Document #L2/11-???
Title: Proposal to include Duployan Shorthands and Chinook script and Shorthand Format Controls in UCS, as approved by WG2
Source: Van Anderson
Status: Approved by UTC as L2/10-272r. Approved by WG2 resolution M58.20. Contains WG2 ammendments N4088.
Action: Ammended for final approval by UTC. Comments to Van Anderson
Date: 2011-07-19
Discussion list: Chinook in the UCS

L2/11-303

Differences between this document and document # L2/10-272r

This document is substantively the same as document # L2/10-272r, with the following ammendments from WG2 document N4088:

1. The allocation order has been rearranged.
2. The collation order has been rearranged to reflect the allocation order.

The proposal has also been ammended to reflect that L2/10-272r was approved by the UTC with the caveat that the rendering model would be incorporated as a technical note. The rendering model has also been clarified that WJ is the non-breaking equivalent of ZWSP, as per Unicode ch 16.2 (v6.0). Lastly, several representative glyphs have been updated with distinguishing arrows and an update to abbreviations (DTRS→DTLS). All character properties besides code point and collation weight are the same as in L2/10-272r.

Historical Overview of the Duployéan and adaptations

The Duployéan shorthands and Chinook script are used as a secondary shorthand for writing French, English, German, Spanish, Romanian, and as an alternate primary script for several first nations' languages of interior British Columbia, including the Chinook Jargon, Okanagan, Lilooet, Shushwap, and North Thompson. The original Duployéan shorthand was invented by Emile Duployé, published in 1860, as a stenographic shorthand for French. It was one of the two most commonly used French shorthands, being more popular in the south of France, and adjacent French speaking areas of other countries. Adapted Duployéan shorthands were also developed for English, German, Spanish, and Romanian. The basic inventory of consonant and vowel signs - all in the first two columns of the allocation - have been augmented over the years to provide more efficient shorthands for these languages and to adapt it to the phonologies of these languages and the languages using Chinook writing. There currently exists no encoding - PUA or otherwise - for the representation of the Duployan or Chinook. Indeed, the submission of the Duployan Shorthands and Chinook script to the Unicode Consortium has necessitated the creation, from scratch, of the first Duployéan/Chinook font, and the allocation is based solely on the internal logic of the script and affinity of usage among characters.

The Chinook script was an adaptation and augmentation of the Duployéan shorthand by fr. Jean Marie Raphael LeJeune, used for writing the Chinook Jargon and other languages of 19th c. interior British Columbia. Its original use and greatest surviving attestation is from the run of the *Kamloops Wawa*, a (mostly) Chinook Jargon newsletter of the Catholic diocese of Kamloops, British Columbia, published 1891-1923. At the time, the Chinook Jargon pidgin was widely spoken from SE Alaska to northern California, from the Pacific to the Rockies, and sporadically outside this area. Although the Chinook Jargon was the lingua franca in many communities of the Pacific Northwest, it was generally a spoken, rather than written language. Most attempts at documentation used the Latin script to approximate Jargon words with English or French phonology, and indeed, dictionaries of the Chinook Jargon are still readily available in these Latinate orthographies. In contrast, the archives of the *Kamloops Wawa*, written in Chinook, includes a considerable dictionary, but also constitutes an unparalleled 3+ decade corpus of Chinook Jargon usage during the height of its spread and utility. The Chinook Script makes use of the basic Duployéan inventory, with the addition of

several derived letterforms and compound letters.

In 1984, the "Students' Practical Encyclopedia" (*Enciclopedia practicâ a copiilor*) was published in Romania, containing the "Curs de Stenografie" by Margareta Sfinţescu. This shorthand was an adaptation of the Duployéan for Romanian, using a few of the Chinook and Duployan shorthand compound letters as basic letterforms, and several basic vowel forms with diacritics. It also makes use of a "doubling mark" to indicate a general duplication of a word or phonemic form.

The Pernin shorthand was first published by Helen M. Pernin as "Pernin's Universal Phonography" no later than 1882. There is an alternate version of the Pernin shorthand published as "Pernin's Practical Reporter", that has different affixes. The next year, John Mathew Sloan published the competing Sloan-Duployan method, which was expanded in 1918, when Denis R. Perrault published the Perrault-Duployan system. All three of the above, being the main English adaptations of Duployan, enjoyed some popularity, but never attained the reach of Pitman or Gregg shorthands. All three systems share many characters with Chinook and each other. The most significant anomalies of these systems are the invariant vowel signs in Pernin, the quarter-circle combined consonants, found in each system but with differing values, the extensive use of vowel diacritics in Sloan, and heavy shading of letters - as the voiced consonants in Pitman-based systems are - to indicate "r" flavored letters in Sloan.

Unsupported orthographies. Currently, materials are unavailable to attempt including Carl Brandt's English Duployéan adaptation or George Galloway's extension of the Sloan-Duployan in the current encoding. Similarly, documentation of the adaptations of Duployéan to German and Spanish are unavailable, so complete support for these orthographies is probably not offered in the current allocation. Allocation space has been set aside to reasonably accommodate extensions for some of these extensions of the Duployéan script.

Typology

Duployéan is, at its core, an alphabetic (consonant & vowel) stenographic (simple line & curve) writing system (cf. Pitman shorthand, a stenographic abjad). It classifies under the geometric shorthands, in that the model letterforms are generally based on circles and lines (cf. Gregg's eliptical shorthand). In general, there is a visual and functional distinction between consonants, which are based either on lines or large semi-circles and have invariable orientation, ie consonants do not rotate to match with surrounding letters; and the vowels, which are generally based on circles, quarter arcs, and small semi-circles, and generally reshape and orient contextually. It is an LTR script, proceeding down the page in lines like most modern Western scripts, although individual letters may be written right-to-left.

Script Structure

The core repertoire of the Duployéan writing contains several classes of letters, differentiated primarily by visual form and stroke direction, and nominally by phonetic value. Letter classes include the line consonants (P, T, F, K, & L-type) and arc consonants (M, N, J, & S-type), circle vowels (A, O, & W- vowels), nasal vowels, and orienting vowels (U/Eu,I/E). In addition, the Chinook writing contains spacing letters, compound consonants, and a logograph. The extended Duployéan shorthand includes four other letter classes - the complex letters (multisyllabic symbols with consonant forms), and high, low, and connecting terminals for common word endings. The Romanian stenography, Pernin, Perrault, and Sloan orthographies add a few letters or letter forms, ideographs, and several combined letters. Most "core" letters have related variant forms, including the addition of ancillary dots and crosses, size variants, and the compounding of vowels.

Since the Duployéan was originally developed as a shorthand system, strings of letters are joined together cursively into words in Duployéan, Romanian, Pernin, Perrault, and Sloan, or nominally syllabic units in Chinook - usually with a single circle vowel for each unit. The original Duployéan and its offshoots all encourage overlapping for initialisms and abbreviations and many prescribe overlaps and raised or lowered text height for some morphemes or phonemes.

Character List

Supplemental Punctuation 2E00-2E7F

2E3C;STENOGRAPHIC PERIOD

Duployan Shorthands and Chinook 1BC00-1BC9F

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1BC00;DUPLOYAN LETTER H;Lo;0;L;;;;;N;;;;;
1BC01;DUPLOYAN LETTER X;Lo;0;L;;;;;N;;;;;
1BC02;DUPLOYAN LETTER P;Lo;0;L;;;;;N;;;;;
1BC03;DUPLOYAN LETTER T;Lo;0;L;;;;;N;;;;;
1BC04;DUPLOYAN LETTER F;Lo;0;L;;;;;N;;;;;
1BC05;DUPLOYAN LETTER K;Lo;0;L;;;;;N;;;;;
1BC06;DUPLOYAN LETTER L;Lo;0;L;;;;;N;;;;;
1BC07;DUPLOYAN LETTER B;Lo;0;L;;;;;N;;;;;
1BC08;DUPLOYAN LETTER D;Lo;0;L;;;;;N;;;;;
1BC09;DUPLOYAN LETTER V;Lo;0;L;;;;;N;;;;;
1BC0A;DUPLOYAN LETTER G;Lo;0;L;;;;;N;;;;;
1BC0B;DUPLOYAN LETTER R;Lo;0;L;;;;;N;;;;;
1BC0C;DUPLOYAN LETTER P N;Lo;0;L;;;;;N;;;;;
1BC0D;DUPLOYAN LETTER D S;Lo;0;L;;;;;N;;;;;
1BC0E;DUPLOYAN LETTER F N;Lo;0;L;;;;;N;;;;;
1BC0F;DUPLOYAN LETTER K M;Lo;0;L;;;;;N;;;;;
1BC10;DUPLOYAN LETTER R S;Lo;0;L;;;;;N;;;;;
1BC11;DUPLOYAN LETTER TH;Lo;0;L;;;;;N;;;;;
1BC12;DUPLOYAN LETTER SLOAN DH;Lo;0;L;;;;;N;;;;;
1BC13;DUPLOYAN LETTER DH;Lo;0;L;;;;;N;;;;;
1BC14;DUPLOYAN LETTER KK;Lo;0;L;;;;;N;;;;;
1BC15;DUPLOYAN LETTER SLOAN J;Lo;0;L;;;;;N;;;;;
1BC16;DUPLOYAN LETTER HL;Lo;0;L;;;;;N;;;;;
1BC17;DUPLOYAN LETTER LH;Lo;0;L;;;;;N;;;;;
1BC18;DUPLOYAN LETTER RH;Lo;0;L;;;;;N;;;;;
1BC19;DUPLOYAN LETTER M;Lo;0;L;;;;;N;;;;;
1BC1A;DUPLOYAN LETTER N;Lo;0;L;;;;;N;;;;;
1BC1B;DUPLOYAN LETTER J;Lo;0;L;;;;;N;;;;;
1BC1C;DUPLOYAN LETTER S;Lo;0;L;;;;;N;;;;;
1BC1D;DUPLOYAN LETTER M N;Lo;0;L;;;;;N;;;;;
1BC1E;DUPLOYAN LETTER N M;Lo;0;L;;;;;N;;;;;
1BC1F;DUPLOYAN LETTER J M;Lo;0;L;;;;;N;;;;;
1BC20;DUPLOYAN LETTER S J;Lo;0;L;;;;;N;;;;;
1BC21;DUPLOYAN LETTER M WITH DOT;Lo;0;L;;;;;N;;;;;
1BC22;DUPLOYAN LETTER N WITH DOT;Lo;0;L;;;;;N;;;;;
1BC23;DUPLOYAN LETTER J WITH DOT;Lo;0;L;;;;;N;;;;;
1BC24;DUPLOYAN LETTER J WITH DOTS INSIDE AND ABOVE;Lo;0;L;;;;;N;;;;;
1BC25;DUPLOYAN LETTER S WITH DOT;Lo;0;L;;;;;N;;;;;
1BC26;DUPLOYAN LETTER S WITH DOT BELOW;Lo;0;L;;;;;N;;;;;
1BC27;DUPLOYAN LETTER M S;Lo;0;L;;;;;N;;;;;
1BC28;DUPLOYAN LETTER N S;Lo;0;L;;;;;N;;;;;
1BC29;DUPLOYAN LETTER J S;Lo;0;L;;;;;N;;;;;
1BC2A;DUPLOYAN LETTER S S;Lo;0;L;;;;;N;;;;;
1BC2B;DUPLOYAN LETTER M N S;Lo;0;L;;;;;N;;;;;
1BC2C;DUPLOYAN LETTER N M S;Lo;0;L;;;;;N;;;;;
1BC2D;DUPLOYAN LETTER J M S;Lo;0;L;;;;;N;;;;;
1BC2E;DUPLOYAN LETTER S J S;Lo;0;L;;;;;N;;;;;
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1BC46;DUPLOYAN LETTER I;Lo;0;L;;;;;N;;;;;
1BC47;DUPLOYAN LETTER E;Lo;0;L;;;;;N;;;;;
1BC48;DUPLOYAN LETTER IE;Lo;0;L;;;;;N;;;;;
1BC49;DUPLOYAN LETTER SHORT I;Lo;0;L;;;;;N;;;;;
1BC4A;DUPLOYAN LETTER UI;Lo;0;L;;;;;N;;;;;
1BC4B;DUPLOYAN LETTER EE;Lo;0;L;;;;;N;;;;;
1BC4C;DUPLOYAN LETTER SLOAN EH;Lo;0;L;;;;;N;;;;;
1BC4D;DUPLOYAN LETTER ROMANIAN I;Lo;0;L;;;;;N;;;;;
1BC4E;DUPLOYAN LETTER SLOAN EE;Lo;0;L;;;;;N;;;;;
1BC4F;DUPLOYAN LETTER LONG I;Lo;0;L;;;;;N;;;;;
1BC50;DUPLOYAN LETTER YE;Lo;0;L;;;;;N;;;;;
1BC51;DUPLOYAN LETTER U;Lo;0;L;;;;;N;;;;;
1BC52;DUPLOYAN LETTER EU;Lo;0;L;;;;;N;;;;;
1BC53;DUPLOYAN LETTER XW;Lo;0;L;;;;;N;;;;;
1BC54;DUPLOYAN LETTER U N;Lo;0;L;;;;;N;;;;;
1BC55;DUPLOYAN LETTER LONG U;Lo;0;L;;;;;N;;;;;
1BC56;DUPLOYAN LETTER ROMANIAN U;Lo;0;L;;;;;N;;;;;
1BC57;DUPLOYAN LETTER UH;Lo;0;L;;;;;N;;;;;
1BC58;DUPLOYAN LETTER SLOAN U;Lo;0;L;;;;;N;;;;;
1BC59;DUPLOYAN LETTER OOH;Lo;0;L;;;;;N;;;;;
1BC5A;DUPLOYAN LETTER OW;Lo;0;L;;;;;N;;;;;
1BC5B;DUPLOYAN LETTER OU;Lo;0;L;;;;;N;;;;;
1BC5C;DUPLOYAN LETTER WA;Lo;0;L;;;;;N;;;;;
1BC5D;DUPLOYAN LETTER WO;Lo;0;L;;;;;N;;;;;
1BC5E;DUPLOYAN LETTER WI;Lo;0;L;;;;;N;;;;;
1BC5F;DUPLOYAN LETTER WEI;Lo;0;L;;;;;N;;;;;
1BC60;DUPLOYAN LETTER WOW;Lo;0;L;;;;;N;;;;;
1BC61;DUPLOYAN LETTER NASAL U;Lo;0;L;;;;;N;;;;;
1BC62;DUPLOYAN LETTER NASAL O;Lo;0;L;;;;;N;;;;;
1BC63;DUPLOYAN LETTER NASAL I;Lo;0;L;;;;;N;;;;;
1BC64;DUPLOYAN LETTER NASAL A;Lo;0;L;;;;;N;;;;;
1BC65;DUPLOYAN LETTER PERNIN AN;Lo;0;L;;;;;N;;;;;
1BC66;DUPLOYAN LETTER PERNIN AM;Lo;0;L;;;;;N;;;;;
1BC67;DUPLOYAN LETTER SLOAN EN;Lo;0;L;;;;;N;;;;;
1BC68;DUPLOYAN LETTER SLOAN AN;Lo;0;L;;;;;N;;;;;
1BC69;DUPLOYAN LETTER SLOAN ON;Lo;0;L;;;;;N;;;;;
1BC6A;DUPLOYAN LETTER VOCALIC M;Lo;0;L;;;;;N;;;;;
1BC70;DUPLOYAN AFFIX LEFT HORIZONTAL SECANT;Lo;0;L;;;;;N;;;;;
1BC71;DUPLOYAN AFFIX MID HORIZONTAL SECANT;Lo;0;L;;;;;N;;;;;
1BC72;DUPLOYAN AFFIX RIGHT HORIZONTAL SECANT;Lo;0;L;;;;;N;;;;;
1BC73;DUPLOYAN AFFIX LOW VERTICAL SECANT;Lo;0;L;;;;;N;;;;;
1BC74;DUPLOYAN AFFIX MID VERTICAL SECANT;Lo;0;L;;;;;N;;;;;
1BC75;DUPLOYAN AFFIX HIGH VERTICAL SECANT;Lo;0;L;;;;;N;;;;;
1BC76;DUPLOYAN AFFIX ATTACHED SECANT;Lo;0;L;;;;;N;;;;;
1BC77;DUPLOYAN AFFIX ATTACHED LEFT-TO-RIGHT SECANT;Lo;0;L;;;;;N;;;;;
1BC78;DUPLOYAN AFFIX ATTACHED TANGENT;Lo;0;L;;;;;N;;;;;
1BC79;DUPLOYAN AFFIX ATTACHED TAIL;Lo;0;L;;;;;N;;;;;
1BC7A;DUPLOYAN AFFIX ATTACHED E HOOK;Lo;0;L;;;;;N;;;;;
1BC7B;DUPLOYAN AFFIX ATTACHED I HOOK;Lo;0;L;;;;;N;;;;;
1BC7C;DUPLOYAN AFFIX ATTACHED TANGENT HOOK;Lo;0;L;;;;;N;;;;;
1BC80;DUPLOYAN AFFIX HIGH ACUTE;Lo;0;L;;;;;N;;;;;
1BC81;DUPLOYAN AFFIX HIGH TIGHT ACUTE;Lo;0;L;;;;;N;;;;;
1BC82;DUPLOYAN AFFIX HIGH GRAVE;Lo;0;L;;;;;N;;;;;
1BC83;DUPLOYAN AFFIX HIGH LONG GRAVE;Lo;0;L;;;;;N;;;;;
1BC84;DUPLOYAN AFFIX HIGH DOT;Lo;0;L;;;;;N;;;;;
1BC85;DUPLOYAN AFFIX HIGH CIRCLE;Lo;0;L;;;;;N;;;;;
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1BC2F;DUPLOYAN LETTER J S WITH DOT;Lo;0;L;;;;;N;;;;;
1BC30;DUPLOYAN LETTER J N;Lo;0;L;;;;;N;;;;;
1BC31;DUPLOYAN LETTER J N S;Lo;0;L;;;;;N;;;;;
1BC32;DUPLOYAN LETTER S T;Lo;0;L;;;;;N;;;;;
1BC33;DUPLOYAN LETTER S T R;Lo;0;L;;;;;N;;;;;
1BC34;DUPLOYAN LETTER S P;Lo;0;L;;;;;N;;;;;
1BC35;DUPLOYAN LETTER S P R;Lo;0;L;;;;;N;;;;;
1BC36;DUPLOYAN LETTER T S;Lo;0;L;;;;;N;;;;;
1BC37;DUPLOYAN LETTER T R S;Lo;0;L;;;;;N;;;;;
1BC38;DUPLOYAN LETTER W;Lo;0;L;;;;;N;;;;;
1BC39;DUPLOYAN LETTER WH;Lo;0;L;;;;;N;;;;;
1BC3A;DUPLOYAN LETTER W R;Lo;0;L;;;;;N;;;;;
1BC3B;DUPLOYAN LETTER S N;Lo;0;L;;;;;N;;;;;
1BC3C;DUPLOYAN LETTER S M;Lo;0;L;;;;;N;;;;;
1BC3D;DUPLOYAN LETTER K R S;Lo;0;L;;;;;N;;;;;
1BC3E;DUPLOYAN LETTER G R S;Lo;0;L;;;;;N;;;;;
1BC3F;DUPLOYAN LETTER S K;Lo;0;L;;;;;N;;;;;
1BC40;DUPLOYAN LETTER S K R;Lo;0;L;;;;;N;;;;;
1BC41;DUPLOYAN LETTER A;Lo;0;L;;;;;N;;;;;
1BC42;DUPLOYAN LETTER SLOAN OW;Lo;0;L;;;;;N;;;;;
1BC43;DUPLOYAN LETTER OA;Lo;0;L;;;;;N;;;;;
1BC44;DUPLOYAN LETTER O;Lo;0;L;;;;;N;;;;;
1BC45;DUPLOYAN LETTER AOU;Lo;0;L;;;;;N;;;;;
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1BC86;DUPLOYAN AFFIX HIGH LINE;Lo;0;L;;;;;N;;;;;
1BC87;DUPLOYAN AFFIX HIGH WAVE;Lo;0;L;;;;;N;;;;;
1BC88;DUPLOYAN AFFIX HIGH VERTICAL;Lo;0;L;;;;;N;;;;;
1BC90;DUPLOYAN AFFIX LOW ACUTE;Lo;0;L;;;;;N;;;;;
1BC91;DUPLOYAN AFFIX LOW TIGHT ACUTE;Lo;0;L;;;;;N;;;;;
1BC92;DUPLOYAN AFFIX LOW GRAVE;Lo;0;L;;;;;N;;;;;
1BC93;DUPLOYAN AFFIX LOW LONG GRAVE;Lo;0;L;;;;;N;;;;;
1BC94;DUPLOYAN AFFIX LOW DOT;Lo;0;L;;;;;N;;;;;
1BC95;DUPLOYAN AFFIX LOW CIRCLE;Lo;0;L;;;;;N;;;;;
1BC96;DUPLOYAN AFFIX LOW LINE;Lo;0;L;;;;;N;;;;;
1BC97;DUPLOYAN AFFIX LOW WAVE;Lo;0;L;;;;;N;;;;;
1BC98;DUPLOYAN AFFIX LOW VERTICAL;Lo;0;L;;;;;N;;;;;
1BC99;DUPLOYAN AFFIX LOW ARROW;Lo;0;L;;;;;N;;;;;
1BC9C;DUPLOYAN SIGN O WITH CROSS;So;0;L;;;;;N;;;;;
1BC9D;DUPLOYAN THICK LETTER SELECTOR;Cf;0;BN;;;;;N;;;;;
1BC9E;DUPLOYAN DOUBLE MARK;Mn;1;L;;;;;N;;;;;
1BC9F;DUPLOYAN PUNCTUATION CHINOOK FULL STOP;Po;0;L;;;;;N;;;;;
1BCA0;SHORTHAND FORMAT LETTER OVERLAP;Cf;0;BN;;;;;N;;;;;
1BCA1;SHORTHAND FORMAT CONTINUING OVERLAP;Cf;0;BN;;;;;N;;;;;
1BCA2;SHORTHAND FORMAT DOWN STEP;Cf;0;BN;;;;;N;;;;;
1BCA3;SHORTHAND FORMAT UP STEP;Cf;0;BN;;;;;N;;;;;
```

Proposal to include Duployéan Shorthands and Chinook script and Shorthand Format Controls in Unicode/ISO-10646, as approved by WG2

	1BC0	1BC1	1BC2	1BC3	1BC4	1BC5	1BC6	1BC7	1BC8	1BC9		1BCA
0	1BC00	1BC10	1BC20	1BC30	1BC40	1BC50	1BC60	1BC70	1BC80	1BC90	0	1BCA0
1	1BC01	1BC11	1BC21	1BC31	1BC41	1BC51	1BC61	1BC71	1BC81	1BC91	1	1BCA1
2	1BC02	1BC12	1BC22	1BC32	1BC42	1BC52	1BC62	1BC72	1BC82	1BC92	2	1BCA2
3	1BC03	1BC13	1BC23	1BC33	1BC43	1BC53	1BC63	1BC73	1BC83	1BC93	3	1BCA3
4	1BC04	1BC14	1BC24	1BC34	1BC44	1BC54	1BC64	1BC74	1BC84	1BC94	4	
5	1BC05	1BC15	1BC25	1BC35	1BC45	1BC55	1BC65	1BC75	1BC85	1BC95	5	
6	1BC06	1BC16	1BC26	1BC36	1BC46	1BC56	1BC66	1BC76	1BC86	1BC96	6	
7	1BC07	1BC17	1BC27	1BC37	1BC47	1BC57	1BC67	1BC77	1BC87	1BC97	7	
8	1BC08	1BC18	1BC28	1BC38	1BC48	1BC58	1BC68	1BC78	1BC88	1BC98	8	
9	1BC09	1BC19	1BC29	1BC39	1BC49	1BC59	1BC69	1BC79		1BC99	9	
A	1BC0A	1BC1A	1BC2A	1BC3A	1BC4A	1BC5A	1BC6A	1BC7A			A	
B	1BC0B	1BC1B	1BC2B	1BC3B	1BC4B	1BC5B		1BC7B			B	
C	1BC0C	1BC1C	1BC2C	1BC3C	1BC4C	1BC5C		1BC7C		1BC9C	C	
D	1BC0D	1BC1D	1BC2D	1BC3D	1BC4D	1BC5D				1BC9D	D	
E	1BC0E	1BC1E	1BC2E	1BC3E	1BC4E	1BC5E				1BC9E	E	
F	1BC0F	1BC1F	1BC2F	1BC3F	1BC4F	1BC5F				1BC9F	F	

Character names. For naming purposes, the Duployan Shorthands and Chinook script have two distinct sets of characters. The first set consists of most letters and letter based signs that generally interact cursively with each other, with the exception of a few spacing characters. The second set consists of affix signs that can be attached/overlapping or sit above or below the adjacent characters at the beginning and end of words, and the word signs. The first set have character names that indicate their primary phonetic value, while the second set are described graphically.

Character Ordering and Roadmap to the Duployan Shorthand and Chinook character block

Ordering of the characters in the Duployéan-based scripts is generally undefined - many cite in Latin alphabetical order - and the allocation order has been defined to be as commensurate with the collation specification as possible:

Columns 0 to 3 contain consonant characters, arranged by orientation in groups: non-combining characters, short line consonants, medium line consonants, long line consonants, dotted line consonants; half-arc consonants, crossed half-arc consonants, dotted half-arc consonants; long half-arc consonants, crossed long half-arc consonants, other long half-arc consonants; down-slope quarter arc consonants, up-slope quarter arc consonants.

Columns 4 to 6 contain vowel characters, arranged by size and usage in groups: circle vowels, half-arc vowels, quarter-arc vowels, compound W-vowels, nasal vowels.

Column 7 contains the attached affixes starting with the invariants and moving from the most deeply attached to the most tenuously attached.

Columns 8 and 9 contain the high and low affixes, respectively, grouped by like shapes. Column 9 also contains miscelaneous punctuation, word signs, marks, and line weight modifier characters.

As before, column 10 (A) contains the Shorthand Format Control block, unchanged from L2/10-272r.

Collation

Information on collation of Duployan scripts is generally ambiguous and arbitrary. Many dictionaries and primers simply cite in that language's Latin alphabetical order with no attempt made at native collation. Other sources group words by novel alphabetization, no more or less canonical than any other. The Romanian "Curs de Stenografie" does make an effort at native collation, starting with vowels, and then in the general order of the consonants in this allocation.

The most logical collation, given the structure of the script, is to collate by general shape, which places primacy on the consonants which, being invariant, tend to determine the shape of a word. Vowels have their own order, and clusters of one or more vowels should be collated as a single vowel. Initial vowel clusters are ordered before the first consonant, medial and final clusters after the last, but before any affixes.

A simple code point sort will generally approximate the collation specification.

Collation starts with consonants - initial vowels (ie no consonant) << line consonants << half-arc consonants << quarter-arc combined consonants << medial/final vowels - then Affixes - attached << high << low - and finally signs. Secondary weight is given to diacritics, marks, and the bold R letters in the Sloan orthography - all characters which do not change the basic shape of the word form. Tertiary weight is given to the joiners, spaces, and format controls, some of which can indicate semantic content, but often indicate presentation form.

Collation table

Primary collation: Initial vowel cluster Initial vowel cluster < H < X < P < T < F < K < L < B < D < V < G < R < P N < D S < F N < K M < R S < TH < SLOAN DH < DH < KK < SLOAN J < HL < LH < RH < M < N < J < S < M N < N M < J M < S J < M WITH DOT < N WITH DOT < J WITH DOT < J WITH DOTS INSIDE AND ABOVE < S WITH DOT < S WITH DOT BELOW < M S < N S < J S < S S < M N S < N M S < J M S < S J S < J S WITH DOT < J N < J N S < S T < S T R < S P < S P R < T S < T R S < W < WH < W R < S N < S M < K R S < G R S < S K < S K R < medial/final vowel cluster

< LEFT HORIZONTAL SECANT < MID HORIZONTAL SECANT < RIGHT HORIZONTAL SECANT < LOW VERTICAL SECANT < MID VERTICAL SECANT < HIGH VERTICAL SECANT < ATTACHED SECANT < ATTACHED LEFT-TO-RIGHT SECANT < ATTACHED TANGENT < ATTACHED TAIL < ATTACHED E HOOK < ATTACHED I HOOK < ATTACHED TANGENT HOOK < HIGH ACUTE ARC < HIGH TIGHT ACUTE < HIGH GRAVE ARC < HIGH LONG GRAVE < HIGH DOT < HIGH CIRCLE < HIGH LINE < HIGH WAVE < HIGH VERTICAL < LOW ACUTE ARC < LOW TIGHT ACUTE < LOW GRAVE ARC < LOW LONG GRAVE < LOW DOT < LOW CIRCLE < LOW LINE < LOW WAVE < LOW VERTICAL < LOW ARROW < O WITH CROSS < word/affix signs from outside the Duployan block: LESS THAN, GREATER THAN, MULTIPLICATION, PLUS SIGN, etc.

Vowel order: A < SLOAN Ow < OA < O < AOU < I < E < IE < SHORT I < UI < EE < EH < ROMANIAN I < SLOAN EE < LONG I < YE < U < EU < XW < U N < LONG U < ROMANIAN U < UH < SLOAN U < OOH < OW < OU < WA < WO < WI < WEI < WOW < NASAL U < NASAL O < NASAL I < NASAL A < PERNIN AN < PERNIN AM < SLOAN EN < SLOAN AN < SLOAN ON < VOCALIC M

Secondary collation: No marks < Combining R < Double Mark < Diacritics.

Tertiary collation: No format < Variation Selectors < SP/NBSP < ZWNJ < ZWJ; < shorthand formats Letter Overlap < Continuing Overlap < Down < Up; < following ZWSP < HSP < 6/MSP < THSP < 4/MSP < 3/MSP < NSP < MSP.

Irrelevant: All punctuation, including CHINOOK FULL STOP.

Character Properties. Duployan and Chinook are uncased, and as such, letters and affix signs are gc=Lo. The Double Mark is gc=Mn, ccc=1. The O with Cross is gc=So, Chinook Full Stop and Stenographic Period, gc=Po. Shorthand Formats and Duployan Thick Letter Selector are gc=Cf.

Input. A Basic Duployan keyboard layout has been devised for inputting Duployan text. This places the most common characters in the easiest to reach key positions. Keys are also defined for the basic nasal vowels with inherent joiners, which are the necessary encoding form in many orthographies.

This keyboard layout should be considered informative as a base layout for the complete Duployan and Chinook. Other Duployan keyboards should not be constrained by this layout; specifically, a layout for a particular orthography should place the characters necessary for that language on the most convenient keys, regardless of the general layout, and should not necessarily provide for access to all Duployan characters or alternate forms of the nasal vowels.

Duployan Rendering model.

The Unicode Technical Committee, at its August 2010 meeting, accepted all characters in the Duployan block, the Shorthand Format Controls block, and the Stenographic Full Stop. At that time, it was decided that given the complex rendering model, and given that most non-speciallist implementations are expected to merely display the base characters without complex shaping, the rendering model for Duployan, below, be included as a technical note to the Standard.

Principles of the Duployan Shorthands and Chinook scripts

Rendering Duployan Characters. Duployan characters, like characters in most shorthand scripts, can cursively connect, combine, and change shape depending on their context. Its appearance is affected by the presence of adjacent characters, ligaturing, the font used to render the character, and the application or system environment. These variables can cause the appearance of Duployan and Chinook characters to differ from their nominal glyphs (used in the code charts). Duployan and Chinook characters are default joining to each other, except for the high and low affixes and where otherwise noted in the code chart. Characters marked as non-joining, and any characters from other blocks are non-joining to Duployan and Chinook characters by default. Exceptions are Zero Width Joiner (U+200D), by definition, and the Shorthand Format Controls (U+1BCA0-U+1BCA3), which are tied to Duployan as Script_Extensions, and alter the joining characteristics of adjacent stenographic characters. Defined width spacing characters (U+2000-U+200B) preserve the height of the cursive stroke, so they should be treated as simple joining characters, with a blank glyph image.
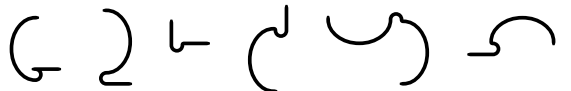
Invariant letters. The majority of characters in the Duployan shorthands and Chinook scripts are invariant letters. They have a static shape, orientation, and stroke direction, and the set of invariant letters is almost completely contiguous with the consonants. Each invariant has a size - as many as three; a shape - line, quarter-circle, semicircle; a static orientation - N/S, E/W, NE/SW, NW/SE; an inherent stroke direction - generally LTR or TopToBottom; and many have derived and compound variants with markings (crosses or dots). They will usually cursively connect - the end of first character's stroke is the beginning of the second's - but will also overlap with a following character when shorthand formats are used. A few invariant letters and all of the high and low affixes are classified as *non-joining characters*, that interact typographically with adjacent characters like a word or text break, and only have a stroke direction when overridden by ZWJ (U+200D).

It can be assumed in the following that similar characters, like D, D-S, TH, and DH have the same cursive, overlapping, and other connecting properties as the character on which it is based, ie T. Likewise, variations of N - N-S, N-M, N-M-S, and Ng - connect like an N, and so on. The invariant letters can be generally classified as *P type* (line with N-S stroke direction), *T type* (line, W-E), *F type*(line, NW-SE), *K type*(line, NE-SW), *L type*(line, SW-NE), *M type*(N-E-S semicircle), *N type*(N-W-S semicircle), *J type*(W-N-E semicircle), and *S types*(W-S-E semicircle), and combined consonants (all quarter-circles, see code chart). Furthermore, the P,T,F,K, and L collectively constitute the *Line consonants*, and the M,N,J, and S types, as well as the combined consonants, are *arc consonants*.

Orienting characters. Many vowels have a consistent shape, but rotate to align with the preceding character and will mirror to allow the following character to attach without crossing the vowel or preceding character. When adjacent one non-joining and one joining character, these orienting vowels will rotate to align with the adjacent joining character, and mirror right/up or left/down based on their identity as a *primary orienting* or *secondary orienting* vowel. Likewise, when adjacent two similar type characters, or if the following character allows mirroring

either way, they will align with the preceding character and mirror according to their orientation. Directional affinities are preserved, even when preceded by a non-joining and followed by a joining character. Primary orientation indicates an affinity for a stroke direction towards the right, and up when lacking a right/left distinction. Conversely, secondary orientation is left/down. Many orienting vowels come in pairs, with opposite orientations but the same basic shape. Except for 'I' and 'E', orienting characters can be bracketed by ZWJ/ZWNJ (U+200D/U+200C) to make a joining or non-joining invariant version. 'I' and 'E' have related invariant characters encoded seperately.

Table 1: Comparison of Primary and Secondary Orienting Vowels

Primary (right/up) Orienting Vowels-	Secondary (left/down) Orienting Vowels -

Related to the orienting vowels and invariant letters are the attached affixes. Many of these, noted in the charts with "dots [to] show position on and relative orientation to base glyph", act as spacing or non-spacing marks that do not effect joining of adjacent characters, but do rotate to match the angle of the base character. Some, noted in the charts with "dots [to] show position on base glyph", are non-spacing invariant marks.

Circle vowels. The most commonly encountered vowel letters are the circle vowels. These vowels connect to preceding and following characters, with the adjacent characters entering the circle vowel at a tangent, and most (except Ou U+1BC5B) exiting the vowel shape at a tangent. The circle vowels often take partial contextual forms, with the adjacent characters implicitly completing the circle by crossing tangents.

Circle vowels followed but not preceded by a joining letter have a clockwise stroke direction into line consonants and will lie inside the arc of an arc consonant. Circle vowels preceded but not followed by a joining character will again sit inside the arc of an arc consonant, as if followed by a T-type if following a line consonant, and above the end of a T-type consonant. Circle vowels adjacent two line consonants will lie outside the angle created by the intersection of the two lines. When adjacent same type line consonants, they will again lie as if followed by a T-type. When adjacent an arc consonant and another invariant, the circle vowel will follow the angle rule as given above, but when the adjacent characters do not present an angle, the circle vowel will lie in the same position as if the following joining character were not there.

Many sequences of successive circle vowels default ligature forms. Where a ligature is not available, or when overridden by an intervening ZWJ + ZWNJ + ZWJ (U+200D + U+200C + U+200D), successive circle vowels not preceded by a joining character will connect at the vertical tangent on the shared side. If a preceding joiner character is present, cursively connected circle vowels will sit on opposite sides of the end of the previous character, with the following character determining the position of the second character, as with a primary orienting vowel (see Table 5

and additions to Figure 16-3, below).

The Duployan Letter Sloan Ow (U+1BC42) and, in the Pernin and Sloan orthographies, discretionary ligatures of circle vowels, are classified as *reverse circle vowels*. These reverse circle vowels are opposite a regular circle vowel, ie they have a withershins stroke direction, will lie outside of arc vowels, inside the angle of two line consonants, &c. Reverse circle vowels are not known to interact typographically with other vowel characters.

Table 2: Circle Vowels and Reverse Circle Vowels

Circle Vowels	Reverse Circle Vowels

Nasal vowels are the only Duployan characters that are positioned contextually. A fully implemented typeface will allow for three different renderings of the four basic nasal vowels (U+1BC61-U+1BC64). When adjacent two joining characters, the nasal vowels will render as a diacritic placed outside the angle of the adjacent characters, shadowing the position of circle vowels adjacent two characters, explained above. When still preceded by a joining character, but followed by ZWJ (U+200D) + a joining character or by any non-joining character, the nasal vowel will render as a primary or secondary orienting vowel in relation to the preceding joining character. It will either join with the following character, if a ZWJ intervenes, or be unjoined with ZWNJ or a non-joining character. Likewise, when following a joining character + ZWJ/ZWNJ (U+200D/U+200C), the nasal vowel will render as a primary or secondary orienting vowel in relation to the *following* joining character. The Duployan Letter Vocalic M (U+1BC6A) is always a primary orienting vowel, cutting backward in relation to the preceding character, and does not position diacritically. A nasal vowel not preceded by a joining character, and followed by a ZWJ + joining character will still orient in relation to the following joining character, allowing for consistent use of Nasal Vowels + ZWJ in orthographies that do not use diacritic positioning of nasals.

When bracketed by Zero Width Joiners, nasal vowels will render as combining invariant characters as per the nominal glyph images. ZWNJ (U+200C) can be used when the orienting or invariant nasal vowel is not to be connected to an adjacent joining character. The Pernin and Sloan nasal vowels (U+1BC65-U+1BC69) are always invariant, and the Vocalic M (U+1BC6A) never. The orthography of the Romanian stenography uses the two U arc vowels (U+1BC51, U+1BC52) as nasals, however the Romanian stenography uses nasals as orienting vowels (+ZWJ), and no marking is needed for proper rendering.

Table 3: Nasal Vowels

＼ + ⸍ + − → ⸜ **F + An + T**

＼ + ⸍ + [ZWJ] + − → ⸦ **F + An_j + T**

＼ + ⸍ + [ZWNJ] + − → ⸜⸗ **F + An_nj + T**

＼ + ⸌ + [ZWNJ] + − → ⸞⸗ **F + On_nj + T**

− + [ZWJ] + ⸍ + − → ⸝ **T + _jAn + T**

− + [ZWJ] + ⸌ + − → ⸟ **T + _jOn + T**

＼ + [ZWJ] + ⸍ + [ZWJ] + − → ⸝ **F + An_j + T**

P.S. The logic behind the prescribed use of ZWJ/ZWNJ is that it deprives the surrounding context from the nasal vowel, specifying only whether the adjacent characters will join, as there are no known ligatures of nasal vowels. The joiner controls could be replaced by any non-joining character and result in the same rendering of the nasal.

Compound vowels. The default rendering of compound vowel sequences (or vowel clusters) depends on the nature of the vowels involved. Most orthogyraphies prefer ligation to simple compounding of circle vowels. However, compounding that visually preserves each member is regularly encountered in sequences involving orienting vowels combined with a circle vowel or any number of other orienting vowels. As a rule, circle vowels act as if an adjacent orienting vowel were a line consonant whose orientation is determined by any joining characters adjacent the vowel cluster. The entire sequence should be rendered as if it were an orienting vowel, although a circle vowel between a joining character and orienting vowel will sit opposite the orienting vowel, touching at the intersection of the orienting vowel and joining character. These vowel

clusters have primary or secondary orientation determined usually by the first character of the sequence, but the last character when not preceded by a joining character. When the vowel cluster is not adjacent any joining characters, default rendering is along a horizontal mid-line, as with clusters of circle vowels (see circle vowels, above).

Table 4: Compound vowels

○	+	ᴄ		→	᧐		**A + I**
○	+	ˇ		→	ᥳ		**A + E**
○	+	ᴄ	+ −	→	᧐		**A + I + T**
○	+	ˇ	+ −	→	℮		**A + E + T**
ᴄ	+	○	+ −	→	℮		**I + A + T**
I	+	○	+ ᴄ	→	ᘺ		**P + A + I**
I	+	○	+ ᴄ + −	→	ᘺ OR ᘺ		**P + A + I + T**
I	+	○	+ ᴄ + (	→	ᘺᵇ OR ᘺᵇ		**P + A + I + M**

ᵕ + ᷉   ⟶ ᵕ   **E + I**

᷉ + ᵕ   ⟶ ~   **I + E**

O + ᷉   ⟶ ᓍ   **O + I**

Ligatures, Allographs, and Standard Variants. Ligaturing behaviour is fairly limited in the Duployan orthographies, especially in comparison with other cursive scripts like Arabic and Devanagari. As with Arabic, Devanagari, and other complex scripts, ligatures can be expressly requested by use of Zero Width Joiner (U+200D). Zero Width Non Joiner (U+200C) should break a ligature into its component characters, and the sequence ZWJ + ZWNJ + ZWJ (U+200D + U+200C + U+200D) would break a default ligature and render the characters by default joining behaviour (see circle vowels, above).

Discretionary Features. All discretionary contextual/ligature forms can be requested in plain text by using ZWJ (U+200D).

The Pernin orthography makes use of a contextual form for repeated consonants, reducing the second consonant to a small blot (in writing, caused by increasing pen or pencil pressure) at the end of the previous character's stroke. This applies to both identical and similar consonants, with the first consonant represented by its full form, eg. T+Dot = T+T or T+D or T+Th &c.

Pernin also prescribes a ligature form of a circle vowel preceding the Pernin R (Duployan letter L, U+1BC06), unless it is followed by another circle vowel. The ligature form is an identically sized reverse circle vowel (see Circle Vowels, above). Similarly, in the Sloan orthography, an initial circle vowel preceded by an R (U+1BC0B) will render as a reverse circle vowel.

Standard Variants. All standard variants are requested in plain text Duployan by using Variation Selector 1 (U+FE00).

Pernin prescribes a "slight upward tick inclining to the left" for an L (U+1BC06, Pernin R) following R (U+1BC0B, Pernin L), and one "to the right" for an R after L. This upward tick can also sometimes be found, generally at word end, following other consonants. These ticks are a standard variation sequence of the Duployan Letter L and the Duployan Letter R, encoded as L/R + VS1 (U+FE00).

The Duployan Letter W (U+1BC38) is the most variable letter among Duployan scripts. In the Sloan and Perrault orthographies, it is a full quarter arc, written NE-SW, 12 o'clock to 9 o'clock. On the other hand, in Pernin, it is closer to a one-sixth arc, starting closer to the 11 o'clock position, though still roughly the same length arc (larger diameter) than the Sloan/Perrault variety. Following K and G (U+1BC05, U+1BC0A), the Duployan Letter W takes the form of a hook - Perrault tending a bit more wave-like than Pernin. Sloan prescribes other characters for

K/G+W, and does not have a hook-form of W. The Pernin variant of W can be accessed in plain text by the use of the variation sequence W + VS1 (U+1BC38 + U+FE00), and the hook form as a default ligature/contextual form. As with all default ligatures, the unligated, joined sequence of K/G + W can be requested in plain text with a medial ZWJ + ZWNJ + ZWJ (U+200D + U+200C + U+200C).

In Chinook usage, the letters M, N, J, and S (U+1BC19 - U+1BC1C) can be used as numbers (see numbers below). When they do so, they are smaller than the normal sized "letter" forms. These variants can be specified, again, by the variation sequence M/N/J/S + VS1 (U+1BC19/A/B/C + U+FE00).

Other default ligatures and contextual forms. Default features are unmarked in plain text. Unligated forms of these character sequences can be requested with the joining sequence ZWJ + ZWNJ + ZWJ (U+200D + U+200C + U+200C).

Most orthographies have some means of indicating the junction of two same type line consonants. Usually, this comes in the form of a slight ($\leq$ line width) jog at the intersection, or sometimes a short cross-tick at the intersection of the characters or an angle change of L/R characters. For the purposes of plain text, the jog is considered the unligated form of the character sequence, and is the neutral default rendering. An implementation can prescribe the cross tick, or other indicator as a default rendering. ZWJ should always request the Pernin dotted form, above, and never the tick, angle, or jog.

The Romanian orthography prescribes contextual forms for the Romanian U character (U+1BC56) and its compounds. The nominal form given in the code charts is for non-medial contexts. When medial, it takes the form of Duployan Letter Ow (U+1BC5A). Positional ligatures include the sequence O + Romanian U (U+1BC44 + U+1BC56), when initial or final, taking the form of an elongated, oval shaped, plain circle vowel. Medially, A or O + Romanian U (U+1BC41/U+1BC44 + U+1BC56) exhibits the default joining behaviour of sequential circle vowels, sitting on opposite sides of the end of the previous character - Romanian U again appearing in its medial "Ow" form. Following other vowels, Romanian U appears in diminished form, as a sort of tail.

Romanian also prescribes a ligated form of the vowel sequence O + A (U+1BC44 + U+1BC41) that is visually identical to the letter Wa (U+1BC5C).

Lastly, the Duployan thick letter selector (U+1BC9D, DTLS) does not have a visual form of its own, but causes the previous character to be rendered as a thick variant, representing the addition of an 'R' sound to a Sloan letter. The Duployan Letter R (U+1BC0B) can not substitute a ligature behavior for the DTLS, as the added 'R' sound can occur in the middle of a compound letter.

Table 5: Ligatures, Allographs, & Alternates

Discretionary features

| + ∘ + ⟍ + −   ⟶ ⌐   **B + Ar + T**

⟋ + ○ + | ⟶ ρ   **rO + P**

Standard variants

⟋ + ⟍ + VS1   ⟶ ⟍   **R + L variant**

− + ⟋ + VS1   ⟶ ⌐   **T + R variant**

⌒ + VS1   ⟶ (**W variant**

(+ VS1   ⟶ ⊂   **M variant**

) + VS1   ⟶ ⊃   **N variant**

⌢ + VS1   ⟶ ∩   **J variant**

⌣ + VS1   ⟶ ∪   **S variant**

Default features

⟋ + ⌒   ⟶ ℓ   **K + W**

| + ⚬ + −   ⟶ ⌀   **P + Rom U + T**

$\|$ + O + ꙅ	→	B + O + Rom U
$\|$ + ° + ꙅ + —	→	B + O + Rom U + D
$\|$ + ° + ꙅ	→	B + A + Rom U
$\|$ + O + ꙅ + —	→	B + A + Rom U + D
$\|$ + ‘ + ° + ꙅ	→	B + I + A + Rom U
– + —	→	T + D
$\|$ + O + °	→	B + O + A
\ + ⌷DT RS + °	→	F_R + A

Additions to Figure 16-1. Prevention of Joining

1BC08   1BC1B

1BC08	200C	1BC1B
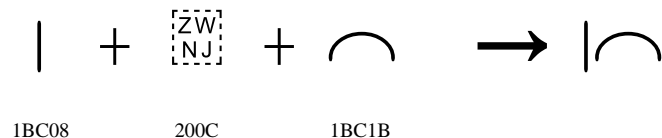
Additions to Figure 16-2. Exhibition of Joining Glyphs in Isolation

1BC56

200D	1BC56	200D
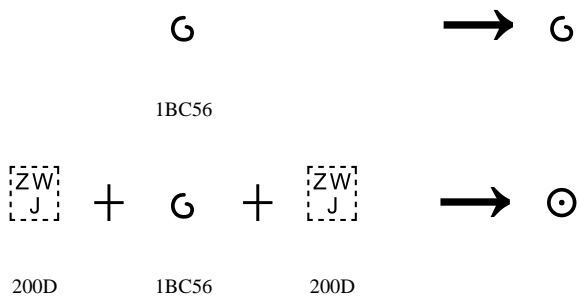
Additions to Figure 16-3. Effect of Intervening Joiners

Character Sequences	As Is	ZW NJ	ZW ZW ZW J NJ J	ZW J
○ ⁄ — 1BC08 1BC41 1BC06 1BC03				
○ ○ — 1BC08 1BC44 1BC41 1BC03				
⁄ ⁄ 1BC0B 1BC06	/ or ⤬ or /			

Joined text. The most common form of character interaction is that of the cursive connection. The termination of a character stroke leads

directly into the beginning of the next character. Vowel signs follow the dynamic shaping discussed above, but fundamentally are the same as other joining characters, joining at a tangent to adjacent characters. Non-joining characters - any character from other scripts, and those found in Duployan - have a small intervening space, as with standard alphabetic writing.

Unjoined text. The Duployan script has a cursive conjoining property that, like Arabic, is effected by the use of the Zero Width Non-Joiner (ZWNJ, U+200C). ZWNJ encodes a break within a word, turning an otherwise joining character into a non-joining character, and resetting the cursive stroke height to neutral. This break is usually found only at nominally syllabic boundaries in Chinook texts, and where a separated letter or letters indicates an affix in the Duployan shorthands. This break is smaller than a word space, in some instances involving negative kerning, and is not a word break. ZWNJ and Zero Width Joiner (U+200D) will also change the positioning of the nasal vowels (see nasal vowels, above).

Overlapping text. The use of overlapping letters to indicate abbreviations and initialisms is found in many systems of shorthand. As such, the current proposal allocates a block of shorthand format characters, which encode non-default text flow in any shorthand. Included are two overlap control characters: the first (U+1BCA0) indicating a single *letter overlap*, with the text continuing to flow as if that overlapping character did not exist, and the second (U+1BCA1) indicating a *continuing overlap* where the text flow proceeds from the overlapping character. In Duployan, this behaviour is limited to consonants, circle vowels, and orienting vowels overlapping consonants.

The overlapping behavior in Duployan shorthands and Chinook is fairly straightforward: for two line consonants, two arc consonants, or a vowel overlapping any consonant, the two characters overlap at approximately 3/5 along the stroke of the first consonant and 2/5 along the stroke of a second consonant or the middle of a vowel. For overlaps of arc and line consonants, the arc consonant is split into the first and second half of the arc, an arc overlapping a line taking place in the first half, line over arc in the second. The line consonant, again at the 3/5 / 2/5 point, will meet the arc at a perpendicular angle, or as close as possible, never beyond the middle of the arc, nor past the end.

It is unknown if or how M type and N type or J type and S type arc consonants would overlap each other until such a time as examples of this occurrence are documented. Default rendering should indicate the overlap in some way, either preserving control characters, or through an offset. Same type line consonants also will not overlap, necessitating similar default rendering; L-type and K-type consonants will not overlap each other, as well, due to their similar angle.

As indicated above, the flow of text continues either with the first character in the case of U+1BCA0, or with the second in the case of U+1BCA1. An overlapping letter can also take another overlapping letter before returning to the original text flow. Also, in the Romanian shorthand, long line consonants (U+1BC08-U+1BC0B) can take two overlapping characters, indicated by two Letter-Overlap control characters (U+1BCA0 + U+1BCA0) followed by the two overlapping characters. With double overlaps, the first overlapping character overlaps at approximately 1/3 of the stroke length of the base character, the second at ~ 2/3. See Parsing of Shorthand Overlap Sequences, below.

Down step. The Romanian shorthand prescribes that a certain set of word endings be indicated by letters following not in the default direction of text flow - to the right, but below the word. Likewise, the Sloan-Duployan and Pernin methods prescribe contracted word endings, wherein the next word is started low, to signal a dropped sound at the end of the previous word. As such, a shorthand format has been defined (U+1BCA2) that indicates a following character should be rendered below the previous character, with any subsequent joined characters proceeding relative to the lowered glyph. At word boundaries, this causes the next word (or stenographic period) to be lowered. Because the lowering is a part of the

previous word, the lowered word boundary should be indicated by the shorthand format down step, followed by a width defined space (U+2002-U+200b) and the next word, or period (U+2E3C). Note that the step format control is found directly after the preceding word, as it encodes a phoneme missing from the end. When Cross' Eclectic shorthand is encoded, a space will come before the step format control as the change in alignment represents a missing initial phoneme.

Up step. The Sloan-Duployan and Pernin methods also prescribe contracted word endings, where the next word is started high, signaling the dropped sound. A shorthand format has been defined (U+1BCA3) to indicate a following word (or stenographic period) to be raised. Even though the up control is only found at word boundaries, this boundary form is still indicated by the shorthand format up step, followed by a width defined space and the next word, or period.

Aligned text. The last form of contracted words in Sloan-Duployan and Pernin are non-stepping, with the two words even. As with distinctions in spacing with the Step formats, distinctions in spacing of aligned text are are encoded with defined-width space characters (ZWSP, U+200B; HSP, U+200A; 6/MSP, U+2006; 4/MSP, U+2005; 3/MSP, U+2004; ENSP, U+2003; EMSP, U+2002) or the non-breaking counterparts thereof (note, Word Joiner, U+2060, is the non-breaking counterpart of ZWSP, not U+FEFF, ZWNBSP). Note that Thin Space (U+2009), is not used, due to its common equivalence to the Six-Per-Em Space (U+2006). The regular space characters (U+0020 and U+00A0) cause the following word to start at a neutral baseline, and cannot be used for aligned or stepped word boundaries. If different sized spaces are needed unaligned, again, the above space characters can be used, preceded by ZWNJ. Note that the natural letterspacing of unjoined characters is retained with step format controls, so a ZWSP (U+200B) will not cause the adjacent characters to touch, and will, in fact, appear identical to a ZWNJ (U+200C), except that alignment will be preserved.

Table 6: Text flow

Joined Text

Unjoined Text

Letter Overlaps

→	$Line_X S$
→	$S_X Line$
→	$B_X R$
→	$D_X G$
→	$V_X D$
→	$G_X B$
→	$R_X V$
→	$M_X M$
→	$M_X S$
→	$M_X J$
→	$KAT_{XK} AT$

+ ╲ + ∘ + ─

Continuing & Double Overlaps

╲ + ∘ + ─ + [↦] → $\ne$ $KAT_{X+}KAT$

+ ╲ + ∘ + ─

⌣ + [↦] + | + [↦] + ⌢ → ⋉ S_XB_XJ

─ + [↦] + [↦] + ∘ + ⫽ + ⌣ → ⚯ $D_{XA+K}Un$

Under affixes

(+ ⌄ + [↓] + ⌣ + ∘ → ⟨ MIn_{-SA}

Under word

─ + [↓] + [ZW SP] + ─ → ── D_{-_T}

Over word

| + [↑] + [ZW SP] + ᴄ → |ᶜ B^{+}_Ie

Combining diacritical marks on vowels. Several Duployan orthographies use combining diacritical marks to distinguish vowels. These diacritics include acute, grave, breve, macron, under macron, over dot, under dot, diaeresis, under diaeresis, &c. They can appear on orienting vowels, circle vowels, and nasal vowels (On, and An). Although there are several vowel letters with marks included in the allocation, these are not decomposable as a combining sequence, as the diacritic marks change position along with their "base" orienting vowel. Combining diacritics indicate vowels with diacritics that consistently appear above or below the base character, no matter the adjacent joining characters.

Affixes. Except for Chinook, every Duployan orthography makes extensive use of a set of marks - often similar, in appearance, to diacritics - and letters to symbolize lexical affixes. The unattached high and low Duployan affixes (U+1BC80..U+1BC99) act much like spacing characters - the marks are written next to the word root, and will be either higher or lower than the adjacent letter.

The attached affixes (U+1BC70..U+1BC7C) touch or cross the first or last letter of a word (again for prefixes or suffixes), with the location of crossing (and touching if not evident) symbolized by a dotted line in the charts. The character names list specifies if the character rotates to complement the angle of the base letter, or is invariant. An attached affix always attaches to a letter, never to an affix. Since affixes are encoded logically, and unattached affixes can logically occur between a root and an attached affix, the displayed order of affixes may be different from the encoded order.

Third, some orthographies use letters or sequences of letters to indicate affixes, some of which appear similar to the high or low affix signs. As a rule, signs that are similar to a letter, but unmotivated - that is, they don't symbolize a sound of the affix - or if a high and low pair is found in the orthography, they are symbolized by affix signs, not letters. Signs that are motivated and aren't paired high/low should be represented by a letter, often separated by ZWNJ (U+200C) from the root, whether the affix usually appears lower or higher than the adjacent character or not. Some letter affixes are encoded with the shorthand format Continuing Overlap (U+1BCA1). For consistency, the shorthand format Letter Overlap (U+1BCA0) should not be used to combine an affix to a root - even if the root is a single character.

In the Sloan orthography, successive high and low affixes or letters-as-affix and high/low affixes are written joined together. These compound affixes always position like the first high or low affix in the compound. It is encoded as affix 1 + ZWJ + affix 2, whether it is affix sign + affix sign or letter + affix sign. Letter + letter affixes do not need to be joined by ZWJ, as they are already joining characters. As with other affixes, if the compound ends with a letter-affix, it must also be followed by ZWNJ if it does not cursively connect with the word root. Likewise, some high/low affix signs can be used as an attached affix, again encoded with ZWJ (U+200D).

<div align="center">

Table 7: Diacritics and affixes

Diacritics and Precomposed Vowels

</div>

P + E + Underdot

P + Rom I

T + E + Underdot

T + Rom I

Affix Signs and Letters

arc **D** arc

Darc arc

Dline+ arc

/arc**S** → arc/**S**

DOK-M

KT-R

T +vert+ **I**

Numbers. The Duployan orthographies each have a distinct means of expressing numbers. Some number systems must utilize formatting requiring markup to represent all aspects of the number system, and as of this time, there is no expectation that a full transcription of all number forms should be representable in plain text. The Chinook number system uses Duployan characters and markup to indicate numbers. The

Romanian shorthand and French Duployéan use regular European/Arabic numerals in conjunction with Duployan characters, combining marks, and markup to indicate magnitude and aspect. Sloan and Pernin use markup and non-Duployan characters in conjunction with regular European/Arabic numerals.

Chinook numbers. The Chinook number characters are 1 P, 2 T, 3 F, 4 K, 5 R, 6 M, 7 N, 8 J, 9 S, 0 O, 10 A, 100 Wa, and 1000-enclosing circle handled with markup. The numbers can be indicated Hanzi-style with P-S combining with O, A, or Wa to indicate value, although an O, A, or Wa must be preceded by a P to indicate a single hundred or ten, unlike Hanzi numerals. P-S connects to O, A, and Wa the same as in running text. O is used unconnected to indicate a zero or connected for the tens with a following digit zero, while A is used when connecting the tens to a non-zero ones digit. The enclosing circle for thousands surrounds the entire group of up to five characters (P-S + Wa + P-S + A/O + P-S), and can nest inside itself to indicate millions - a separate circle surrounding a following thousands group. Chinook numbers can also be indicated Indian/Arabic style, with the digits 0 9 (O-S) having place value. This is especially common when writing years or when numbering items, as opposed to enumerating them. The digits generally connect cursively, the same as in Hanzi-style Chinook numbers. For most Chinook writers, the numeral forms of M, N, J, and S are about half-size normal, and are requested in plain text by M/N/J/S + VS1 (U+FE00).

Romanian numbers. The Romanian number system uses the European/Arabic numerals to indicate numbers 0-99, with marks to indicate further powers of ten: an overdot (U+0307) for hundreds, a preceding Middle Dot (U+00B7) for thousands, a dot below (U+0323) for millions, and a following Middle Dot for thousand millions. As with most systems using marks to indicate magnitude, these marks can be used in conjunction, e.g. a dot above and dot below for hundred millions. Multiplicative forms (with the prefix *ân-*) use the character A Nasal (U+1BC64) before a number, percentages with Combining Ring Above (U+030A), and grade with the degree sign (U+00B0). Ordinals are symbolized by a following T (U+1BC03), while fractions are written numerator over denominator, with no solidus or line. This representation of fractions constitutes a presentation form of already encoded fraction signs or can be explicitly expressed using markup, never with the shorthand format down step (U+1BCA2).

Pernin numbers. The Pernin number system uses the European/Arabic numerals to write numbers, although periods (U+002E) can be used instead of zeros. An underline (by markup) indicates ordinals (first, second...), while an overline (again) indicates the numerical adverbs (once, twice...). The Pernin system suggests, however, that "when large numbers are to be written ... it is better to indicate ... us[ing] a corresponding shorthand contraction for thousand, million, etc.", such contractions left to the individual.

Sloan numbers. The Sloan number system uses the European/Arabic numerals to write numbers, and can be used for ordinals, iteratives, &c. e.g. 2: two, twice, second, secondly. The shorthand aspect in the Sloan system is the use of an overline, strikethrough, and underline (all represented with markup) for magnitude as follows: Overline: hundreds; Strikethrough: thousands; Underline: millions. Again, these can be used in conjunction with each other to indicate, for example hundred millions with an overline and underline.

French Duployéan numbers. The French Duployéan number system, like the Romanian, uses the European/Arabic numerals with Duployan letters and affixes indicating magnitude and aspect. Magnitude is indicated as follows: Hundreds with an S (U+1BC1C) after the number; Thousands with the Duployan Affix High Dot (U+1BC84) following the number; Millions with the Duployan Affix Low Grave Arc (U+1BC92) following; and Thousand Millions (Milliards) with a following R (U+1BC0B) like a large solidus. As above, these indicators of magnitude can be combined, e.g. an S and high dot indicating hundred thousands. For ordinals, the Duployan Affix Low Dot (U+1BC94) is used following any

indications of magnitude; Adverbs with the Duployan High Acute Arc (U+1BC80); Approximates (*dizaine, douzaine, &c*) with the Duployan High Grave Arc (U+1BC82); Adverbials with the Duployan High Circle (U+1BC85); Percents with the Duployan Low Circle (U+1BC95), doubled for Per mill. Manuscripts will indicate the numbers 4 and 6 with an underline to distinguish these number forms from the words "quittance" and "mot" to which the regular number forms show affinity; This distinction should be handled with markup or by typeface choice.

Confusability and usage

Given the complex shaping engine required to render Duployan text, there can be ambiguity as to which character or character sequence should be used to represent a given form. The full names list supplied can be consulted for known ambiguities, but this is not an exhaustive list. For dotted letters vs. diacritics, the determining factor is always whether the dot moves in relation to the letter contextually, as explained in diacritics, above. The dotted consonants should always be used and never decomposed; e.g. HL (U+1BC16) ≠ H (U+1BC00) + L (U+1BC06) and S with dot below (U+1BC26) ≠ S (U+1BC1C) + Dot Below (U+0323). Other confusables are in the affixes, and the rule (as given above) is that an affix that is motivated uses the letters, generally unjoined to the word, e.g. Pernin Inter- = In (U+1BC63) + T (U+1BC03) + ZWNJ, Magn- = M (U+1BC19) + ZWNJ, and Multi- = M (U+1BC19) + Continuing Overlap (U+1BCA1). When there is a positional distinction (high vs. low), the affix signs should always be used.

Romanian word signs For the most part, the extensive list of Romanian word signs are unambiguous. The Duployan Letter Ow (U+1BC5A) should only be used in Romanian text as an overlapping character or as a word sign. In running text, the Ow shape represents the medial form of the Duployan Letter Romanian U (U+1BC56). In numeric contexts, the Degree Sign (U+00B0) and Combining Ring Above (U+030A) should be used instead of the High Circle Affix (U+1BC85) for indicating percentages and grade of Romanian numbers. Likewise, the Combining dots (U+0307 & U+0323), Combining Diaereses (U+0308 & U+0324), and Middle Dot (U+00B7) should be used to indicate powers of ten instead of the Dot affixes (U+1BC84 & U+1BC94) and letter H (U+1BC00).

Proper Names Most Duployan shorthands prescribe that proper names be marked, as there are no majescule letters. Universally, they prescribe an underline, which should not be encoded in plain text, but handled through markup.

Stenographic Period

This proposal includes a Stenographic Period character for inclusion in the BMP Supplemental Punctuation block at U+2E3C. The Stenographic Period is used with shorthand/stenography systems in place of the normal period. Oftentimes, these systems will make use of a dot for a letter, word, or affix symbol, and the crossed period is used to avoid ambiguity. Due to its script=common attribute, and its unsuitability to any SMP blocks, this punctuation mark should be placed in the BMP.

Parsing of Shorthand Overlap sequences.

Parsing as a tree. Even though the handling of Duployan characters with Shorthand Format Overlap Controls is fairly simple, it is based on a more robust model with a few simple rules analysable as an N-ary tree: 1) each Overlap Control (branch) has as its base (parent node) the most recent character in the text stream 2) each Overlap Control must take a single shorthand character as its "argument" (child node), 3) the argument of each Overlap Control is allocated by a preorder insertion, where the number of branches of a particular node (character) is defined by the number of consecutive Overlap Controls directly following the character in the text stream. 4) for a Continuing Overlap to be valid, its base (parent node) must be the original base character, or the argument (child node) of another valid Continuing Overlap.

As a rule, nasal vowels, affix signs, and the letters H, X, the H-modified consonants from 1BC11-1BC18, and all vowel characters are not bases for an overlapping character. The letters H, X, I, E, and affix signs do not overlap other letters. The voiced (medium length) line consonants can take two characters overlapping in the Romanian orthography.

Parsing as a stream. The structure of a shorthand overlap sequence can also by analysable as a simple stream 1) each Overlap Control has as its base the most recent character in the text stream, 2) each Overlap Control must take a single shorthand character as its argument, 3) after the the initial base, each character binds to one Overlap control - the first unbound Overlap control in the most recent group of overlap controls with an unbound member. 4) for a Continuing Overlap to be valid, its base must be the original base character, or a character bound to another valid Continuing Overlap.

Example. The example given below is for demonstration purposes only, counterfactually presuming that a Duployan character can take three Overlaps or be a third overlapping character. Known textual examples contain just a few overlaps associated with a single parent base character. Each character and overlap control is numbered identically in the text stream, parsing structures, and output image, and is color matched between the parsing structures and output image.

Character 1 is the highest base character. If there are no Continuing overlaps, the next non-overlapping character will cursively connect to this character.
Characters 2, 3, &4 are Overlap Format Controls, with Character 1 as their base. In this case, Character 2 is a Continuing Overlap, and is the first (leftmost) overlap of Character 1, while 3 and 4 are the middle and rightmost overlaps
Character 5 is the first character overlapping Character 1. Since Character 2, of which this character is the argument, is a valid Continuing Overlap, the next non-overlapping character will cursively connect to this character, if it is not the base for another Continuing Overlap.
Character 6 is a Continuing Overlap, with Character 5 as its base.
Character 7 is the character overlapping Character 5. Since Character 6 was a valid Continuing Overlap, the next non-overlapping character will cursively connect to this character.
Character 8 is the second character overlapping Character 1. It is the argument for Character 3.
Characters 9 and 10 are Letter Overlaps with Character 8 as their base.
Character 11 is the first character overlapping Character 8, and is the argument of Character 9.
Character 12 is the second character overlapping Character 8, and is the argument for Character 10.
**Character 13** is the third character overlapping Character 1, and is the argument of Character 4.
Since there are no remaining unbound Overlap controls, **Character 14** is not an overlapping character. Since the cursive connection was passed into the overlaps by the Continuing Overlap Format Controls (Characters 2 and 6), this character cursively connects to Character 7, instead of

Character 1, and the rest of the word would continue from it.

Example Text Stream, Parsing Examples, and Sequence Rendering

number	1	2	3	4	5	6	7	8	9	10	11	12	13	14
code point	U+1BC0D	xA1	xA0	xA0	x0A	xA1	x04	x0B	xA0	xA0	x04	x03	x02	x0A
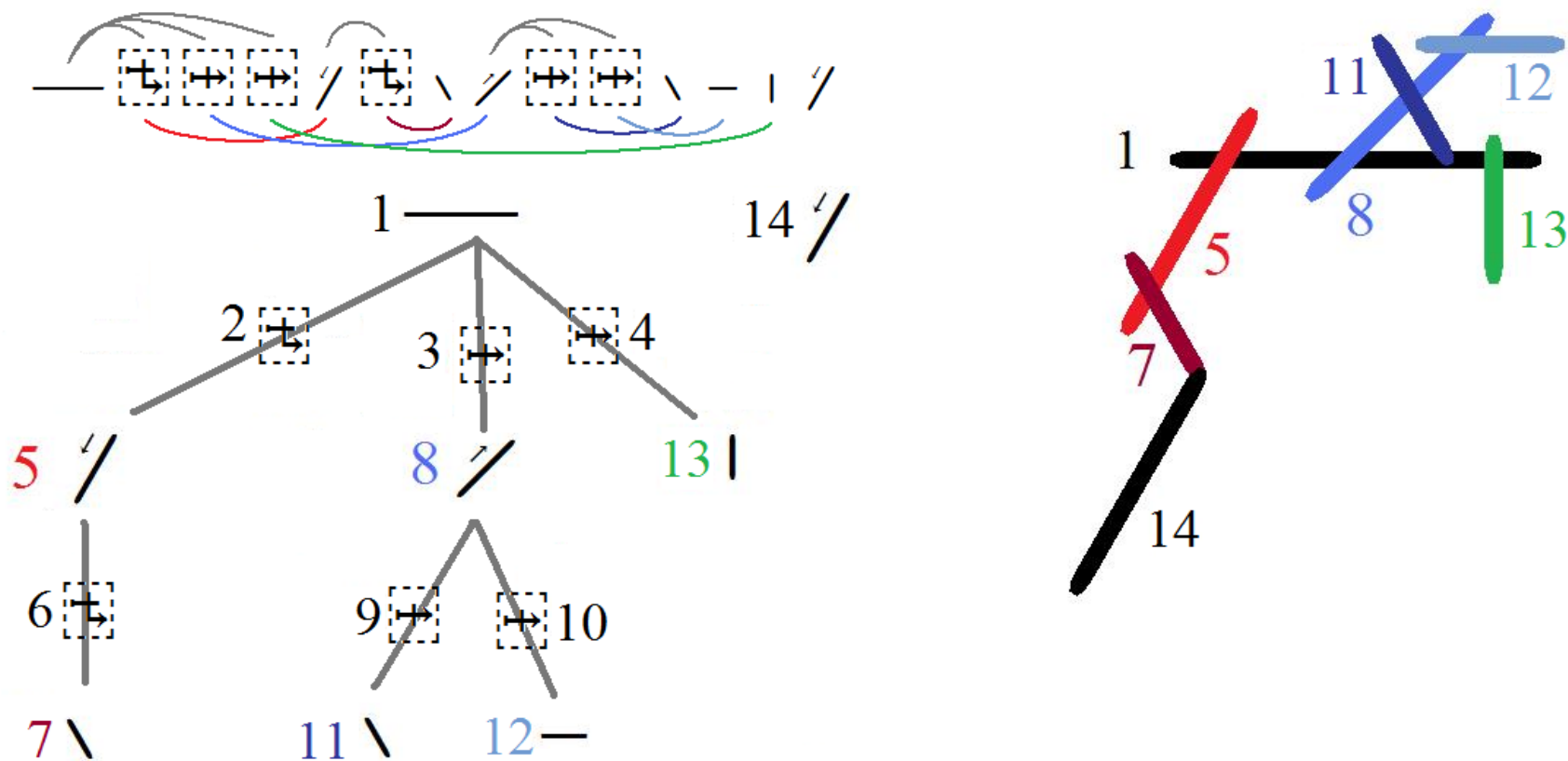
Parsing of Shorthand Steps.

In contrast with overlaps, the Shorthand Step Format controls have a simple grammar: ZWNJ (U+200c), space & NBSP (U+0020 & U+00a0) and all non shorthand characters will return a text stream to a neutral baseline. Spacing characters (except for space and NBSP), including ZWSP, ZWJ, and WJ (U+200b, U+200d, & 2060), and all gc=Mn will preserve the current baseline (ie, the height of the cursive stroke) and advance the text stream, if appropriate. Shorthand Step Format controls always act in relation to the current stroke height, whether it is neutral or

has been altered by preceding characters.

Shorthand steps should only be used between two letters, or adjacent to a spacing character.

Given that future shorthands will need to be encoded with varying step heights, and the needs of those shorthands should take precedence, this proposal does not define whether multiple instances of an Up or Down step is legal. Until such time as a determinative shorthand is encoded, a second (or more) Up or Down Step Format control should be interpreted as raising or lowering the stroke height a second (or more) time.

Shorthand Control level of implementation.

Different shorthands will have need for differing levels of implementation of the Shorthand Format Controls. Support of arbitrarily complex Overlap sequences shall not be required for Unicode conformance; therefore, the block description for each encoded shorthand should include specifications for the width of overlaps (maximum number of overlaps assignable to a single character), the depth (how many overlaps can "stack" on each other), and the breadth (how many overlaps are assignable to an already overlapping character). If the depth is only 1, then the breadth is, by default, 0. For example, the Duployan Shorthands and Chinook, as a whole, have a width of 2 (on the medium line consonants in Romanian), a depth of 2 (Chinook abbreviations), and a breadth of 1. Implementations for specific orthographies are: French Duployan: 1x1; Romanian: 2x1; Chinook: 1x2(1); Sloan: 1x1; Pernin: 1x1; Perrault: 0.

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nouveau site duployé, http://cf.geocities.com/barouder396/

Documentation

– 5 –
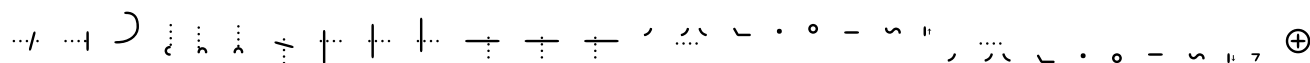
to instruct and benefit the Indians, by means of written characters is that known as the "Kamloops Wawa"... Written in an international language, "set up" in Stenographic characters, and printed on a mimeograph by its inventor, editor, reporter, and publisher all in one, this little weekly seems to leave nothing in the way of novelty to be desired.

Phonetic Alphabet.

Vowels:

A   O   OU   OW   WA   U

a   o   oo   ow   wa   e   u

an   in   on   un

AN   IN   ON   UN

Consonants:

H   P   T   F   K   L   J   S   N   M

h   p   t   f   k   l   sh   s   n   m

B   D   V   G   R   J, S, N w/ dot

a   b   c   d   e   f   g   h

o   i   j   k   l   m   n   o   p

q   r   s   t   u   v   w

Pronunciation.

o : a   as in   arm, are.

o : o   as in   note.

o : oo   as in   food.

o : ow   as in   owl.

o : wa   as in   wax.

e : e   as in   obey

u : u   as in   use.

Compound vowels:

o : wa   WO   o : woe;

o : woo;   WOW   o : wow;

o : owa; also   o : owa.

WI   o : we;   o : way;

WEI   o : weyie;   o : weeya.

Consonants:

. : h, always aspirate, never silent.

ʌ : kh, guttural, explosive.

ʃ : h-l, separate.

HL   ʃ : hl, combined.

LH   ʃ : lh, wet l, lla, lya.

ʃ : l-h, separate.

ʃ : h-k, separate.

ʃ : kr, an explosive articulation.

RH   ʃ : a very soft r, or an imitation, heard in some native languages.

X   ıı : h-h, a duplication of the articulation, but a lighter one than usual, can be acquired only by practice.

TH   ↝ : th : in english th.

Example 1: Basic Inventory of Chinook letters. Page 5 of *Chinook Rudiments* from the *Kamloops Wawa*. Circled are Duployan letters A, O, Ou, Ow, Wa, U, Nasals I/U/O/A; H, P, T, F, K, L, M, N, J, S; B, D, V, G, R, J/S/N with dot inside; Wo, Wow, We, Weyi; HL, LH, RH, X, and TH.

CHAPITRE VI

LES CONSONNES COMPLEXES

Définition

Les consonnes complexes sont des signes qui représentent un groupe de deux ou trois consonnes. Les voyelles éventuellement intercalées entre ces consonnes ne sont pas représentées.

Il existe trois sortes de consonnes complexes.

1 - Allongement des consonnes ordinaires.

Ke-Me / Gue-Me — **K M**

Pe-Ne / Be-Ne — **P N**

Fe-Ne / Ve-Ne — **F N**

De-Se — **D S**

Re-Se — **R S**

Me-Se — **M S**

Ne-Se — **N S**

Se-Se — **S S**

Je-Se — **J S**
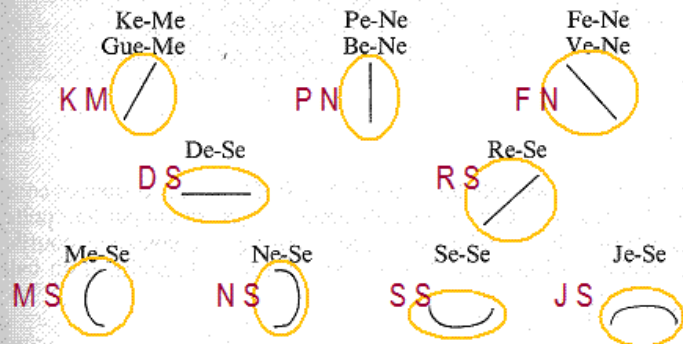
2 - Consonnes courbés sécantes.

Me-Ne — **M N**

Ne-Me — **N M**

Se-Je — **S J**

Je-Me — **J M**

Me-Ne-Se — **M N S**

Ne-Me-Se — **N M S**

Se-Je-Se — **S J S**

Je-Me-Se — **J M S**
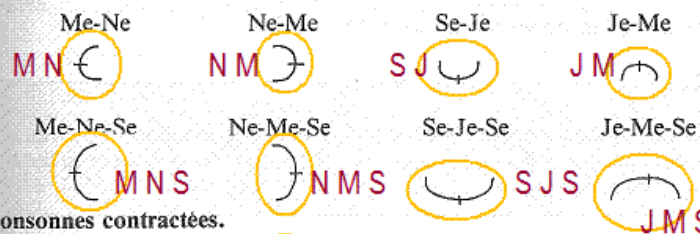
3 - Consonnes contractées.

Je-Ne — **J N**

Je-Ne-Se — **J N S**

Notes

33 Dans chaque groupe, **Se** peut se lire **Ze** ou **Xe**
   Ne peut se lire **Gne**
   Je peut se lire **Che**

34 La consonne complexe De-Se ne fait pas Te-Se
   La consonne complexe Re-Se ne fait pas Le-Se

55

Example 2: Complex French consonants. Page 55, *Cours De Stenographie, Duployé Fondamentale*. Circled are Duployan letters KM, PN, FN, DS, RS; MS, NS, JS, SS; MN, NM, JM, SJ; MNS, NMS, JMS, SJS; JN, and JNS.

TABLEAU GÉNÉRAL DES FINALES

A - Les finales attachées

1. Cionnel, cionnaire / Zionnel, zionnaire

2. Té - Dé

3. Ta - To - Tou / Da - Do - Dou

B - Les finales semi-attachées

1. Tan - dan / Anté - ande

2. Anse - Inse / Onse - Ianse

C - Les finales détachées

	ing, indre, ian, éen, ien	euil, ieu, ueu, ieur, eur	ueuse, ieuse, euse	ificative, ificatif	iste
ment					
cion	ion, zion	ié, eil	ière	ification	isme

83

Example 3: French Affixes, page 83, ibid. Circled are the Attached affixes Tail, E Hook, I Hook, Tangent, and Secant; High and Low affixes Acute, Grave, Dot, Circle, Wave, and Line.

Example 4: Wi/Weyi distinction, from the *Kamloops Wawa*. Circled are We and Weyi, and the Chinook Full Stop.

Example 5: Wow in use, ibid. Circled are Wow and Chinook Full Stop. Notice the overlapped T + K (God) and S + S (Holy Spirit) at the bottom.

Example 7: Chinook Numbers, ibid.

Example 6: DH digraph, ibid. Circled is Duployan letter DH, with Latin English transliteration.

Example 8: Primary/Secondary orientation. Page 8, *Stenographie Integrale*

Example 9: I/E and U/Eu, Page 1, ibid.

Example 10: K+W and G+W nominal differences vs. actual implementation (Perrault above Pernin)

Example 11: Romanian arc consonant word signs. Page 18 (241), *Curs de Stenographie*. Circled are Duployan Signs J with dots inside and above, and M with Dot.

PRO, PRE, PER. These may be classed among the most frequently recurring prefixes, and may be abbreviated with great advantage. *Pro* is represented by a light accent written from right to left and placed near the beginning of the sign following the omitted prefix; thus: *protect* *proceed* *problem*

Pre is represented by a short inclined dash written downwards from right to left through the beginning of the following sign; thus: *predict* *preserve* *prefix*

Per is represented by a similar dash written in the opposite direction; thus: *permit* *perfect* *perjurer*

CON, COUN, COM. These prefixes are all contracted by the same form, which consists of a light accent written in the opposite direction to that used to represent *pro;* thus: *connect* *conceal* *complain* *commit* *country*

DIS, DES, is represented by a short dash placed immediately *above* the beginning of the following sign, as: *discreet* *dissolve* *despair*

MIS, MES, is represented by a short dash placed immediately *below* the beginning of the following sign, as: *mistake* *message* *misconstrue*

Example 12: Pernin Affixes. Page 26, *Pernin's Practical Reporter*. Examples of both Secant affixes.

SUB, SUP, SURP, may be written in a contracted form by a vertical line passing through the following sign at about one-third of its length above the sign; thus: *suppose* *subject* *subtract* *supply* . As the *r* before *p* is very indistinctly heard in ordinary pronunciation, it may be omitted and the same contraction used for *surp* as for *sup; surprise* *surpass* .

TRANS may be represented by a short vertical line passing through the following sign at equal distances above and below; thus: *transact* *transmit* *transform*

SUPER, SUPRE, may be represented by a vertical line intersecting the following sign at two-thirds of its length above it: *supersede* *superfine* *supreme* .

EXTRA, EXTRE, EXTRI, may be represented by a horizontal dash written through the following sign at a distance of two-thirds its length to the left; thus: *extract* *extravagant* *extreme* .

INTER, ENTER, INTRO, may be represented by a short horizontal dash intersecting the following sign at equal distances; thus: *interest* *enterprise* *introvert* .

CONTRA, CONTRI, CONTRO, COUNTER may be represented by a short horizontal dash written through the following sign at a distance of two-thirds of its length to the right; thus: *contract* *control* *counteract* *contribute*

NOTE.—In cases where the sign following the contracted prefix is traced in a similar direction to it, it is allowable to give the prefix an inclined form, taking care, however, to observe its proper distance at either end.

Example 13: Pernin Affixes, page 29, ibid. Horizontal and Vertical Secant affixes.

LESSON VIII.
PREFIXES.

As a large number of words commence with the prefixes given in the present lesson, the contracted method of writing them will be of great assistance in acquiring speed.

CON, COM, CUM, COUN, COG, ╲, are indicated by the grave accent written from left to right above the sign which follows, and to the left of it; thus:

conceal,   *commit,*   *cumber,*   *countenance,*   *cognizant.*
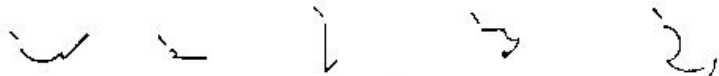
CONTRA, CONTRO, CONTRI, COUNTER, ⌣, are indicated by a sign composed of the *con* prefix and a short *t* sign, written in the *con* position, thus making it very suggestive of the prefixes for which it is employed; thus:

contract,   *contrite,*   *control.*
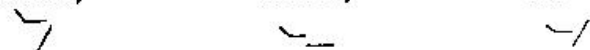
DIS, DES, DEC, ▬, are represented by a short dash written immediately above the sign following; thus:

display,   *descend,*   *deceit.*
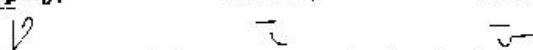
EX, ╲, is represented by an accent similar to that of *con,* but placed immediately *below* the sign following instead of *above* it; thus:

example,   *exhaust,*   *exhort.*
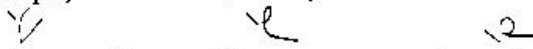
EXTRA, EXTRE, EXTRI, EXTER, ╲_, are formed of the *ex* prefix and the *t* sign, and written in the *ex* position; thus:

extract,   *extreme,*   *extricate,*   *external,*   *extirpate.*
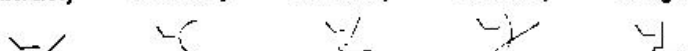
ENTER, INTER, INTRO, INTRU, '▬, are indicated by *ent* written parallel with and in close proximity to the beginning of the sign following; thus:

entertaining,   *interval,*   *introspect.*
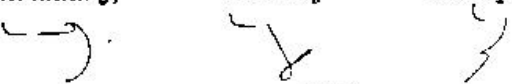
MIS, MES, ▬, are represented by a short horizontal dash placed in a reverse position to *dis, des,* immediately *under* the beginning of the following sign; thus:

mistake,   *message,*   *Messiah.*
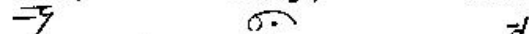
NOM, NON, NUM,), This prefix is indicated by placing the *n* sign close to the remainder of the word; thus:

nominal,   *nonsense,*   *numeral.*

MAGNA, MAGNE, MAGNI, (, are indicated by the *m* sign, written in close proximity to the remainder of the word; thus:

magnet,   *magnify.*

POR, PRO, PRU, ╱, are indicated by an acute accent written from *right* to *left* in a reverse position to the *con* prefix, *above* and to the *right* of the next sign; thus:

protect,   *portion,*   *proceed.*
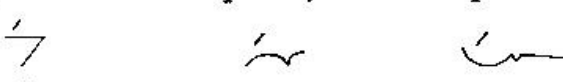
MULTI, (, with the next sign written *through* the prefix; thus:

multiply,   *multitude.*

SUB, SUR, ╱, are represented by an acute accent written from *right* to *left, above* and *to the left* of the sign following; thus:

subsist,   *surround.*

SUF, SUG, ╱, are represented by an acute accent written *under* and to the *right* of the next sign following; thus:

suggest,   *sufficient.*

Example 14: Pernin Affixes. Page 74, *Pernin's Universal Phonography*.

Example 15: Pernin Affixes. Page 75, *Pernin's Universal Phonography*. Pro- and Sub- signs contrast Affix High Acute and Affix High Right Acute.

AFFIXES.

Contracted affixes, to which this lesson is devoted, will be found to be, at certain times, very useful in shortening the writing. After the method for abbreviating on the vowels and combinations has been learned, the contracted affixes will not be employed to any great extent, as, in a majority of cases, the word will be abbreviated before the affix is reached. Still, the affixes are especially useful in writing words of two syllables, and it is well for the student to become thoroughly familiar with their forms, so that he can apply them readily when occasion demands their use.

CONTRACTED AFFIXES—JOINED.

AFFIX.	SIGN.	EXAMPLE.	Applicat'n.
Ness,		goodness,	
Full,		useful,	
Fully,		usefully,	
Fullness,		awfulness,	
Less, lous,		heedless,	
Lessly, lously,		artlessly,	
Lessness,		thoughtlessness,	
Ble, able, ible,		notable,	
Bly, ably, ibly,		terribly,	
Cian, cion, sion, tion,		Grecian,	
Ime,	(up)	time,	
Imely,		timely,	
Ine,	(down,	fine,	
Inely,		finely,	
Ineness,		fineness,	

Example 16: Pernin Suffixes. Page 82, ibid. Circled are Vertical Attached Affixes Up and Down.

PERNIN'S PRACTICAL REPORTER.

32

TABLE OF CONTRACTED PREFIXES.

PREFIXES.	SIGN.	EXAMPLE.	APL'N.
Pro,	,	Product,	
Per, pre,		Persist, predict,	

Con, coun, com,	`	Conceit, compel,	
Dis, des,		Dissolve, desert,	
Mis, mes,		Missive, Messiah,	
Sub, sup, surp,		Submit, supper,	
Trans,		Transaction,	
Super, supre,		Superb, supreme,	
Extra, extre, extri,		Extract, extreme,	
Inter, enter, intro,		Interest, intercede,	
Contra, contri, contro, counter		Contrary, control,	

DOUBLE PREFIXES.

Precon,		Preconceive,	
Unpre,		Unprepared,	
Discon,		Disconnect,	
Indis,		Indisposed,	
Miscon,		Misconduct,	
Uncon,		Uncontrollable,	
Recom, recon,		Recommend, reconcile,	
Irrecon,		Irreconcilement,	
Accom accoun,		Accomplish, accountable	

IRREGULAR PREFIXES.

For, fore,		Forbid, foretell,	
Self,		Selfish, self-control,	
Just,		Justify,	
Circum,		Circumflex,	
Retro, retri,		Retrograde, retribution,	
Repre,		Represent,	

Above and *over* are represented by a dash above the word or sign following, as: *above the* ‾ ; *overthrow* ; and *under* and *below* by a dash beneath; thus: *understand* ; *below him* ✕

Example 17: Pernin Prefix chart (note double prefix "precon-"). Page 32, *Pernin's Practical Reporter*. Circled are the Horizontal and Vertical Secant affixes.

As *r* is one of the most frequently occurring consonants, great brevity may be secured by omitting it *generally* after circle vowels, the omission being shown by reversing the position the vowel would naturally occupy. (See page 25.) The *r* sign must be supplied, however, between two circle vowels, and occasionally at other times, wherever uncertainty might result from its omission. When *l* follows *r*, a slight tick separates the two signs.

Trace the circle vowels *below* the horizontals *t, d, th,* at the beginning of words, and *above* at the ending of words, as in *odd, dough.* Trace them *inside* of curved signs on beginning and ending words, as in *ash, so.*

Trace them to the *right* of up strokes *l, r,* on beginning words, and to the *left* on ending as in *all, row.* Trace them to the *left* of *f, v,* on beginning words, and *to* the *left* on ending, as in *of; foe.*

Trace the circle vowels to the LEFT of stems *p, b, k, g :*
At the beginning and ending of words as in *oak, go.*
When they occur between the two *vertical* or the two *oblique* consonant stems, as in *pop, gag;* also when *preceded* by an oblique and *followed* by a vertical as *cap, cope.*

Example 18: Circle vowels and Pernin "R" reverse circle vowels. pp 19 & 23, *Pernin's Universal Phonography*.

VOWEL SIGNS AND DIPHTHONGS.

ah o as in *ah.*	ĕ Ⓤ as in *eat.*
aw Ⓞ as in *aught.*	ĕ Ⓝ as in *ebb.*
o ◯ as in *oak.*	ĭ Ⓒ as in *ill.*
oo, w (as in *ooze, will.*	ī Ⓘ as in *ire.*
ū Ⓤ as in *youth.*	ow ⊙ as in *owl.*
uh ⌐ as in *up.*	oi 𝟨 as in *oil.*
ā Ⓒ as in *aid.*	

COMBINATIONS.

an Ⓙ (down) as in m*an.*	em, im ⟍ (down) as in *em-* ber.
en, in ⟍ (down) as in m*en.*	
on ⎱ ⟋ (up) as in ⎰ gone. un ⎰ ⎱ fun.	om ⎱ ⟋ (up) as in ⎰ omber. um ⎰ ⎱ umpire
am ⟋ (down) as in *ample.*	

Example 19: Pernin Vowels. Page 16, ibid. Circled are Duployan letters OA, Long U, IE, EE, UI, Short I; Pernin An, and Pernin Am.

13

CONSONANTS

LETTERS	SIGNS	EXAMPLES
P		Port ; pole ; tap ; cap ; pad
B		Board ; bowl ; tab ; cab ; bad
T	—	Toad ; toll dart ; coat
D	——	Doll ; adopt ; code ; bode
F	\	Foal ; fault ; raft ; fad
V	\	Valve ; void ; vow ; oval
K	/	Coal ; cart ; coil ; calf ; poke
G	/	Goal ; gag ; dog ; grab ; god
L	/	Load ; low ; lard ; loaf ; tall
R	/	Road ; row ; roar ; rap ; far
M	(	Moan ; mow ; dome ; arm
N	)	Known ; no ; knack ; gnarl ; cone
Gn ing ning	)	Sing ; knowing ; morning ; sang ; growing
J	⌢	Jar ; jack ; joke ; Madge
Ch	⌢	Char ; touch ; vouch ; catch
Sh	⌢	Shown ; shore : Pasha ; sash
Zh	⌢	Azure ; pleasure ; vision
S	⌣	Sort ; sore : sauce ; pass
Z	⌣	Zone ; froze ; toes
W	(	Was ; watch ; which
H	•	Home ; hose ; hat ; heat
Th	∴	That ; broth ; pathos

In practice. the dots are omitted.

Example 20: Perrault Consonants. Page 13, *Perrault-Duployan ....*

14   15

COMBINED – CONSONANTS.			VOWELS & DIPHTHONGS (1st GROUP)		
LETTERS	SIGNS	EXAMPLES	LETTERS	SIGNS	EXAMPLES
Ds Ts		Trades, debts, its, dismal; sets	a	o	ah; bat; cat; chat; far; sat; shark
Drs Trs		Traders, debtors, eaters; doctors	a	o	awe; ball; caught; chalk; fought; short
Sd St		Caused, stop. mast; seixed; cast	ō	O	oh; bowl; coat; chore; fold; shore
Str		Dastard; strap; master; sister	ow	⊘ O	how; bow; cow; chowder; fowl; sour
Sp		Spoke; speed; crisp; spat	oy	⊘	ahoy; boy; coil; choice; soil; Roy
Spr		Spear; spread; sparrow; asperity		2nd GROUP	
Wr		Wher; swear; sward; award	ā	ᴐ ᴧ ɛ ɔ	hay; bale; ape; shade; fate; bait
Krs		Acres; shakers; dockers; backers	ĕ	◡ ◠ ς ɔ	hell; bell; ever; shed; fed; bet
Grs		Diggers; beggers; fingers	ē	ᴐ ᴧ ᴧ ς ɔ	heal beal; eve; sheet; feed; beat
Sk		Task; mask; cask; Alaska	ĭ	◡ ◠ ς ɔ	hit, bill; if; chill; fit; bit
Skr		Skirmish; scroll; scratch; scream		3rd GROUP	
Sn		Seen; snow; snore; snipe	ī	.	high; buyer; hire; chide, fight; bite
Sm		Small; seam; smoke; smith; chasm	ū	ᵛ	you; bureau; ewer; jute; feud, beauty
Kw		Queer; quick; liquid; equity; qualm			
Gw		Linguist; languid; anguish			

Example 21: Perrault combined consonants, circle and orienting vowels, pp 14 & 15, ibid. Circled are Duployan Letters TS, TRS, ST, STR, SP, SPR, WR, KRS, GRS, SK, SKR, SN, SM.

16   17

LETTERS	SIGNS	4th GROUP				
oo		ugh;	boot;	shoor;	fool;	soot
uh		bud;	shod;	furl;	sod	

NASALS — 5th GROUP

LETTERS	SIGNS					
an		ban;	band;	banjo;	fange,	sand
en		ben,	bend;	bench;	fence,	send
in		bin,	hink,	pinch,	fin,	sink
on		bun,	bunk,	bunch,	fun,	son

COMBINATIONS — 6th GROUP

LETTERS	SIGNS				
am		bam;	jam;	cramp;	drachm,
em		bem;	gem;	tremble;	member
im		bim;	jim;	rim;	nimble
um		bum;	chum;	rum;	humble

FIRST LESSON

1. Perrault-Duployan Stenography has twenty-one vowels: ah, aw, ŏ, ow, oi, a, e, ĕ, i, ī, ŭ, oo, uh,

an, en, in, un, am, em, im, um,

2. And twenty-two consonants:

P B; T D; F V; K Gue; L R; M N; Gn-ing-ning; J Ch;

Sh Zh S Z H Th W

3. As in our latin writing, in Stenography the signs are of three dimensions : let,

4. The brief sounds are represented by short signs:

P T F K L N - J Sh, S

and the long signs represent long sounds:

B D V Gue R Gn Ch Zh Z

5. It is most important to keep the proportions: small signs should not be made too large, nor the large ones too small:

bode, pat, luck, rud, fat, vat, cat, caught

6. The consonants are always written from top to bottom,

7. L & R, only, are written upwards (see rule 2).

8. Isolated, the consonants are supposed to be followed by the silent vowel E:

pea, bee, tea, fee, me

9. Final, they are always supposed to be followed by the silent E:

pope, bode, cove, package, late, farce, are.

Example 22: Perrault nasal vowels, pp 16 & 17, ibid. Circled are Duployan Letters XW and Vocalic M.

Învăţind tehnica aplicării abrevierilor, veţi reuşi să scurtaţi cuvintele, să le simplificaţi traseul, să faceţi eliminări de litere, cuvinte, şi cu timpul, să prindeţi „din zbor" tot ce auziţi.

A abrevia — în scris — înseamnă a nota un cuvînt, un titlu etc. printr-un simbol, printr-o prescurtare. Şi în scrierea obişnuită — cînd ne grăbim — folosim abrevieri, de ex.: în loc de pentru scriem pt, anul curent (a.c.), anul trecut (a.t.), anul viitor (a.v.), articol (art.), nostru (ns.) şi aşa mai departe (ş.a.m.d.).
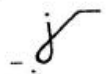
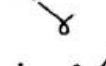În stenografie este NEVOIE de un mare număr de abrevieri pentru a dobîndi viteza dorită.

ABREVIEREA SUFIXELOR, A PREFIXELOR ŞI A UNOR GRUPURI FIXE DE SUNETE COMUNE MAI MULTOR CUVINTE UZUALE (cu ajutorul unui punct, unor semne, unor litere)

**Abrevieri cu ajutorul unui punct:**

— Punctul pus deasupra primei litere a rădăcinii (în cazul de faţă numim rădăcină partea de cuvînt care nu se abreviază, care rămîne a fi stenografiată integral, după stenografierea prescurtată a prefixelor, a sufixelor sau a altor grupuri de sunete care se întîlnesc în mai multe cuvinte uzuale) abreviază grupurile: trans, tram, tran;

transport

tramvai

trandafir

— Punctul înaintea primei litere a rădăcinii abreviază grupurile: inter, între, întru, într-o, intra (îndru, îndre) prin extindere;

intern

întrec

întreg

îndrumare

— Punctul dedesubtul ultimei litere a rădăcinii abreviază grupurile: ţiune, tiune (ţie), siune (ziune), (sie) ciune;

moţiune

acţiune

sesiune

relaţie

pensie

— Punctul la dreapta abreviază grupurile: tiv, siv, ziv (tive, sive); motiv(e), operativ (e)

— Punctul deasupra ultimei litere a rădăcinii va

reprezenta terminaţiile în lui; vărului

satului

omului

— Punctul deasupra rădăcinii, indiferent unde, abreviază grupurile: tat, tate, tăţi (tivitate); mutat, mutaţi emotivitate pătat, pătate

Abrevieri cu ajutorul unor semne, unor litere:

— Terminaţiile: mant, ment, mînt se scriu printr-un accent ascuţit pus deasupra rădăcinii cuvîntului, iar terminaţia minte printr-un accent grav; moment alarmant zăcăminte

— Terminaţiile: lor, ilor, lelor se redau printr-un r stenografic scris la dreapta: maşelor lalelelor

232

233

Example 23: Romanian Affixes. Page 14 (232,233), *Curs de Stenographie*.

— Terminaţiile: ţionar, ţional, ţionat, ţionăm, ţionează formează sufixe derivate; dicţionar naţional acţionat menţionăm menţionează

— Terminaţiile: mentar, mentare, mîntare se redau printr-un m stenografic pus deasupra sau la dreapta rădăcinii cuvîntului; documentar înmormîntare

— Terminaţiile: anţă, enţă, inţă (onţ, unţ) se redau prin an, in, on stenografic intenţionat scrise cu colţ; ambianţă esenţă

— Terminaţiile: escu, eşti, ească se redau prin doi e stenografici uniţi, care cu deschizătura în sus se vor citi escu, în jos ească şi la stînga eşti, eşte; gîndesc gîndească gîndeşti

— Terminaţiile: ism, asm se redau printr-un i stenografic pus perpendicular pe ultima consoană a rădăcinii cuvîntului; basm fantasm egoism

— Terminaţiile: 1. titudine se notează printr-un d stenografic apăsat (atitudine; aptitudine 2. bil se notează printr-un b stenografic apăsat (abil mobil;); 3. grafie, graf, se notează printr-un f stenografic apăsat (fotografie geografie fotograf, geograf)

— Grupurile: str, zdr şi st se obţin printr-o liniuţa pusă tangent (la începutul, sfîrşitul şi mijlocul cuvintelor) de ex.: (stric strig atest gust păstrez)

— Isto se redă printr-un i (sau e) stenografic mai mare la începutul cuvîntului; (istorie istorice)

— Terminaţia ist se redă printr-o liniuţă perpendiculară aşezată pe ultimul semn; (corist egoist)

— Contra, contro, contri — se obţine printr-un ct stenografic; (contrar control contract);

— Ex (exa, exo), eteri (exter, extra, extre) se redă printr-un e stenografic; (extern exterior)

— Circum, circu — se redă printr-un i stenografic; (circulă circulară)

— Supra, super — se redă printr-un s stenografic pus deasupra cuvîntului; (suprafaţă supraom)

— Asupra — se redă printr-un a stenografic pus deasupra cuvîntului; (asupra noastră asupra voastră)

234

235

**Example 24:** Page 15 (234,235), ibid.

— În loc de electro, scriem un I stenografic; (electrocuta ⟶ Electronica ?)

scriu ⟶ sublinia) ⟶
— Printr-un t stenografic la începutul cuvîntului obţinem: tra, tre, tri, tro, tru; (trasat ⟶ traversa ⟶)

fic se notează: cre, cra, cro, cru; (creare ⟶ creşă ⟶ cromat ⟶)

— Eliminarea lui r din mijlocul unor cuvinte nu îngreunează citirea lor; (aprobat ⟶ agramat ⟶ oprire ⟶)

— Negaţia ne — se redă printr-un n stenografic pus înaintea cuvîntului; (nesfîrşit ⟶ nemijlocit ⟶ necaz ⟶)

— Printr-un d stenografic la începutul cuvîntului obţinem: dra, dre, dru; (dragă ⟶ dramă ⟶ dresat ⟶)

— Printr-un g stenografic se notează: gra, gre, gri, gru; (granulă ⟶ greşeală ⟶)

Semnul + înaintea cuvîntului poate fi folosit în cuvinte ca: plusprodus- +i.e. plusvaloare +⟶

— Nemai — se redă printr-un nm stenografic (nemaiavînd ⟶ nemaivăzut ⟶)

— Printr-un p stenografic la începutul cuvîntului se notează: pra, pro, pre, pri, pru; (pradă ⟶ prevăd ⟶)

— Printr-un f stenografic se notează: fru, fra, fre, fri, (frî); (fructe, ⟶ frînă ⟶ frapat ⟶)

Cîteva abrevieri

— Tor (tură, ter, tător) — se redă printr-un t stenografic pus la sfîrşitul cuvîntului; (dator ⟶ natură ⟶)

— Printr-un b stenografic se notează: bra, bri, bro, bru; (brutar ⟶ broşat ⟶ brigadă ⟶)

Printr-un v stenografic se notează: vre, vra; (vreme ⟶ vrajă ⟶)

În STENOGRAFIE fiecare îşi poate face un număr de abrevieri personale adecvate domeniului respectiv. Important este ca ele să aibă o construcţie logică. Ele uşurează munca fizică a mîinii, dar nu trebuie să sporească, cu mult, efortul cerebral la descifrare.

— Sub — se redă printr-un unghi ascuţit pus sub rădăcina cuvîntului; (subsol ⟶ sub-

— Printr-un c stenogra-

236

237

Example 25: Page 16 (236,237), ibid.
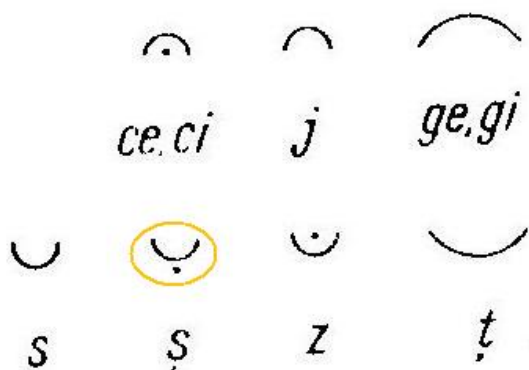
Example 26: Unique Romanian arc consonants. Page 5 (212), ibid. Circled is Duployan Letter S with Dot Below.

ep, eb, et, ed, ec, eg,
ef, ev, el, er

Pentru a deosebi pe i de e
  vom pune un punct:

ip, ib, it, id, ic, ig, if,
iv, il, ir

Example 27: Romanian I. Page 11 (226), ibid. Circle is Duployan Letter Romanian I.

Exemple:
900   9̇
9 000   9·
9 000 000   9̇
9 000 000 000 ·9
230 000   230·
560 000   560·
500 000 000   ṩ

Fracțiile se scriu astfel:

1   2   1
5   4   3

Numerele multiplicative:

îndoit, întreit,
împătrit,
înzecit, însutit,
înmiit

‵2 ‵3   ‵4   ‵10 ‵i   ‵1·

Cifrele romane: I, II, III. IV
V, VI, VII, VIII, IX X, XI,
XII, XIII, XIV, XV, XVI,
XVII, XVIII, IX, XX etc., le
vom înlocui cînd steno-
grafiem cu cifrele arabe.

1, 2, 3, 4, 5, 6, 7, 8, 9, 10,
11, 12, 13, 14, 15, 16, 17,
18, 19, 20

Dacă vrem să scriem 3 la
sută (3%) vom pune un
mic zero deasupra cifrei.
(De ex. 3%, 6%, 8%, 10%)

3° 6° 8° 10°

Dacă vrem să scriem 6
grade, vom pune un mic
zero la dreapta cifrei:
6 grade, 8 grade, 10
grade, 100 grade.

6° 8° 10° i°

230

Repetările de numerale
care arată aproximația (la
numerele mari) cum ar fi
sute și sute, mii și mii, mi-
lioane și milioane, mi-
liarde și miliarde se no-
tează prin două puncte în
loc de unul.

sute și sute   ï
mii și mii   1··
milioane și milioane ꞁ̣
miliarde și miliarde ··1

Numeralele ordinale
al doilea, al treilea,
al zecilea, al o sutălea
se notează printr-o mică
liniuță orizontală

2 —   3 —
10 — 1 —

  Folosind literele alfabe-
tului latin — scris cu mîna
— dar lăsînd un spațiu
mai mare între ele și cu-
vintele următoare putem
obține:

  parametru,   𝒫
  parametri
  plenipotențiar   𝓅
  diametru   𝒟
  diametral opus   𝒟𝓅
  lire   𝓛
  ad interim   𝒶
  Marea Revoluție   𝓸
Socialistă din Octombrie
a pune punctul pe i   𝒾

231

Example 28: Romanian Numbers. Page 13 (230, 231), ibid.

B   B

ba, bo, bu, baba,
Bob, buba

bat, bot,
Buda, bac,
bagă, buc
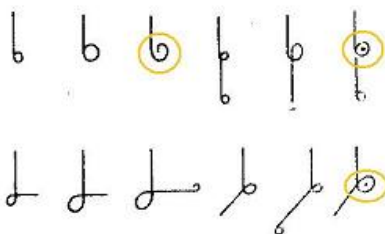
217

Example 29: Romanian U. Page 7 (217), ibid. Circled are Duployan Letter Romanian U, final and medial forms.

următor, minim,
maximum, deoarece
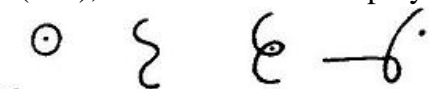
de aceea, deocamdată,
din aceasta

din această cauză, din
cauza aceasta

din multe cauze, din
multiple cauze
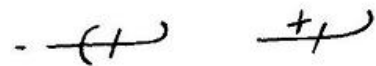
din diverse cauze, de-a
lungul și de-a latul
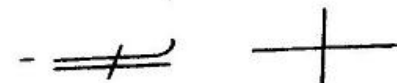
Example 30: Romanian overlaps, double overlaps, etc. Page 19 (242), ibid.

Face parte, face faţă,
face cunoscut:
bun venit, bun găsit,
pur şi simplu

radio şi televiziune,
radio-amatori
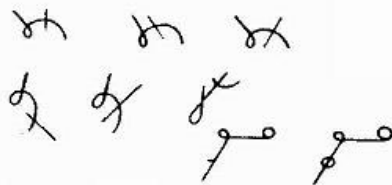
— Se taie cu o linie cuvintele care se repetă. Ex.:
ceea ce, să se, zi de
zi, ceas de ceas
an de an, fel de fel

Example 31: Double mark. Page 17 (238), ibid.
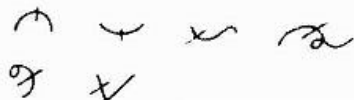
de jur împrejur

a vă aduce la
cunoştinţă, organizare
organizări, de acord, de
comun acord
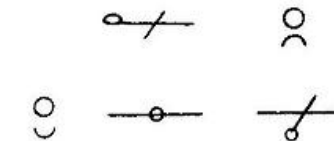
de ordin, prin urmare,
ca urmare

ordine de idei, ordinea
următoare
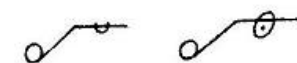
Example 32: Romanian U & Ow in overlaps. Pp 19 (242) & 20 (244), ibid.

Example 33: Sloan Letters. Page 6&7, *Sloan-Duployan Phonographic Instructor*. Circled are Duployan Letters Uh, Ooh, Sloan Eh, Sloan Ee; Sloan U, and Sloan Ow.

contra, contri, contro, counter, are represented by a tick slanted in the opposite direction from "con," placed over the beginning of the outline to which it is prefixed, thus: contradict ⌐, contribute ⌐, controvert ⟍, counteract ⟩

acc, ax, ex, &c., are represented by making a tick, then writing the rest of outline through it, so as to form a cross, thus: accident ⟵, axil ⤬, express ⤲. When "r" follows "ex" thicken the tick, thus: exercise ⤸. When "ex" is medial make the part of the word following "x" overlap the part preceding it, thus: mixture ⟵, approximate ⤶, texture ⟝

ab, ob, are represented by a dot placed over the beginning of outline to which it is prefixed, thus: abstract ⟩, observe ⤸

Example 35: Sloan Affixes. Page 16, *Sloan-Duployan, Reporter's Rules*

8   SLOAN-DUPLOYAN PHONOGRAPHIO INSTRUOTOR.

The following signs are shaded to affix " R," thus:—

pr ǀ   br ǀ   kr ╱   gr & jr ╱   fr ╲   vr ╲   tr —   dr ——   thr ∸

lr ⁓ (up)   rr ╱ (up)   wr ⌒   swr ⌒   str–dr ⌐   s(i)str ⌐

smr ⌣   snr ⌣   kwr ⌡   skwr & skr ⌡   trs ╱ (up)   drs ╱ (up)

spr ╱ (up)   slr ⌡ (up)   anr enr inr ⌣   onr & unr ⌒ (up)

The vertical and horizontal curves are thickened to prefix " R," thus:—

rn	rum	rn	rng	rs-z	rss-z	rsh & rzh	rch
(	(	)	)	⌣	⌣	⌢	⌢

N.B.—When a vowel (or diphthong) comes between p–r, b–r, w–r, st–r, sp–r, r–s, &c., it is omitted. The above is the only practical Phonetic Alphabet in the world.

Example 34: Sloan combined consonants + combining R (note TRS & DRS).
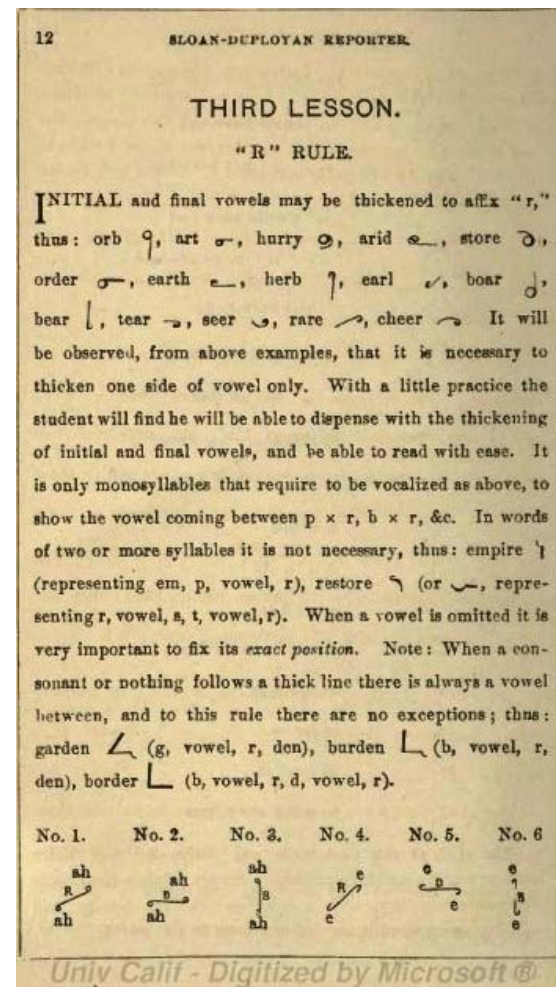
Example 39: The Sloan R rule. Page 12, ibid.

Page 8, ibid.
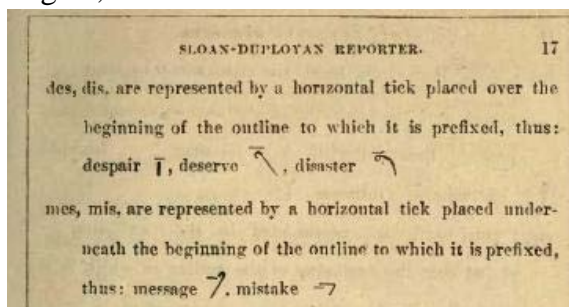
Example 36: Page 17, ibid.
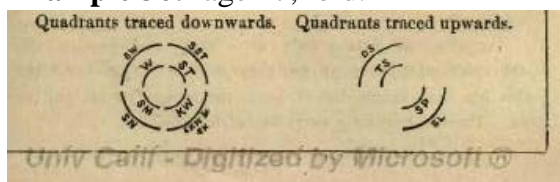
Example 37: Sloan Combined consonants. Page 5, ibid.

proper names should be underlined. As figures may be written r pidly, no special signs are given for them. The figure 1 may be used for one, once, first, firstly; 2 for two, twice, second, secondly; 3 for three, thrice, third, thirdly, &c.; 20, twentieth; 30, thirtieth; 80, eightieth, &c., &c. If a line ... ...ich means 900. over figures it denotes hundreds, as ...

If a line be drawn thro... ...res it denotes thousands, as ...,000. If a line be drawn below figures it ..., which m... ...ilions, as ..., which means 9,000,000. Two or den... more such abbreviations may be used, as ..., which means 900,000; ... means 900,000,000; ... means 900,000,000,000.

The first half of a large semicircle may be shaded to prefix "R" and the second portion written light, or vice versá, thus:

remember (, resources ..., resist ..., murmur ...

arises ..., series or serious ...

Example 38: Sloan Numbers. Page 8, ibid.
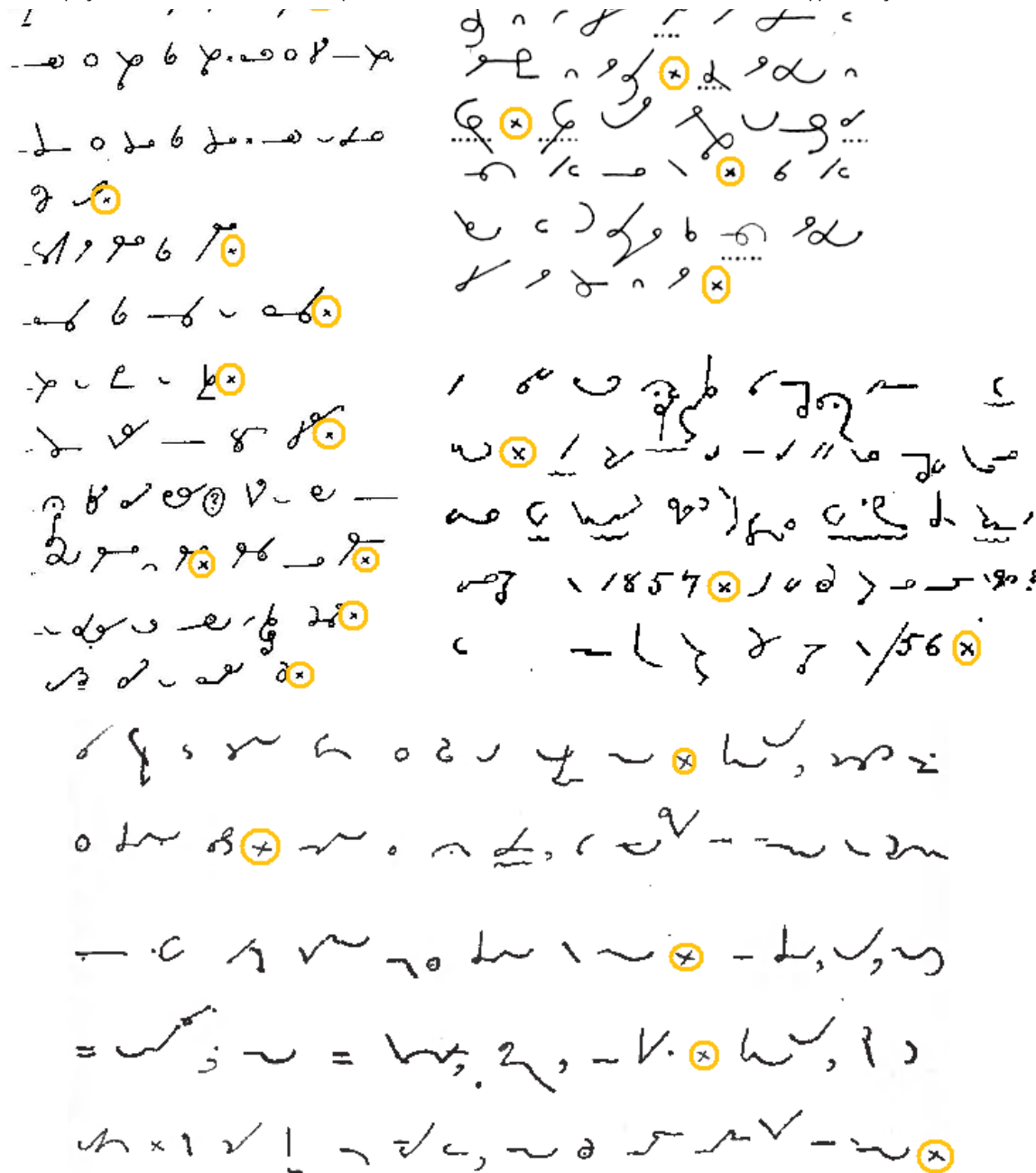
Example 40: Examples of the Stenographic Period from French Duployéan, Romanian, Sloan-Duployan, Pernin's Universal, and Pernin's Reporters' shorthands.
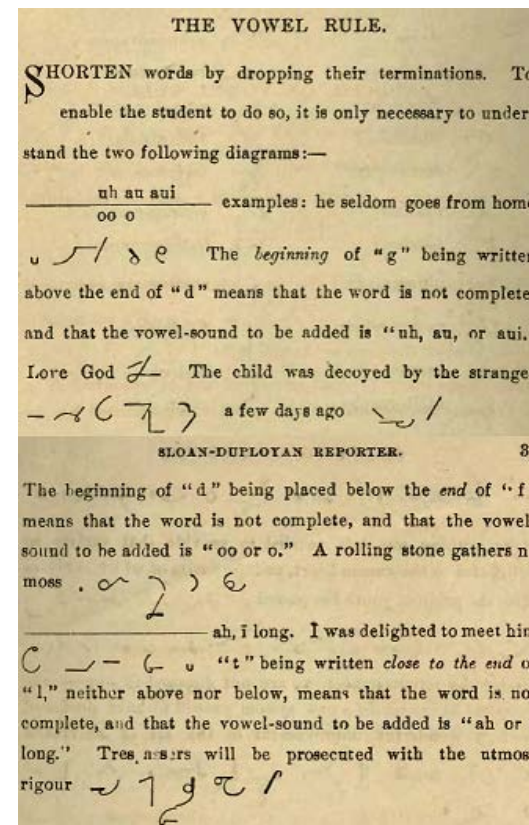
Example 41: The Sloan "vowel rule", showing the shorthand up/down control at word breaks.

ISO/IEC JTC 1/SC 2/WG 2
PROPOSAL SUMMARY FORM TO ACCOMPANY SUBMISSIONS
FOR ADDITIONS TO THE REPERTOIRE OF ISO/IEC 10646

Form number: N3702-F (Original 1994-10-14; Revised 1995-01, 1995-04, 1996-04, 1996-08, 1999-03, 2001-05, 2001-09, 2003-11, 2005-01, 2005-09, 2005-10, 2007-03, 2008-05, 2009-11)

A. Administrative

1. **Title:**   Proposal to include Duployan Shorthands and Chinook script in Unicode / ISO-10646.

2. Requester's name: Van Anderson vanisaac@boil.afraid.org

3. Requester type (Member body/Liaison/Individual contribution):   Individual contribution

4. Submission date: 2010-04-12

5. Requester's reference (if applicable):

6. Choose one of the following:

    This is a complete proposal: X

    (or) More information will be provided later:

B. Technical - General

1. Choose one of the following:

    a. This proposal is for a new script (set of characters):   Yes

        Proposed name of script: 1) Duployan Shorthands and Chinook 2) Shorthand Format Controls

    b. The proposal is for addition of character(s) to an existing block: Yes

        Name of the existing block: Supplemental Punctuation

2. Number of characters in proposal: 148 - (1 in Supplemental Punctuation, 4 in Shorthand format controls, 143 in Duployan Shorthands and Chinook)

3. Proposed category (select one from below - see section 2.2 of P&P document):

A-Contemporary	B.1-Specialized (small collection)	X	B.2-Specialized (large collection)
C-Major extinct	D-Attested extinct		E-Minor extinct
F-Archaic Hieroglyphic or Ideographic		G-Obscure or questionable usage symbols	

4. Is a repertoire including character names provided?   Yes

    a. If YES, are the names in accordance with the "character naming guidelines"   Yes

    b. Are the character shapes attached in a legible form suitable for review?   Yes

5. Fonts related:

    a. Who will provide the appropriate computerized font to the Project Editor of 10646 for publishing the standard?

Van Anderson vanisaac@boil.afraid.org

b. Identify the party granting a license for use of the font by the editors (include address, e-mail, ftp-site, etc.):

Van Anderson https://boil.afraid.org/Chinook/DuployanProp.ttf

6. References:

a. Are references (to other character sets, dictionaries, descriptive texts etc.) provided?   Yes

b. Are published examples of use (such as samples from newspapers, magazines, or other sources)

of proposed characters attached?   Yes, for some of repertoire

7. Special encoding issue

Does the proposal address other aspects of character data processing (if applicable) such as input,

presentation, sorting, searching, indexing, transliteration etc. (if yes please enclose information)?   Yes

Information on presentation and collation is included in this document, above. Standard transliteration is superfluous due to the existence of Latin orthographies for all known languages using Duployan.

C. Technical - Justification

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

If YES explain

2. Has contact been made to members of the user community (for example: National Body,

user groups of the script or characters, other experts, etc.)?   Yes

If YES, available relevant documents: Online forums: Forum du petit sténographe (http://forumsteno.vosforums.com/), Chinook Language List (http://listserv.linguistlist.org/archives/chinook.html)

3. Information on the user community for the proposed characters (for example:

size, demographics, information technology use, or publishing use) is included?   Yes

Reference: Script will be used primarily by small community of hobbyists and linguistic/historical scholars, with expected minor utility to legal and government historians, due to extensive usage of Duployan shorthands in Canada and France, and the historical use of shorthands to record legal and legislative proceedings.

4. The context of use for the proposed characters type of use; common or rare)   rare

Reference:

5. Are the proposed characters in current use by the user community?   Yes

If YES, where? Reference: Still in use by small hobbyist community, mostly in France. Scholarly and historical/cultural preservation use.

6. After giving due considerations to the principles in the P&P document must the proposed characters be entirely

    in the BMP?   No.

        If YES, is a rationale provided?

            If Yes, reference: Except for one character in Supplemental Punctuation, characters should be allocated in SMP (Plane 1) as per Roadmap.

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

8. Can any of the proposed characters be considered a presentation form of an existing

    character or character sequence?   No

        If YES, is a rationale for its inclusion provided?

            If Yes, reference:

9. Can any of the proposed characters be encoded using a composed character sequence of either

    existing characters or other proposed characters?   No

        If YES, is a rationale for its inclusion provided?

            If Yes, reference:

10. Can any of the proposed character(s) be considered to be similar (in appearance or function)

    to an existing character?   Yes.

        If YES, is a rationale for its inclusion provided?   Yes

            If Yes, reference: Any similarities in appearance are coincidental or a motivated adaptation of letter shapes to Duployan.

11. Does the proposal include use of combining characters and/or use of composite sequences?   Yes

    If YES, is a rationale for such use provided?   Yes

            If Yes, reference: Several orthographies use optional combining accents to distinguish similar vowel sounds. Further justification is contained in document, above.

    Is a list of composite sequences and their corresponding glyph images (graphic symbols) provided?   No.

            If Yes, reference: Examples of several composite sequences are provided, and all other sequences can be trivially derived from those given.

12. Does the proposal contain characters with any special properties such as

    control function or similar semantics?   Yes

            If YES, describe in detail (include attachment if necessary)

The 4 Shorthand Format Control characters (U+1BCF0-U+1BCF3) and Duployan thick letter selector (U+1BC7F) are discussed above. See tables 5 & 6 for examples and preceding text for description. Parsing and syntax information for Shorthand Format Seqences is on page 10.

13. Does the proposal contain any Ideographic compatibility character(s)?   No

    If YES, is the equivalent corresponding unified ideographic character(s) identified?

Proposal to include Duployéan Shorthands and Chinook script and Shorthand Format Controls in Unicode/ISO-10646, as approved by WG2

If Yes, reference: