1. Introduction. Van Anderson’s work toward encoding Duployan is quite excellent. Ireland has no reservations about the character set proposed for encoding. We have, however, technical concerns about the structure of the code table proposed in document N3895.

Our technical concerns have to do with the proposed sorting order. Mr Anderson notes that, for the most part, users of Duployan shorthands and Chinook have had very little experience with actually sorted text. In the context of UCS implementation, of course, this will not be the case. Files named in Duployan will be sorted by the OS. The question is how.

2. Sorting by shape. Mr Anderson rightly constructs an ordering based on shape. Although it is probable that few users of Duployan have expectations about ordering, basing an ordering on shape is a sensible and useful way of proceeding. It is not without precedent. Users of Blissymbols have a dictionary which has three separate orderings:

- Finding Symbols by Word (an English-to-Bliss glossary)
- Finding Symbols by Meaning (a thesaurus arranged by semantic field)
- Finding Symbols by Shape (a Bliss-to-English dictionary ordered by character)

Mr Anderson’s ordering based on shape will very likely prove to be useful to users of Duployan. Certainly the same principles as applied in Blissymbols have been implemented very successfully, and users of the Blissymbol Reference Guide have learnt the sequence quickly and have no trouble finding things by shape.

3. Organization of the code chart. Although we recognize and agree that the ISO/IEC 14651 and the Unicode Collation Algorithm ordering as specified in N3895 is useful, we believe that the ordering of the characters as presented in the code chart will prove to work against the end user in environments where 14651 and the UCA are not properly implemented. The code chart sequence arranges the characters according to quite different criteria than those which are used for ordering, and we do not believe that the proposer’s chart ordering could be or should be considered useful to the end user. We do recognize that it has a structure. Unfortunately the structure is based on the wrong axis, in our view.

A look at the code table in N3895 shows that it is organized on a horizontal axis. This makes for an “attractive” code table with some pedagogical features—but this does not make a useful code table in terms of technical functionality. Having acknowledged the usefulness of Mr Anderson’s proposed ordering scheme, we suggest that the code chart order also be based on the principles of Mr Anderson’s
sorting order, rather than on a secondary classification as it currently is. The benefit of this will be immediate—even a binary sort of data based on such a system will be more similar to the specification of 14651 and the UCA than a binary sort based on the code chart of N3895 would be.

4. “Optimization”. Mr Anderson’s proposal suggests that some sort of “optimization” might be had if columns 0 and 1 contain high-frequency characters. We do not believe that any genuine benefit accrues here. The Basic Latin and Latin-1 binary sort does not interfile \textit{AaÁáBbCcÇçDdÐð}, but rather \textit{ABCDabcd} and \textit{ÁÇÐáçð} respectively, and the letters in Latin 1 (which constitute the bulk of Latin-script languages used) is distant enough from the four columns in Basic Latin. “Optimization” is evidently no great concern there.

Our view is that the better optimization of the Duployan code chart would be to have its binary order follow the order proposed for sorting the script in general. We give a chart below which orders Duployan according to those principles. We have not altered any of the glyphs or character names in Mr Anderson’s proposal, apart from the five “dotted-box” glyphs which we have normalized to the same conventions of size of similar glyphs in the UCS. We also made some corrections to spelling errors in the informative annotations in the names list.

5. Issue: Expansion. In Mr Anderson’s proposal some blanks are left here and there within the code chart, evidently for potential additions. For instance, between U+1BC63 and U+1BC66 two spaces are left. One might surmise that the following two characters are envisaged:

\begin{verbatim}
U+1BC63 \text{空白}
U+1BC64 *\text{空白}
U+1BC65 */\text{空白}
U+1BC66 /\text{空白}
\end{verbatim}

We would have no issue with re-inserting such gaps in the re-ordered chart and would welcome Mr Anderson’s advice on this point.

6. Issue: Ordering within shape-classes. In some instances we are uncertain why the specific ordering has been chosen. For example, Mr Anderson’s ordering gives the following:

\begin{verbatim}
{ { { ( { ) ) } } } \end{verbatim}

We are not certain why the long arcs have been inserted where they are. Why is the sequence not the following, which does not break up the original triple of arc, arc-with-stroke, and arc-with-dot?

\begin{verbatim}
{ { { { ( ) ) ) } } } \end{verbatim}

Another example which seems to be inconsistent is based on the arc-with-dot patterns. If dot-above precedes dot-below in the consonants, why does it not do so in the vowels? In the example below, the first four characters are ordered as in Mr Anderson’s proposal, and the second four show an ordering which we might recommend.
A third example has to do with the half-arcs. Shouldn’t the relative ordering of the vowel arcs be consistent with the consonant arcs? In the example below, the first eight characters are ordered as in Mr Anderson’s proposal, and the second eight show an ordering which we might recommend.

A fourth example has to do with the quarter-arcs. Here there are downward sloping and upward sloping Shouldn’t the relative ordering of the vowel arcs be consistent with the consonant arcs? In the example below, the first set of characters are ordered as in Mr Anderson’s proposal, and the second set shows an ordering which we might recommend.

We would also like clarification of the relative order of the quarter-circle vowels including DUPLOYAN LETTER U N and DUPLOYAN LETTER ROMANIAN U.

We would welcome discussion with Mr Anderson on these particulars, and perhaps the current ordering scheme could be made somewhat more regular, if it has not otherwise been optimized according to principles with which we are not familiar.

The Irish National Body favours the encoding of Mr Anderson’s Duployan character set, but would prefer a reorganization of the code chart. Such a reorganization might take place during ballot comments if there is not sufficient time to agree on the outstanding points before a new ballot is sent out after the Busan meeting of WG2.


Figure 1a. Sample from Anderson’s proposal showing lines in various orientations and sizes.

Figure 1b. Sample from Anderson’s proposal showing half-circles in various orientations and sizes.

Figure 1c. Sample from Anderson’s proposal showing quarter-circles in various orientations and sizes.

Figure 1d. Sample from Anderson’s proposal showing vowels arranged in various shapes.

Figure 1e. Sample from Anderson’s proposal showing secants and other connectors organized according to evidently sensible criteria.
Figure 2. Sample from Woods et al. 1992 showing the index to the “Finding Symbols by Shape” section of the Blissymbols Reference Guide.
**Figure 3.** Sample from Woods et al. 1992 showing a subset of the characters organized by half-circle in the “Finding Symbols by Shape” section of the Blissymbols Reference Guide. At the top of the page the “alphabet” is given and a square box shows which section the reader is in. This is used to help readers orient themselves when looking up Bliss-words.
<table>
<thead>
<tr>
<th>1BC0</th>
<th>1BC1</th>
<th>1BC2</th>
<th>1BC3</th>
<th>1BC4</th>
<th>1BC5</th>
<th>1BC6</th>
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### Dot consonants

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<th>Description</th>
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<tbody>
<tr>
<td>1BC00</td>
<td>DUPLOYAN LETTER H</td>
<td>• Chinook, Pernin, Sloan, Perrault</td>
</tr>
<tr>
<td>1BC01</td>
<td>DUPLOYAN LETTER X</td>
<td>• Salishan</td>
</tr>
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### Vertical-line consonants

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<tr>
<th>Code</th>
<th>Character</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1BC02</td>
<td>DUPLOYAN LETTER P</td>
<td>• Chinook number 2</td>
</tr>
<tr>
<td>1BC03</td>
<td>DUPLOYAN LETTER B</td>
<td>→ 1BC07</td>
</tr>
<tr>
<td></td>
<td>DUPLOYAN LETTER D</td>
<td>→ 1BC08</td>
</tr>
<tr>
<td>1BC04</td>
<td>DUPLOYAN LETTER P N</td>
<td>= Sloan B B</td>
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<tr>
<td></td>
<td></td>
<td>→ 1BC1E</td>
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### Horizontal-line consonants

<table>
<thead>
<tr>
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<th>Character</th>
<th>Description</th>
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<tr>
<td>1BC05</td>
<td>DUPLOYAN LETTER T</td>
<td>• Chinook number 2</td>
</tr>
<tr>
<td>1BC06</td>
<td>DUPLOYAN LETTER TH</td>
<td>• Chinook, Sloan, Pernin, Perrault</td>
</tr>
<tr>
<td>1BC07</td>
<td>DUPLOYAN LETTER SLOAN DH</td>
<td>= Sloan D D</td>
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<tr>
<td>1BC08</td>
<td>DUPLOYAN LETTER D</td>
<td>→ 1BC1E</td>
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### Northwest-to-southeast diagonal-line consonants

<table>
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<th>Character</th>
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</thead>
<tbody>
<tr>
<td>1BC09</td>
<td>DUPLOYAN LETTER F</td>
<td>• Chinook</td>
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<tr>
<td>1BC10</td>
<td>DUPLOYAN LETTER V</td>
<td>= Sloan V V</td>
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<tr>
<td>1BC11</td>
<td>DUPLOYAN LETTER SLOAN J</td>
<td>= Sloan J J</td>
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### Northeast-to-southwest diagonal-line consonants

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<tr>
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<th>Character</th>
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<tr>
<td>1BC12</td>
<td>DUPLOYAN LETTER K M</td>
<td>• written down and to the left</td>
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<tr>
<td></td>
<td></td>
<td>= Sloan G G</td>
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<tr>
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<td>→ 1BC19</td>
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### Southwest-to-northeast diagonal-line consonants

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<tbody>
<tr>
<td>1BC13</td>
<td>DUPLOYAN LETTER L</td>
<td>• written up and to the right</td>
</tr>
<tr>
<td>1BC14</td>
<td>DUPLOYAN LETTER HL</td>
<td>• Chinook</td>
</tr>
<tr>
<td>1BC15</td>
<td>DUPLOYAN LETTER LH</td>
<td>• Chinook</td>
</tr>
<tr>
<td>1BC16</td>
<td>DUPLOYAN LETTER R</td>
<td>• Chinook number 5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• French number milliards</td>
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<tr>
<td></td>
<td></td>
<td>• written up and to the right</td>
</tr>
<tr>
<td></td>
<td></td>
<td>= Pernin letter L</td>
</tr>
<tr>
<td></td>
<td></td>
<td>= Pernin Reporters word repeat sign</td>
</tr>
<tr>
<td>1BC17</td>
<td>DUPLOYAN LETTER RH</td>
<td>• Chinook</td>
</tr>
<tr>
<td>1BC18</td>
<td>DUPLOYAN LETTER R S</td>
<td>• written up and to the right</td>
</tr>
<tr>
<td></td>
<td></td>
<td>= Sloan R R</td>
</tr>
<tr>
<td></td>
<td></td>
<td>→ 1BC2C</td>
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### Left half-circle consonants

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</thead>
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<tr>
<td>1BC19</td>
<td>DUPLOYAN LETTER M</td>
<td>• Chinook Number 6</td>
</tr>
<tr>
<td>1BC1A</td>
<td>DUPLOYAN LETTER M N</td>
<td>• Romanian Mai mult, not Romanian Mult mai shorthand sign</td>
</tr>
<tr>
<td></td>
<td></td>
<td>→ 1BC1E</td>
</tr>
<tr>
<td>1BC1B</td>
<td>DUPLOYAN SIGN M WITH DOT</td>
<td>= Romanian sign Mijloc</td>
</tr>
<tr>
<td>1BC1C</td>
<td>DUPLOYAN LETTER M S</td>
<td>= Sloan shorthand letter M M</td>
</tr>
<tr>
<td></td>
<td></td>
<td>→ 1BC2C</td>
</tr>
</tbody>
</table>

### Right half-circle consonants

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<td>1BC1D</td>
<td>DUPLOYAN LETTER M N</td>
<td>= Sloan shorthand letter M M</td>
</tr>
<tr>
<td></td>
<td></td>
<td>→ 1BC2C</td>
</tr>
</tbody>
</table>

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**Date: 2010-09-21**
Top half-circle consonants

1BC23 ← DUROYLAN LETTER J
• Chinook number 8
= Chinook letter SH
= Pernin letter SH
1BC24 ← DUROYLAN LETTER J M
• not Romanian ceea ce shorthand sign
→ 1BC19 ( duployan letter m
1BC25 ○ DUROYLAN LETTER J N
→ 1BC1E ) duployan letter n
1BC26 ← DUROYLAN LETTER J WITH DOT
= Chinook, Romanian CH
= Sloan ZH
= Chinook, Perrault J
1BC27 ← DUROYLAN SIGN J WITH DOTS INSIDE AND ABOVE
= Romanian sign Ici
1BC28 ← DUROYLAN LETTER J S
= Romanian stenographic letter Ge
= Pernin, Perrault letter ZH
= Sloan letter CH
→ 1BC2C ← duployan letter s
1BC29 ← DUROYLAN LETTER J M S
→ 1BC19 ( duployan letter m
→ 1BC2C ← duployan letter s
1BC2A ○ DUROYLAN LETTER J N S
→ 1BC1E ) duployan letter n
→ 1BC2C ← duployan letter s
1BC2B ← DUROYLAN LETTER J S WITH DOT
= Sloan letter hard CH
= Pernin, Perrault letter Ch

Bottom half-circle consonants

1BC2C ← DUROYLAN LETTER S
• Chinook number 9
• French Hundreds
1BC2D ← DUROYLAN LETTER S J
• not Romanian sa se shorthand sign
→ 1BC23 ← duployan letter j
1BC2E ← DUROYLAN LETTER S WITH DOT
= Chinook TS
= Chinook, Romanian, Sloan Z
1BC2F ← DUROYLAN LETTER S WITH DOT BELOW
= Romanian Sh
1BC30 ← DUROYLAN LETTER S S
• French, Sloan
= Romanian stenographic letter Ts
= Pernin, Perrault letter Z
→ 1BC2C ← duployan letter s
1BC31 ← DUROYLAN LETTER S J S
→ 1BC23 ← duployan letter j

Downward-sloping quarter-arc consonants

1BC32 ← DUROYLAN LETTER S T
• Perrault
• written down
= Sloan SM
1BC33 ← DUROYLAN LETTER S T R
• Perrault
• written down
= Sloan SN
1BC34 ← DUROYLAN LETTER S P
• Perrault, Pernault
• written down
= Sloan KW
1BC35 ← DUROYLAN LETTER S P R
• Perrault, Pernault
• written down
= Sloan SKW
1BC36 ← DUROYLAN LETTER T S
• written down
• Perrault
= Sloan STD
1BC37 ← DUROYLAN LETTER T R S
• written down
• Perrault
= Sloan SST
1BC38 ← DUROYLAN LETTER W
• Sloan, Perrault, Pernin
• written down
• takes form of a hook or wave after K and G
1BC39 ← DUROYLAN LETTER WH
• written down
1BC3A ← DUROYLAN LETTER W R
• written down
• Perrault
= Sloan SW

Upward-sloping quarter-arc consonants

1BC3B ← DUROYLAN LETTER S N
• written up
• Perrault
= Pernin KRS
= Sloan SP
1BC3C ← DUROYLAN LETTER S M
• written up
• Perrault
= Pernin GRS
= Sloan SL
1BC3D ← DUROYLAN LETTER K R S
• written up
• Perrault
1BC3E ← DUROYLAN LETTER G R S
• written up
• Perrault
1BC3F ← DUROYLAN LETTER S K
• written up
• Perrault, Pernin
= Sloan TS
1BC40 ← DUROYLAN LETTER S K R
• written up
• Perrault, Pernin
= Sloan DS

Large circle vowels

1BC41 ○ DUROYLAN LETTER O
• Chinook number 0
1BC42 ○ DUROYLAN LETTER W O
• Chinook
1BC43 ○ DUROYLAN LETTER AOU
Small circle vowels

- **DUPLOYAN LETTER A**
  - Chinook number 10s
  - Cartesian
  - Not Romanian O+A
  - Perrault letter OY
- **DUPLOYAN LETTER WA**
  - Chinook
  - Not Romanian O+A
  - Perrault letter AW
  - Pernin letter AW
- **DUPLOYAN LETTER OA**
  - Chinook
  - Pernin letter AW
  - Pernin letter AW
  - Perrian letter AW
- **DUPLOYAN LETTER EU**
  - Pernin

Small half-circle vowels

- **DUPLOYAN LETTER I**
  - Character rotates to match entry angle of preceding consonant
  - Character has primary orientation (right and up)
  - Pernain letter long A, short E (with accents)
  - Perrian letter long A, short E (with dot accent)
  - Romanian stenographic letter AN
  - Consolidated Duployan letter R T R
- **DUPLOYAN LETTER UI**
  - Character rotates to match entry angle of preceding consonant
  - Character has secondary orientation (left and down)
  - Character has secondary orientation (left and down)
  - Romanian stenographic letter AN
  - Consolidated Duployan letter R T R
- **DUPLOYAN LETTER WI**
  - Character rotates to match entry angle of preceding consonant
  - Character has secondary orientation (left and down)
  - Romanian stenographic letter AN
  - Consolidated Duployan letter R T R
- **DUPLOYAN LETTER WEI**
  - Character rotates to match entry angle of preceding consonant
  - Character has secondary orientation (left and down)
  - Romanian stenographic letter AN
  - Consolidated Duployan letter R T R

Medium half-circle vowels

- **DUPLOYAN LETTER SHORT I**
  - Perrian, Duployan shorthand
  - Used as an invariant vowel and for orienting word abbreviations consisting of only vowels
  - Consolidated Duployan letter R T R
- **DUPLOYAN LETTER EE**
  - Perrian, Duployan shorthand
  - Used as an invariant vowel and for orienting word abbreviations consisting of only vowels
  - Consolidated Duployan letter R T R

Diagonal-line vowels

- **DUPLOYAN LETTER YE**
- **DUPLOYAN LETTER LONG I**
  - Perrian
  - Angles like an “F” when adjacent a K-type consonant
- **DUPLOYAN LETTER U**
  - Character rotates to match entry angle of preceding consonant
  - Character has primary orientation (right and up)
  - Romanian stenographic letter EN
  - Consolidated Duployan letter EN
- **DUPLOYAN LETTER UH**
  - Pernin
  - Angles like an “F” when adjacent a K-type consonant
- **DUPLOYAN LETTER EU**
  - Pernin
  - Angles like an “F” when adjacent a K-type consonant

Quarter-circle vowels

- **DUPLOYAN LETTER U**
  - Character rotates to match entry angle of preceding consonant
  - Character has primary orientation (right and up)
  - Romanian stenographic letter EN
  - Consolidated Duployan letter EN
- **DUPLOYAN LETTER UH**
  - Pernin
  - Angles like an “F” when adjacent a K-type consonant
  - Consolidated Duployan letter EN
- **DUPLOYAN LETTER UH**
  - Pernin
  - Angles like an “F” when adjacent a K-type consonant
  - Consolidated Duployan letter EN

Oblong circle vowels

- **DUPLOYAN LETTER U**
  - Pernin, Perrault
  - This vowel does not rotate to match entry angle of preceding consonant
  - Consolidated Duployan letter R T R
- **DUPLOYAN LETTER UH**
  - Sloan
  - Consolidated Duployan letter R T R
- **DUPLOYAN LETTER OOH**
  - Sloan
  - Consolidated Duployan letter R T R

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Date: 2010-09-21
Dot vowels

1BC5D  • DUPLOYAN LETTER OU
  • should not be used for Perrault Ow
  ≈ <initial, final> 1BC5E  •
  = Chinnook letter oo
  → 1BC60  • duployan letter romanian u
  → 1BC5A  • duployan letter uh
  → 1BC5B  • duployan letter ooh
  → 1BC5C  • duployan letter sloan u

1BC5E  • DUPLOYAN LETTER OW
  • should not be used for Romanian U
  ≈ <medial> 1BC60  •

1BC5F  • DUPLOYAN LETTER WOW
  • Slavish

Small quarter-circle vowels

1BC60  • DUPLOYAN LETTER ROMANIAN U
  → 1BC5E  • duployan letter ow

1BC61  • DUPLOYAN LETTER VOCALIC M
  • primary orienting vowel
  = Perrault letters Am, Em, Im, Um (with accents)
  = DUPLOYAN LETTER NASAL I
  • character positions diacritically, as an orienting vowel, or as an invariant vowel
  • primary orientation
  • invariant direction down
  = Romanian multiplicative number prefix
  = Pernin letter IM
  = Consolidated Duployan affix INT-R-

1BC62  • DUPLOYAN LETTER NASAL U
  • character positions diacritically, as an orienting vowel, or as an invariant vowel
  • secondary orientation
  • invariant direction down
  • French number 1
  = Pernin letter IN
  = Consolidated Duployan affix INT-R-

1BC63  • DUPLOYAN LETTER NASAL O
  • character positions diacritically, as an orienting vowel, or as an invariant vowel
  • neutral nasal vowel for transcription of an ambiguous secondary orienting nasal vowel
  • secondary orientation
  • invariant direction up
  = Pernin letter OM
  = Perrault letters An, En, In, Un (with accents)
  = Pernin letter IM
  = Consolidated Duployan affix INT-R-

1BC64  • DUPLOYAN LETTER NASAL A
  • Perrault vocalic N - An, En, In, Un (with accents)
  • character positions diacritically, as an orienting vowel, or as an invariant vowel
  • neutral nasal vowel for transcription of an ambiguous primary orienting nasal vowel
  • primary orientation
  • invariant direction up
  = Pernin letter ON
  = Romanian stenographic letter YN

1BC65  • DUPLOYAN LETTER PERNIN AN
  • written down

1BC66  • DUPLOYAN LETTER PERNIN AN
  • written down

1BC67  • DUPLOYAN LETTER PERNIN AM
  • written down

1BC68  • DUPLOYAN LETTER SLOAN AN

1BC69  • DUPLOYAN LETTER SLOAN EN

1BC6A  • DUPLOYAN LETTER SLOAN ON

Attached affixes

1BC6B  • DUPLOYAN AFFIX ATTACHED SECANT
  • dots show position on and relative orientation to base glyph and are not rendered
  • as a prefix, takes opposite relative position to following glyph
  • generally crosses adjacent character at perpendicular, but has a bias towards SW/NE angle to contrast 1BC71
  • default neutral secant affix
  = French suffix -anse
  = Pernin prefix Pre-
  = Sloan affix Ax-/-ext

1BC6C  • DUPLOYAN AFFIX ATTACHED TANGENT
  • dots show position on and relative orientation to base glyph and are not rendered
  • as a prefix, takes opposite relative position to following glyph
  = French suffix -tan
  = Romanian shorthand letter Str/-str

1BC6D  • DUPLOYAN AFFIX ATTACHED TAIL
  • orienting character
  = French suffix -sionaire

1BC6E  • DUPLOYAN AFFIX ATTACHED I HOOK
  • glyph is retrograde and opens left or right, dependent on preceding letter
  • dots show position of preceding glyph and are not rendered
  → 1BC48  • duployan letter i
  = French suffix -tou
  = Sloan affix Inr/-ary

1BC6F  • DUPLOYAN AFFIX ATTACHED E HOOK
  • glyph is retrograde and opens up or down, dependent on preceding letter
  • dots show position of preceding glyph and are not rendered
  → 1BC49  • duployan letter e
  = French suffix -te

1BC70  • DUPLOYAN AFFIX ATTACHED TANGENT HOOK
  • attached affix
  • dots show position on and relative orientation to base glyph and are not rendered
  = Romanian affix Ist/-ism
  = Consolidated Duployan prefix T-R-
  = DUPLOYAN AFFIX ATTACHED LEFT-TO-RIGHT SECANT
  • dots show position on and relative orientation to base glyph and are not rendered
  • generally crosses adjacent character at perpendicular, but has a bias towards NW/SE angle to contrast 1BC6B
  • as a suffix, takes opposite relative position to following glyph
  = Pernin prefix Per-
### Vertical affixes

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1BC72</td>
<td>D U P L O Y A N A F F I X L O W VERTICAL SECANT = Pernin Reporters' Extra-</td>
</tr>
<tr>
<td></td>
<td>• dots show position on base glyph and are not rendered</td>
</tr>
<tr>
<td></td>
<td>→ 1BC08 — duployan letter d</td>
</tr>
<tr>
<td>1BC73</td>
<td>D U P L O Y A N A F F I X M I D VERTICAL SECANT = Pernin Reporters' Trans-</td>
</tr>
<tr>
<td></td>
<td>• dots show position on base glyph and are not rendered</td>
</tr>
<tr>
<td></td>
<td>→ 1BC08 — duployan letter d</td>
</tr>
<tr>
<td>1BC74</td>
<td>D U P L O Y A N A F F I X H I G H VERTICAL SECANT = Pernin Reporters' Super-</td>
</tr>
<tr>
<td></td>
<td>• dots show position on base glyph and are not rendered</td>
</tr>
<tr>
<td></td>
<td>→ 1BC08 — duployan letter d</td>
</tr>
</tbody>
</table>

### Horizontal affixes

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1BC75</td>
<td>D U P L O Y A N A F F I X L E F T HORIZONTAL SECANT = Pernin Reporters' Extra-</td>
</tr>
<tr>
<td></td>
<td>• dots show position on base glyph and are not rendered</td>
</tr>
<tr>
<td></td>
<td>→ 1BC08 — duployan letter d</td>
</tr>
<tr>
<td>1BC76</td>
<td>D U P L O Y A N A F F I X M I D HORIZONTAL SECANT = Pernin Reporters' Inter-</td>
</tr>
<tr>
<td></td>
<td>• dots show position on base glyph and are not rendered</td>
</tr>
<tr>
<td></td>
<td>→ 1BC08 — duployan letter d</td>
</tr>
<tr>
<td>1BC77</td>
<td>D U P L O Y A N A F F I X R I G H T HORIZONTAL SECANT = Pernin Reporters' Contra-</td>
</tr>
<tr>
<td></td>
<td>• dots show position on base glyph and are not rendered</td>
</tr>
<tr>
<td></td>
<td>→ 1BC08 — duployan letter d</td>
</tr>
</tbody>
</table>

### High affixes

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1BC78</td>
<td>D U P L O Y A N A F F I X H I G H A C R U T E = French suffix -ment</td>
</tr>
<tr>
<td></td>
<td>= Romanian suffix -mant</td>
</tr>
<tr>
<td></td>
<td>= Pernin Sub-</td>
</tr>
<tr>
<td></td>
<td>= Pernin Reporters' suffix Pro-</td>
</tr>
<tr>
<td></td>
<td>→ 02CA ′ modifier letter acute accent</td>
</tr>
<tr>
<td>1BC79</td>
<td>D U P L O Y A N A F F I X H I G H TIGHT ACUTE = Pernin Pro-</td>
</tr>
<tr>
<td></td>
<td>• as a suffix, placed above and to the right of the following letter</td>
</tr>
<tr>
<td>1BC80</td>
<td>D U P L O Y A N A F F I X L O W A C R U T E = French suffix -ien</td>
</tr>
<tr>
<td></td>
<td>= Pernin suffix Con-</td>
</tr>
<tr>
<td></td>
<td>→ 02CA ′ modifier letter grave accent</td>
</tr>
<tr>
<td>1BC81</td>
<td>D U P L O Y A N A F F I X L O W TIGHT ACUTE = Pernin Pro-</td>
</tr>
<tr>
<td></td>
<td>• as a suffix, placed under and to the right of the following letter</td>
</tr>
<tr>
<td>1BC82</td>
<td>D U P L O Y A N A F F I X H I G H T R I G H T A C U T E = Pernin Pro-</td>
</tr>
<tr>
<td></td>
<td>• as a suffix, placed above and to the right of the following letter</td>
</tr>
<tr>
<td>1BC83</td>
<td>D U P L O Y A N A F F I X L O W T R I G H T A C U T E = Pernin Pro-</td>
</tr>
<tr>
<td></td>
<td>• as a suffix, placed under and to the right of the following letter</td>
</tr>
<tr>
<td>1BC84</td>
<td>D U P L O Y A N A F F I X H I G H D O T = French suffix -ie</td>
</tr>
<tr>
<td></td>
<td>= Pernin Extra-</td>
</tr>
<tr>
<td>1BC85</td>
<td>D U P L O Y A N A F F I X L O W D O T = French suffix -ie</td>
</tr>
<tr>
<td></td>
<td>• French iterative number</td>
</tr>
<tr>
<td></td>
<td>= Romanian shorthand affix Inter-</td>
</tr>
<tr>
<td></td>
<td>• not Romanian millions - see U+0323 ̇ combining dot below and U+0324 ̈ combining diaeresis</td>
</tr>
<tr>
<td></td>
<td>• as a suffix, placed above and to the right of the following letter</td>
</tr>
<tr>
<td>1BC86</td>
<td>D U P L O Y A N A F F I X H I G H C I R C L E = French suffix -iere</td>
</tr>
<tr>
<td></td>
<td>• French percent</td>
</tr>
<tr>
<td></td>
<td>→ 02F3 ′ modifier letter low ring</td>
</tr>
<tr>
<td>1BC87</td>
<td>D U P L O Y A N A F F I X L O W C I R C L E = French suffix -iere</td>
</tr>
<tr>
<td></td>
<td>= French suffix -isme</td>
</tr>
<tr>
<td></td>
<td>= Pernin affix Mis-</td>
</tr>
<tr>
<td></td>
<td>→ 02D7 ′ modifier letter minus sign</td>
</tr>
<tr>
<td>1BC88</td>
<td>D U P L O Y A N A F F I X L O W W A V E = French suffix -ification</td>
</tr>
<tr>
<td></td>
<td>= French suffix -ification</td>
</tr>
<tr>
<td></td>
<td>→ 02F7 ′ modifier letter low tilde</td>
</tr>
</tbody>
</table>
DUPOLOYAN AFFIX LOW VERTICAL
- functions as attached affix vertical down with ZWJ
- this affix is about half as long as Duployan the letter P
- as a prefix, has rising stroke direction
  = Permin ZWJ + -ine
  → 1BC02 · duployan letter p

DUPOLOYAN AFFIX LOW ARROW
- Romanian prefix Sub-
- low affix

Chinook sign
DUPOLOYAN SIGN O WITH CROSS
- Chinook Likalisti

Sloan R-form selector
DUPOLOYAN THICK LETTER SELECTOR
- commonly abbreviated DTLS
- Sloan R-flavored letters
- Shape shown is arbitrary and is not visibly rendered
- Causes previous Duployan character to be rendered bold

Shorthand double mark
DUPOLOYAN DOUBLE MARK
- Dots show position on and relative orientation to base glyph and are not rendered
- Romanian, Sloan shorthands
- Should be used with M, N, J, and S for the Romanian word signs Mai mult, Nu nu, Ceea ce, and Sa se
- Can be doubled and tripled

Chinook punctuation
DUPOLOYAN PUNCTUATION CHINOOK FULL STOP
Shorthand Format Controls

1B0A0 .SHORTHAND FORMAT LETTER OVERLAP
* shape shown is arbitrary and is not visibly rendered

1B0A1 .SHORTHAND FORMAT CONTINUING OVERLAP
* shape shown is arbitrary and is not visibly rendered

1B0A2 .SHORTHAND FORMAT DOWN STEP
= Romanian shorthand affix -tion-
= Sloan contracted ending oo/o + ZWSP
* shape shown is arbitrary and is not visibly rendered

1B0A3 .SHORTHAND FORMAT UP STEP
= Sloan contracted ending uh/au/au + ZWSP
* shape shown is arbitrary and is not visibly rendered