5 are insufficient to determine which glyph is most portable, but it would be acceptable from the cross section policy.

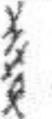
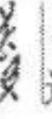
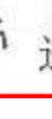
ts'ie ⁵	脱□(～ 衣, 织)		 脱 ₄  脱 ₁  脱 ₁  脱 ₁	 脱 ₁  脱 ₁	 脱 ₂	
t'u ⁵	塔突妥 塌秃			 塔 ₁		 突 ₁

Nushu characters with phonetic values Tshie5 and Thu5 in Yongzi Bijiao

M305		432		tɕion ³³	tɕion ⁴⁴	美
U+1B27E_Tciong44 HYX-432_Tciong44						

M305 U+1B27E HYX-432 PDAM U+1B27E, HYX-432 should be unified with HYX-431 (M276)

NOTE: as discussed in M276, PDAM U+1B253, U+1B27B and U+1B27E should be postponed for future extension.

tɕion ⁴⁴	京惊荆 鯨征正 (~月)	 惊 27 荆 1  正 29	 京 35 惊 11 荆 2 正 4  惊 2 正 2  惊 1 征 3  惊 1	 惊 9 京 1 荆 3 正 3  惊 1 正 1  征 9  正 6	 京 9 惊 6 荆 3 正 9	 京 21 惊 10 正 8  惊 1  正 4
				 正 1		
t'ou ²¹	透	 透 15  透 4	 透 1  透 2  透 2		 透 3	 透 32  透 2  透 1
man ¹³	满莽蟒 网	 满 60	 满 79 网 1	 满 143 网 1	 满 59	 满 71

Nushu characters with phonetic values Tciong44, Thou21 and Mang13 in Yongzi Bijiao

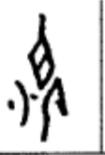
M313	 		458	14		fuə ³³	fuə ³³	话
	U+1B287_Nong44 U+1B28C_Fi21		HYX-458_Fwe33					

M313 U+1B287, U+1B28C HYX-458 (HYX gave no comment)

NOTE: HYX could identify all 3 glyphs, and gave no objection to the unification of them, although PDAM U+1B287 and U+1B28C are proposed as semantically different characters; PDAM U+1B287 means “give (給)” and U+1B28C means “expense (費)”. According to Yongzi Bijiao, PDAM U+1B28C is only used by Yi and the frequency is low (< 10). It should be noted that another glyph meaning “expense (費)”, the top glyph in HYX column, is not included in PDAM2. In summary, PDAM U+1B28C should be postponed for future extension.

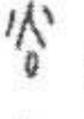
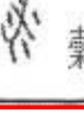
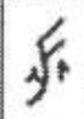
noŋ ⁴⁴	给	 给 75	 给 41	 给 35	 给 38	 给 30
fi ²¹	费废	 费 2	 费 1  费 1  费 1	 费 1  费 1  费 4		 费 4  费 1

Nushu characters with phonetic values Nong44 and Fi21 in Yongzi Bijiao

M315	U+1B289_Ku5		465	17	 	ku ⁵	ku ⁵	鸽、谷
		HYX-465_Ku5						

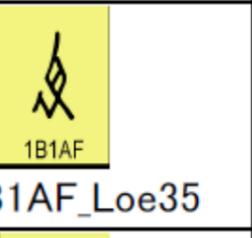
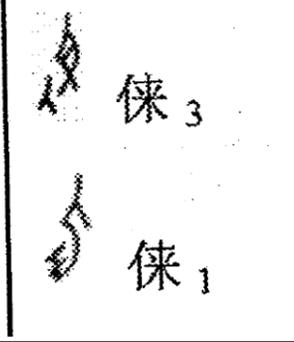
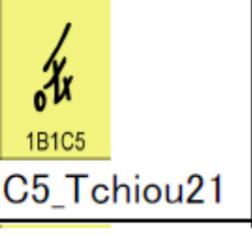
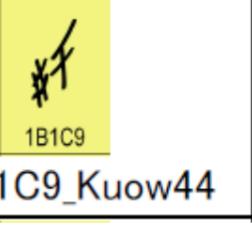
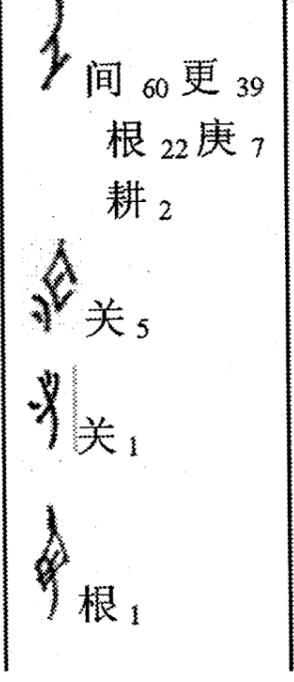
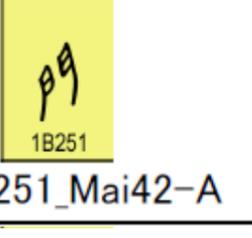
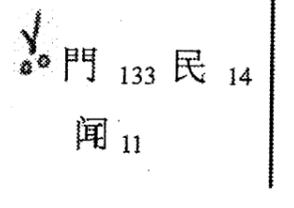
M315 U+1B289 HYX-465 HYX-465B is mistakenly designed.

NOTE: HYX could identify all 3 glyphs, and gave no objection to the unification of them, but commented HYX-465B is mistakenly designed. HYX comment is consistent with the statistics in Yongzi Bijiao. For the consistent design policy, the representative glyph for U+1B289 should be replaced by HYX-465A (the most left dot existence is different).

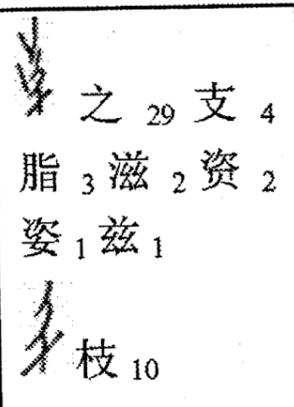
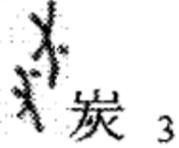
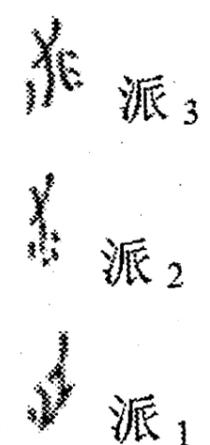
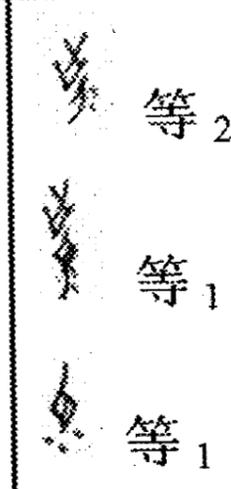
ku ⁵	穀 鸽 谷 古 (~怪) 郭 廓 鼓 (眼 ~ ~) 裹 (动词)	 鸽 ₁	穀 ₆ 鼓 ₂  谷 ₃ 穀 ₉ 鸽 ₃ 穀 ₁	 穀 ₅  穀 ₃  穀 ₁  穀 ₁  穀 ₁	 穀 ₂	 穀 ₃ 鸽 ₃  穀 ₄  穀 ₁  鸽 ₁
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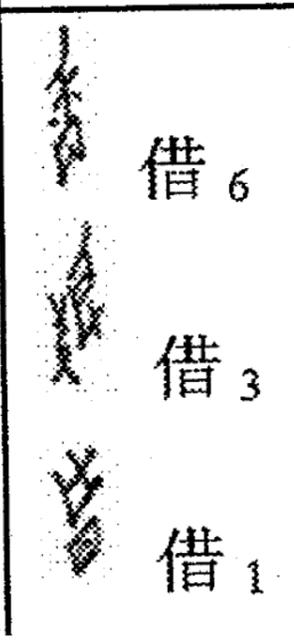
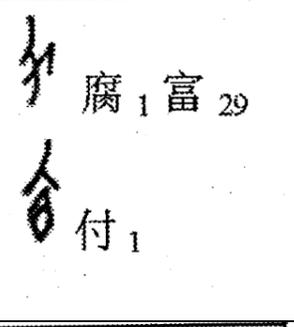
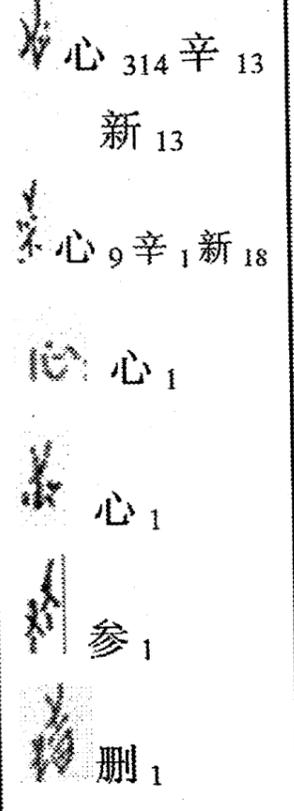
Nushu characters with phonetic value Ku5 in Yongzi Bijiao

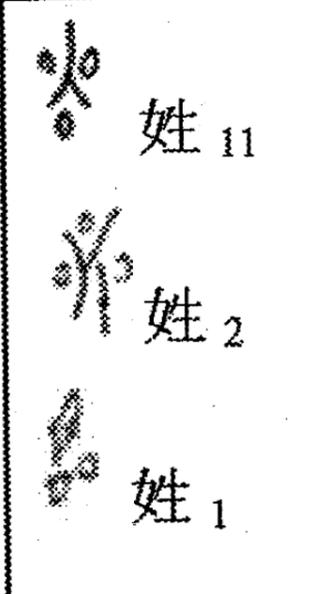
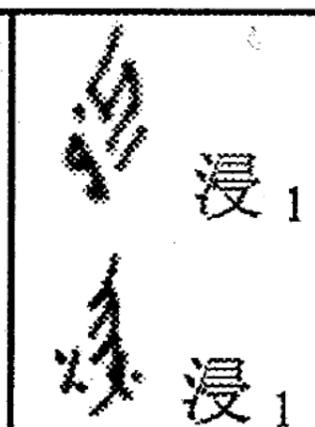
Following is a table of UU glyphs (found in PDAM but not in Endo2002 nor Endo's later survey) that HYX commented as she could identify but uses different glyphs if she writes a document.

Clips of WG2 N4533		Preferred glyph given in the interview	Glyphs in HYX column for the phonetic value defined in PDAM1	Proposed Solution
UU013				Replace the representative glyph by the top glyph in HYX column of Yongzi Bijiao.
UU018				Replace the representative glyph given by the interview 
UU020				PDAM U+1B1C9 is acceptable to keep in the first core set for Nushu.
UU049				PDAM U+1B1C9 is acceptable to keep in the first core set for Nushu.

Following is a table of UU glyphs (found in PDAM but not in Endo2002 nor Endo's later survey) that HYX could not identify

Clips of WG2 N4533		Glyphs in HYX column for the phonetic value defined in PDAM1	Proposed Solution
UU005	 U+1B149_Tswe44		The representative glyph should be replaced by the top frequent glyph in HYX's top frequent (>10) glyph for Tswe44 in Yongzi Bijiao.
UU010	 U+1B194_Thuow21		PDAM U+1B194 should be postponed for future extension. Too few examples.
UU012	 U+1B1AD_Phoe35		PDAM U+1B194 should be postponed for future extension. Too few examples.
UU027	 U+1B1F5_Lai35		PDAM U+1B1F5 should be postponed for future extension. Too few examples.

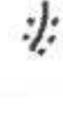
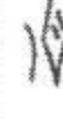
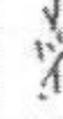
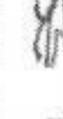
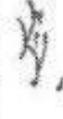
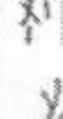
UU034	 U+1B21A_Tshie21		PDAM U+1B21A should be postponed for future extension. Too few examples.
UU036	 U+1B221_Ti44		PDAM U+1B221 should be postponed for future extension. Too few examples.
UU037	 U+1B224_Fu21		PDAM U+1B224 should be postponed for future extension. Too few examples.
UU041	 U+1B22C_Sai44-A		PDAM U+1B22C should be postponed for future extension. Too few examples.

UU043	 U+1B23F_Siong21	 <p>姓₁₁</p> <p>姓₂</p> <p>姓₁</p>	PDAM U+1B23F should be postponed for future extension. Too few examples.
UU052	 U+1B25E_Tsa33	 <p>浸₁</p> <p>浸₁</p>	PDAM U+1B25E should be postponed for future extension. Too few examples.

Some representative glyphs are hard to find in corresponding entries in Yongzi Bijiao.

UU041	 1B22C U+1B22C_Sai44-A
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UU041: PDAM U+1B22C seems to be mistakenly designed shapes of anonymous second, Yi's third, Yang's second and HYX's third preferences.

sai ⁴⁴	心新辛 参(人~) 僧删薪 森	 心 171  心 128 新 5 辛 1  心 58	 心 381 新 20 森 1 辛 11  新 1  删 1  僧 1  僧 1  僧 1	 心 578 新 32 辛 17  心 12  新 10  新 1  新 1  新 1	 心 195 新 9 辛 7  心 66 新 4 辛 2  心 59 新 2  心 2 新 1  心 1  心 1	 心 314 辛 13 新 13  心 9 辛 1 新 18  心 1  心 1  参 1  删 1
					 辛 1	

Nushu characters with phonetic value Sai44 in Yongzi Bijiao

UU043	 U+1B23F_Siong21
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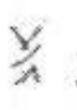
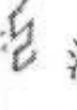
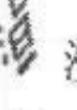
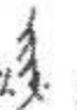
UU043: PDAM U+1B23F seems to be based on the first preference of Yang for Siong21, but Yangzi Bijiao's glyph image is too low resolution to clarify the shape. However, it is not shared by other users, thus its interchangeability is questionable.

sionj ²¹	性姓□ (铁锈)	 性 8	 姓 28 性 10  性 3  性 1 姓 1	 性 8 姓 11  姓 23	 姓 65 性 1  性 6  姓 1  姓 1  姓 1	 姓 11  姓 2  姓 1
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Nushu characters with phonetic value Song21 in Yongzi Bijiao

UU052	 U+1B25E_Tsa33
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UU052: U+1B25E seems to be mistakenly designed shapes of anonymous first or HYX's second preferences.

tsa ³³	浸习集 疾	 浸 ₃  浸 ₁	 习 ₂  浸 ₁  浸 ₁  浸 ₁  浸 ₁  习 ₁	 习 ₁	 习 ₂  浸 ₁	 浸 ₁  浸 ₁
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Nushu characters with phonetic value Tsa33 in Yongzi Bijiao