ISO/IEC JTC1/SC2/WG2 N4902 L2/17-342 2017-09-27

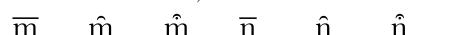
Universal Multiple-Octet Coded Character Set International Organization for Standardization Organisation internationale de normalisation Международная организация по стандартизации

Doc Type:	Working Group Document
Title:	Proposal to add two characters for Medieval Cornish to the UCS
Source:	Michael Everson
Status:	Liaison Contribution
Action:	For consideration by JTC1/SC2/WG2 and UTC
Date:	2017-09-27

0. Summary. This proposal requests the encoding of one combining mark and one punctuation characters. If this proposal is accepted, the following characters will exist:

\bigcirc	1DFA	COMBINING FINAL SWASH
		• used in medieval Cornish
		• fuses typographically with a, e, m, n, r, u, y
ķ	2E4F	DOUBLE OBLIQUE HYPHEN WITH FALLING DOTS
		• used in medieval Cornish

1. COMBINING FINAL SWASH. Medieval handwriting in Cornish uses a variety of mechanisms for representing an abbreviation of m and n. These mechanisms occur alongside one another and can all be represented by characters in the UCS (U+0306 COMBINING OVERLINE, U+0311 COMBINING INVERTED BREVE, and U+0352 COMBINING FERMATA).



These are read *mm* and *nn*; *mn* and *nm* are in principle possible but would be extremely rare. These marks also appear on vowels:

 \overline{a} \hat{a} \hat{a} \overline{y} \hat{y}

Which can be read *am* and *ym* or *an* and *yn*. But one kind of abbreviation, which is relatively productive, is also found:

 \widehat{a} \widehat{e} \widehat{m} \widehat{n} \widehat{r}/\widehat{r} \widehat{w} \widehat{y}

These forms are polyvalent. This mark may simply be a meaningless swash form, or it may be an abbreviation. Thus the readings for these may be a, e, m, n, r, u, y, or am, em, mm, nm, rm, um, ym, or an, en, mn, nn, rn, un, yn. There is no way of telling without knowing the reading rules for these. But a palaographic representation of the text is impossible for these last forms without the combining character proposed here. We already have a similar analogous situation with U+035B COMBINING ZIGZAG ABOVE, which was encoded as an abbreviation representing er and re. Here are some examples:

war's dr's der's man'e

These are forms attested in the manuscripts: the first two words are Middle Cornish war 'on' (where the COMBINING ZIGZAG is otiose) and dre 'through' (where it represents -e), and the second two are Middle English dere 'dear' (where the ZIGZAG represents -e), manere 'manner' (where it represents -er-). The encoded COMBINING ZIGZAG can be used to correctly represent the text, whether the reading of it is e or e or er, or whether it is just an otiose swash. Similarly, when we have a word ending in -e, we do not know whether it is -en or -em or -e but with the new COMBINING FINAL SWASH it is possible to represent the text accurately regardless of the meaning.

It is usual in the UCS that diacritics that fuse typographically with base characters are encoded atomically, but since this is a productive abbreviation character not used in a standard orthography it is considered reasonable to encode it as a single combining character. An informative note listing the characters which have been observed making use of it is recommended for the names list.

- **2. DOUBLE OBLIQUE HYPHEN WITH FALLING DOTS.** This separator character has only been observed in Cornish manuscripts, and there is some possibility that it was devised at the scriptorium at Glasney, where Cornish orthography is thought to have been developed and maintained. The character is used with some regularity between verses as a simple separator, and cannot be represented by any other punctuation characters in the standard. It has been found so far in the 14th-century poem *Pascon agan Arluth* 'The Passion of our Lord', in the drama *Beunans Meriasek* 'The Life of St Meriasek' (1504), and in the recently-discovered drama *Bewnans Ke* 'The Life of St Ke'. In the best (and earliest) hands the glyph is definitely two oblique strokes flanked by two angled dots, though in weaker hands glyph variants can be observed. These could be represented by sequences of existing characters if necessary, but the exemplar character cannot be. It is certain that only one character is needed.
- **4. Linebreaking.** Line-breaking properties for these are suggested as follows.

1DFA: CM (Combining Mark) 2E4F: BA (Break_After)

5. Unicode Character Properties. Character properties are proposed here.

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1DFA; COMBINING FINAL SWASH; Mc; 210; L;;;;; N;;;; 2E4F; DOUBLE OBLIQUE HYPHEN WITH FALLING DOTS; Po; 0; ON;;;;; N;;;;
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6. Bibliography.

The following forthcoming volumes in the series Corpus Textorum Cornicorum require the characters proposed in this document.

Williams, Nicholas, Alan M. Kent, & Michael Everson. Forthcoming. *The Charter Fragment* and *Pascon agan Arluth*. (Corpus Textorum Cornicorum; 1) Portlaoise: Evertype.

Williams, Nicholas, Alan M. Kent, & Michael Everson. Forthcoming. *Beunans Meriasek*. (Corpus Textorum Cornicorum; 5) Portlaoise: Evertype.

Williams, Nicholas, Alan M. Kent, & Michael Everson. Forthcoming. *Bewnans Ke*. (Corpus Textorum Cornicorum; 6) Portlaoise: Evertype.

Williams, Nicholas, Alan M. Kent, & Michael Everson. Forthcoming. *Gwryans an Bÿs (The Creacon of the World)*. (Corpus Textorum Cornicorum; 8) Portlaoise: Evertype.

Figures

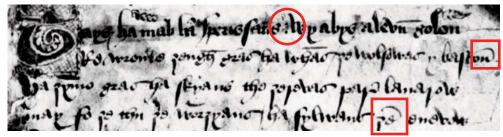


Figure 1. The first line of *Pascon agan Arluth* 'The Passion of our Lord' (BL MS Harley 1782B, fol. 1r), showing DOUBLE OBLIQUE HYPHEN WITH FALLING DOTS and COMBINING FINAL SWASH on n (where it is otiose) and e (where it is meaningful). The text reads, in palaeographic presentation, normalized text, and translation:

Tays ha mab hå fpe2is fans ₹ 66y abys a levn golon Re w2onte 3eugh g2as ha whās / 3e wolfowas y bafcon Ha 3ymo g2as ha skyans the 3erevas par lauaro66 may fo 3e thu 3e wo23yans / ha fylwans 3e enevo66

Tas ha Mab ha'n Spyrys Sans, why a bÿs a leun-golon, re wrauntyo dhywgh grâss ha whans dhe wolsowes y Bassyon; ha dhymmo grâss ha skians dhe dherivas pàr dell wòn, may fo dhe Dhuw dh'y wordhyans ha selwans dhe'n Gristenyon.

May Father, Son and the Holy Spirit—you who pray from the bottom of your heart—grant you grace and yearning to listen to his Passion, and to me grace and wisdom to recount as well as I can, that it may be for the glory of God and the salvation of Christians.

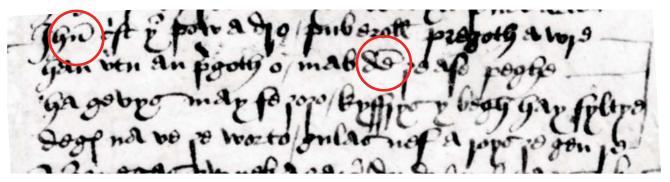


Figure 2. Verse 23 of *Pascon agan Arluth* 'The Passion of our Lord' (BL MS Harley 1782B, fol. 3r), showing COMBINING FINAL SWASH on u and e. On u the swash is decorative but it is meaningful on the e (where it means n). The text reads, in palaeographic presentation, normalized text, and translation:

Ihu cht y pow a dro / pub e2011 p2egoth a wre han vtu an pgoth o / mab de 3e afe peghe ha gevys may fe 3030 / kyffrys y begh hay fyltye degf na ve 3e w02to / gulas nef a roys 3e gen re

Jesu Crist i'n pow adro pùb eur oll pregoth a wre; ha vertu an pregoth o mab den dhe asa peha, ha gevys may fe dhodho kefrÿs y begh ha'y fylta, degys na ve dhyworto gwlas nev ha rës dhe gen re.

Jesus Christ all around the country used always to preach; and the essence of the preaching was that man should give up sinning, so that there should be forgiven him both his sin and his corruption, to the end that the kingdom of heaven should not be taken from him and given to others.

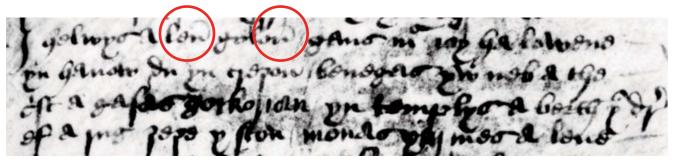


Figure 3. Verse 30 of *Pascon agan Arluth* 'The Passion of our Lord' (BL MS Harley 1782B, fol. 3v), showing COMBINING FINAL SWASH on u and n. On n the swash is decorative but it is meaningful on the u (where it means n). The text reads, in palaeographic presentation, normalized text, and translation:

I helwys a lew golon / gans m ioy ha lowene yn hanow du yn tre3on / benegas yw neb a the cft a gafas go2korian / yn templys a be2th ŷ dr' ef a rug 3e3e y fcon / monas yn mes a lene

Y helwys a leun-golon gans meur joy ha lowena "In hanow Duw intredhon benegys yw neb a dheu!" Crist a gafas gwycoryon i'n templys aberth i'n dre. Ev a wrug dhedha yn scon mones in mes alena.

People called out from the bottom of their heart with great joy and gladness,
"In the name of God among us is blessed he who comes!"
Christ found traders in the temples within the city.
Quickly he caused them to depart away from there

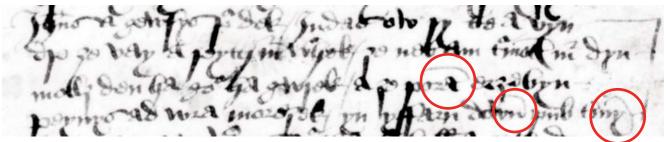


Figure 4. Verse 66 of *Pascon agan Arluth* 'The Passion of our Lord' (BL MS Harley 1782B, fol. 6v), showing COMBINING FINAL SWASH on a, n and y. On n the swash is decorative but it is meaningful on the other two (it means n on both). The text reads, in palaeographic presentation, normalized text, and translation:

Iĥus a gewfys p̃ dek / Iudas ow ry te a vyn dre 3e vay a reyth m² whek / 3e neb am t̃môt m² dyn moll3 den ha gỡ ha gwrek / a 3e po2a e23ebyn peynys ad w2a mo2e3ek / yn yffa2n down pub t'mŷ

Jesus a gewsys pòr deg,
"Jûdas, ow ry te a vynn,
dre dha vay a reth mar wheg
dhe neb a'm torment pòr dynn.
Mollath den, ha gour ha gwreg
a dheu poran er dha bynn.
Painys a'th wra morethek
in iffarn down pùb termyn."

Jesus spoke very fairly,
"Judas, you will betray me,
by your kiss, which you give me so sweetly,
to him who will torment me very sharply.
The curse of men, both husband and wife,
will come exactly against you,
Pains will render you wretched
in deep hell forever."

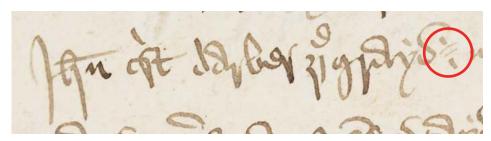


Figure 5. Text from *Beunans Meriasek* (Peniarth MS 105B, fol. 20r), showing DOUBLE OBLIQUE HYPHEN WITH FALLING DOTS. The text reads:

Ihū cft darber 3j grays ?

Jesu Cryst, darbar dha ras

'Jesus Christ, provide thy grace'

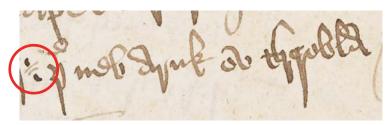


Figure 6. Text from *Beunans Meriasek* (Peniarth MS 105B, fol. 19r), showing DOUBLE OBLIQUE HYPHEN WITH FALLING DOTS. The text reads:

i 3∫ neb a ruk ov throbladhe neb a wrug ow throbla'For him who has troubled me'

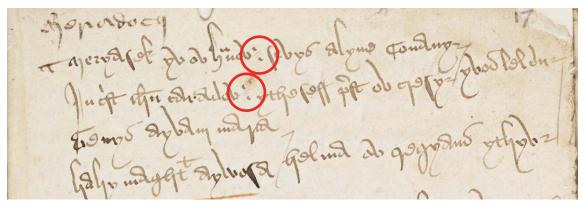


Figure 7. Text from *Beunans Meriasek* (Peniarth MS 105B, fol. 17r), showing DOUBLE OBLIQUE HYPHEN WITH FALLING DOTS. The text reads:

Meradoco

Mezyafek yv ov hnov ‡ fevys a lyne Conany In cti ihu caradov ‡ ythefeff pt ov crefy / y vos lei du • Genys ay vam maria ha hy maght aywofa / helma ov cregyans yth yv •

MERIADOCUS

Meryasek yw ow hanow, sevys a lin Conany.
Yn Cryst Jesu caradow yth esof prest ow cresy.
Y vos lel Dew genys a'y vam Marya, ha hy maghteth a'y wosa; hemma ow crejyans yth yw.

MERIASEK

Meriasek is my name,
Raised from Conan's line
In Christ Jesu the loveable
Am I ever believing.
That he is true God
Born of his Mother Mary,
And she a maiden notwithstanding;
This is my belief.

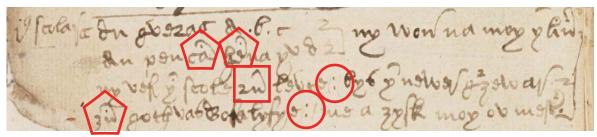


Figure 8. Text from *Beunans Meriasek* (Peniarth MS 105B, fol. 3v), showing DOUBLE OBLIQUE HYPHEN WITH FALLING DOTS. In this rather unskilful hand the dots and lines are reversed and appear like $|\cdot|$ or $/\cdot/$ but the function is clear and unambiguous and this glyph is not to be preferred (the glyph could be composed with VERTICAL BAR and COLON at need). There is also an example of the COMBINING FINAL SWASH in this here (in $2\hat{w}$, where it means m), alongside the COMBINING INVERTED BREVE (in \hat{y}). There are also three examples of a swash with a dot (one word-internally, so it may ne that the name COMBINING SWASH may be considered) on a and e (where it means n) and u (where it means m), but in Cornish texts these are rare and it is recommended to use the sequence base + COMBNINING SWASH + COMBINING DOT ABOVE; no *COMBINING SWASH WITH DOT is proposed. The text reads:

i⁹ fcolar du gve2as A·b·c / an pen ca h∂na yv d ny won na moy ŷ liú ny vef ŷ fcole 2w levte ≱ bys ŷ newer g³3ewar 3w gothvas wofa lyfye ≱ me a 3yſk moy ov meſt'

PRIMUS SCOLARIS

Dew gweres A B C, an pen can, henna yw D.

Ny won na moy y'n lyver.

Ny vuef yn scol, re'm leouta,
bys yn nyhewer gordhewer.

Dhe'm godhvos, wosa lyvya
me a dhysk moy, ow mester.

FIRST SCHOLAR
God keep A, B, C,
The end of the song, that is D.
I know no more in the book.
I was not at school, by my loyalty,
Until late (?) yesterdiay evening.
To my knowledge, after dining
I will learn more, my master.

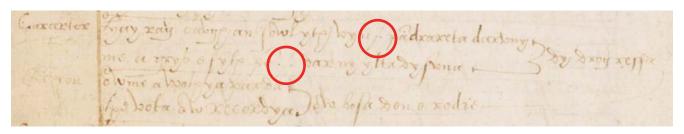


Figure 9. Text from *Bewnans Ke* (NLW MS 23489B, fol. 3v), showing DOUBLE OBLIQUE HYPHEN WITH FALLING DOTS. It was written around 1500 but survives only in an incomplete manuscript from the second half of the 16th century. The hand is spidery and untrained. Here, toward the beginning of the copy, the scribe draws the line separator horizontally, rather than at an angle, looking more like two middle dots and solidus \cdot than as the paradigmatic character. See the next figure for the scribe's other glyph variants iof the same character. The text reads:

Carcertor

Hay rag cavgh an Iowl yth vyn ≱ pådrareta darvny me a grys e fyth pê ≱ dar ny ylta dyfvna dy drog reffa

CARCERATOR
Hay, 'rag! Caugh an Jowl y'th vyn!
Pandra reta? Dar, huna,
me a grys. E 'fyth ge peyn!
Dar, ny ylta dyfuna?
Dys! Drog re 'fo!

JAILER

Hey, come on! The Devil's turd in your mouth! What are you doing? What, sleeping, I think. You'll suffer! What, can't you wake up? Come on! Damn you!

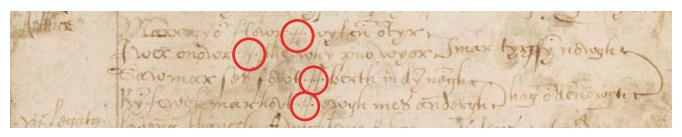


Figure 10. Text from *Beunans Meriasek* (Peniarth MS 105B, fol. 12v), showing DOUBLE OBLIQUE HYPHEN WITH FALLING DOTS. Here, much later in the copy, the scribe draws the line separator horizontally, with a variety of combinations of middle dots and solidus: ·/·/·. A form with two dots also occurs on this same page. ·//· The text reads:

Arthur

Marrogyô flowr ≼ wylcû ôtyr

I wer onowr ≼ thewhy pub wyer

mar tyrffŷnowgh

Saw mar fes fowt ≼ berth in dŷnêgh

Kŷfewgh mar hovt ≼ ewgh mes an dergh
hag ôdênowgh

ARTHURUS

Marrogyon flowr,
wylcum o'm tyr,
i wer onowr
thewhy pub wyer
mar tyrffynnowgh.
Saw mars es fowt
aberth ynneugh,
kyn fewgh mar hout,
ewgh mes a'm veu
hag omdennowgh.

ARTHUR
Choice knights,
welcome to my country,
to great honour
for you in very deed
if you deserve.
But if there is a fault
within you,
though you be never so haughty,
get out of my sight
and withdraw.

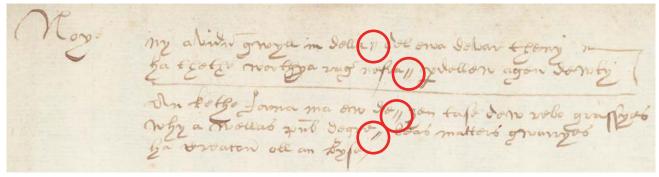


Figure 11. Text from *Gwryans an Bÿs* 'The Creation of the World' (Peniarth MS 105B, fol. 3v), showing DOUBLE OBLIQUE HYPHEN WITH FALLING DOTS. The scribe, William Jordan, does not run verse lines together very much but when he does he omits the dots. This document was written in 1611, a long time later than *Pascon agan Arluth*, so the scribal tradition established in Glasney has attenuated, as it has with *Bewnans Ke*. The text reads:

Noy

Ny a vydn gwyll in della ≷ del ewa dewar thenny, ha thethe wordhya rag nefra ≷ p dellew agan dewty An kethe jorna ma ew de ≷ 3en tafe dew rebo graffyes. Why a wellas pub degre ≷ leas matters gwarryes ha creacon oll an byfe

NOAH

Ny a vydn gwil indella, dell ywa devar dhyn ny, ha dha wordhya rag nefra, par dell yw agan dûty.

An keth jorna-ma yw dü, dhe'n Tas Duw re bo grassys. Why a welas pùb degrê, lies mater gwaries ha creacyon oll an bÿs.

Noah

We will do so, as is our obligation, and worship you forever as is our duty.

This same day is over, thanks be to God the Father. Every estate of you saw, many matters acted and the creation of all the world.

A. Administrative

1. Title

Proposal to add two characters for Medieval Cornish to the UCS

2. Requester's name

Michael Everson

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

Individual contribution.

4. Submission date

2017-09-27

- 5. Requester's reference (if applicable)
- 6. Choose one of the following:

6a. This is a complete proposal

Yes.

6b. More information will be provided later

No.

B. Technical - General

1. Choose one of the following:

1a. This proposal is for a new script (set of characters)

No.

1b. Proposed name of script

1c. The proposal is for addition of character(s) to an existing block

Yes

1d. Name of the existing block

Supplementary Punctuation

2. Number of characters in proposal

2.

3. Proposed category (A-Contemporary; B.1-Specialized (small collection); 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)

Category A.

4a. Is a repertoire including character names provided?

Yes.

4b. If YES, are the names in accordance with the "character naming guidelines" in Annex L of P&P document?

Yes.

4c. Are the character shapes attached in a legible form suitable for review?

Yes.

5a. Who will provide the appropriate computerized font (ordered preference: True Type, or PostScript format) for publishing the standard? **Michael Everson.**

5b. If available now, identify source(s) for the font (include address, e-mail, ftp-site, etc.) and indicate the tools used:

Michael Everson, Fontographer.

6a. Are references (to other character sets, dictionaries, descriptive texts etc.) provided?

Yes.

6b. Are published examples of use (such as samples from newspapers, magazines, or other sources) of proposed characters attached?

Yes.

7. 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.

8. Submitters are invited to provide any additional information about Properties of the proposed Character(s) or Script that will assist in correct understanding of and correct linguistic processing of the proposed character(s) or script.

See above.

C. Technical – Justification

1. Has this proposal for addition of character(s) been submitted before? If YES, explain.

No.

2a. 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.

2b. If YES, with whom?

The author is a member of the user community; also Nicholas Williams, Alan M. Kent.

2c. If YES, available relevant documents

3. Information on the user community for the proposed characters (for example: size, demographics, information technology use, or publishing use) is included?

Medievalists, Celticists, and other scholars.

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

Used historically and in modern editions.

4b. Reference

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

Yes.

5b. If YES, where?

Scholarly publications.

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

Yes.

6b. If YES, is a rationale provided?

Yes.

6c. If YES, reference

Accordance with the Roadmap. Keep with other punctuation and combining characters.

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

Nο.

8a. Can any of the proposed characters be considered a presentation form of an existing character or character sequence?

No.

8b. If YES, is a rationale for its inclusion provided?

8c. If YES, reference

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

No.

9b. If YES, is a rationale for its inclusion provided?

9c. If YES, reference

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

No.

10b. If YES, is a rationale for its inclusion provided?

10c. If YES, reference

11a. Does the proposal include use of combining characters and/or use of composite sequences (see clauses 4.12 and 4.14 in ISO/IEC 10646-1: 2000)?

No.

11b. If YES, is a rationale for such use provided?

11c. If YES, reference

11d. Is a list of composite sequences and their corresponding glyph images (graphic symbols) provided?

No.

11e. If YES, reference

12a. Does the proposal contain characters with any special properties such as control function or similar semantics?

No.

12b. If YES, describe in detail (include attachment if necessary)

13a. Does the proposal contain any Ideographic compatibility character(s)?

No.

13b. If YES, is the equivalent corresponding unified ideographic character(s) identified?