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 LATIN LETTER ANGLICANA W to the UCS

Source: Michael Everson

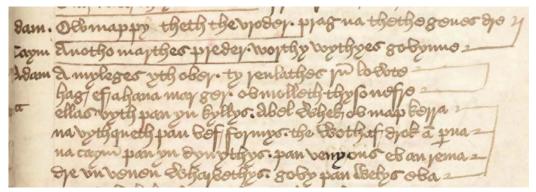
Status: Individual Contribution

Date: 2017-07-26

0. Summary. This proposal requests the encoding of a casing pair of two Latin characters. If this proposal is accepted, the following characters will exist:

A7C2 LATIN CAPITAL LETTER ANGLICANA W
A7C3 LATIN SMALL LETTER ANGLICANA W

- used in medieval English and Cornish
- **1. Introduction.** Unicode 5.1 introduced a set of Latin characters required by medievalists, which were proposed by Michael Everson et al. in "Proposal to add medievalist characters to the UCS" (WG2 N3027; L2/06-027). Many of these characters encoded on the basis of that proposal are used in specialized medievalist transcriptions, where a level of paleographic accuracy is important. Not all medievalist transcriptions make use of such characters. For example, here is a Cornish text (*Origo Mundi*. from the Cornish *Ordinalia*):



In many editions a common modern transcription is generally used:

| Adam | Ow map py theth the vroder • prag na thethe genes dre | 606 • 607 |
|------|---|-----------|
| Caym | Anotho marthes preder • worth y wythyes govynne | |
| Adam | A myleges yth ober • ty renlathes rum lowte | 610 • 611 |
| | hag ef ahana mar ger • ov molleth thyso nefre | |
| | ellas vyth pan yu kyllys • Abel whek ov map kerra | 614 • 615 |
| | na vythqueth pan vef formys • the wothaf drok an perrna | |
| | na caym pan yu dynythys • pan venyons ev an rema | 618 • 619 |
| | dre vn venen wharvethys • govy pan welys eva | |

But for a certain class of edition, supported by the UCS since Unicode 5.1, a closer reading is possible:

| Adam | Our map py theth the vroder • prag na thethe genes dre | 606 • 607 |
|------|--|-----------|
| Caym | Anotho marthes preder • worth y wythyes go6ynne | |
| Adam | A myleges yth ober • ty renlathes rû locete | 610 • 611 |
| | hag ef ahana mar ger • o6 molleth thyfo nefre | |
| | ellas vyth pan yu kyllys • Abel &hek o6 map kerra | 614 • 615 |
| | na vythqueth pan 6ef formys • the Gothaf drok ā prna | |
| | na caym pan yu dynythys • pan venyons e6 an rema | 618 • 619 |
| | dre vn venen &har6ethys • go6y pan &elys e6a | |

Here, the abbreviation p is supported, s and long f are distinguished, v and Middle Welsh f are distinguished, but f and Anglicana f cannot be distinguished in an interchangeable way because the latter character is missing from the UCS. Note that f and f are all valid ways of writing "ow" 'my' in this text (and all are found in this 2800-line drama).

- **2.** Anglicana and Secretary hands. The Anglicana hand developed in England in the 13th and 14th centuries; it is often called "Court Hand" or "Charter Hand" but Parkes introduced the term "Anglicana" at least by 1969. Anglicana Formata and Bastard Anglicana developed in the 14th century. The "Secretary Hand" infiltrated throughout scriptoria due to the influence of French scribes who transformed the Anglicana in a variety of ways.
- **3.** Anglicana & and Secretary w. The origin of the letter W is usually explained by saying that it is simply a ligature of uu or vv. But the matter seems to be somewhat more complex. In England the letter Wynn p, of Runic origin, began to be replaced by a sequence uu, but as various hands developed and as u and v came to be distinguished, a new letter w was devised. It is difficult to say with certainty what the development was, but the Cornish example above is illustrative of the influence and overlap of . In it, b and Middle Welsh b have nearly the same shape (compare b observed deed' in line 612 with b of b in line 621. The Anglicana W in b of b in b of b of looks rather like a ligature of two Middle Welsh b of b in lines 615 and 617 respectively b of looks rather like a ligature of two Middle Welsh b of b of b of b one another b of b one another b of b one another b of b of
- **4. Need for encoding.** The missing Anglicana W was discovered during the preparation of a palaeographic text of the Cornish *Ordinalia*, which will be part of a multi-volume edition of the entire traditional Cornish corpus, in preparation by Nicholas Williams, Alan M. Kent, and Michael Everson. This series will give the Cornish text in modern orthography on the left-hand page, English translation on the right-hand page, and with the palaeographic reading running along the bottom of each spread. This reading distinguishes s and f, r and 2, v and 6, retains combining marks for suspensions, and gives final -f, -9, and other marks. We were surprised to discover that both Anglicana W and Secretary W were distinguished in *Origo Mundi*, but research into the matter suggests that the phenomenon is not limited to the Cornish corpus, but also occurs in Middle English texts as well. Plain-text encoding distinguishing w/6 is as important as that for s/f, r/2, and v/6.

Figures.

The Charter Fragment

The hand of the *The Charter Fragment* is an Anglicana Book hand. ¹³⁸ It is not particularly tidy, but then the metre and rhyme scheme is nowhere near as perfect as that of *Pascon agan Arluth*, either. The hand uses a two-compartment $a(\mathbf{a})$, d with a strong diagonal (\mathfrak{F}) , figure-8 $g(\mathfrak{F})$, and rounded $w(\mathfrak{F})$. Both f and long s f have long descenders (f); final f is sigmoid in shape (\mathfrak{F}) . A long descender is also found on f, which is strongly vertical with a wispy shoulder (f). The f rotunda f is used f and yogh f has the same shape with a round right-swinging descender (f).

Pascon agan Arluth

The hand of *Pascon agan Arluth* is likewise an Anglicana Book hand, fluent but not particularly tidy, though the metre and rhyme scheme is nowhere near as perfect as that of *Pascon agan Arluth*, either. The hand uses both a two-compartment $a(\mathfrak{A})$ and a Secretary hand $a(\mathfrak{a})$, looped $d(\mathfrak{I})$, a cursive $e(\mathfrak{I})$, and figure-8 $e(\mathfrak{I})$. A typical shape is used for $e(\mathfrak{I})$ and $e(\mathfrak{I})$. Both $e(\mathfrak{I})$ and long s $e(\mathfrak{I})$ have long descenders ($e(\mathfrak{I})$); final $e(\mathfrak{I})$ is sigmoid in shape ($e(\mathfrak{I})$). A long descender is also found on $e(\mathfrak{I})$, which as in *The Charter Fragment* is strongly vertical with a wispy shoulder ($e(\mathfrak{I})$); the r rotunda 2 is used ($e(\mathfrak{I})$). The yogh 3 has a somewhat unusual shape with a vertical descender ($e(\mathfrak{I})$).

| 54 | PASSYON AGAN ARLÙTH | f. 7r | f. 7r | THE PASSION OF OUR LORD | 55 |
|----|---|------------|-------|---|----|
| 73 | "Hag a pe indella, ve, nefra ny vien fethys. I'n eur-na fatell via a'm bewnans dell yw screfys i'n Lyfrow in lies le dre brofisy leverys? Res yw porres heb strîvya bodh ow Thas dhe vos sewys." | 580 | 73 | "And if it were thus, I never would have been overcome. Then how would it be concerning my life, as is written in the Scripture in many places told by the prophets? It is very necessary without opposing that the will of my Father be obeyed." | |
| 74 | Jesus a gewsys arta, "Why a dheuth dhymm in arvow dre draison in unn scolkya gans boclers ha cledhydhyow dhe'm kemeres, dhe'm shyndya, ha dhe'm painya bys in crow, kepar ha pàn vena vy an purra lader i'n pow. | 585 590 | 74 | Jesus spoke again, "You have come to me in arms sneaking up by treachery with bucklers and swords to arrest me, to harm me, and to torture as far as bloodshed, as though I were the most out-and-out brigand in the land. | |
| 75 | "In agas mesk pån esen, lahys Duw dhywgh ow tesky, gallos nynj esa cammen dhe'm cara na dhe'm sensy. Lemmyn deuva ken termyn, ow Thas re'm grauntyas dhywgh why, leun a behas, ny wôn ken, dhe wuthyl agas mêstry." | 595 | 75 | "When I was among you, teaching you the laws of God, there was no power at all to kiss me or to imprison me. Now a different time has come; my Father has ceded me to you, full of sin, I do not know the reason, to exercise your authority." | |
| 73 | Hag a pe yn della ve•neffre ny vean fethys yn vana fatell vye•am bewnäs del yw lêfys yn lyffrow yn leas le•dre brofufy leuerys æys yw pont ^a heb ftrevye•both ow 3as 3e vos fewijs | | 75 | In agf myfk pan efen • lays du ʒeugh ow tyfky gallo nÿ gefe keme • 30 cara na 30m fenfy lemyn deve ken t'myn • ow 3as rom growntyas 3ewy leu a beghas ny won ken • 3e we3yll agf meyftry | |
| 74 | Ifius a gewfys aate • why a theth 3ym yn aavow dre dreyfon yn un fcolchye • gans bocleas ha cle3y3yow thom kemeaes 3om fyndye • 3om peynye bys yn crow kep ha del vena ve • an purra lad yn pow | | | | |

Figure 1. Examples from the forthcoming edition of *The Charter Fragment and Pascon agan Arluth* (Corpus Textorum Cornicorum; Vol. 1) showing discussion of palaeography and an example of a spread with the edited text, translation, and palaeographic reading.

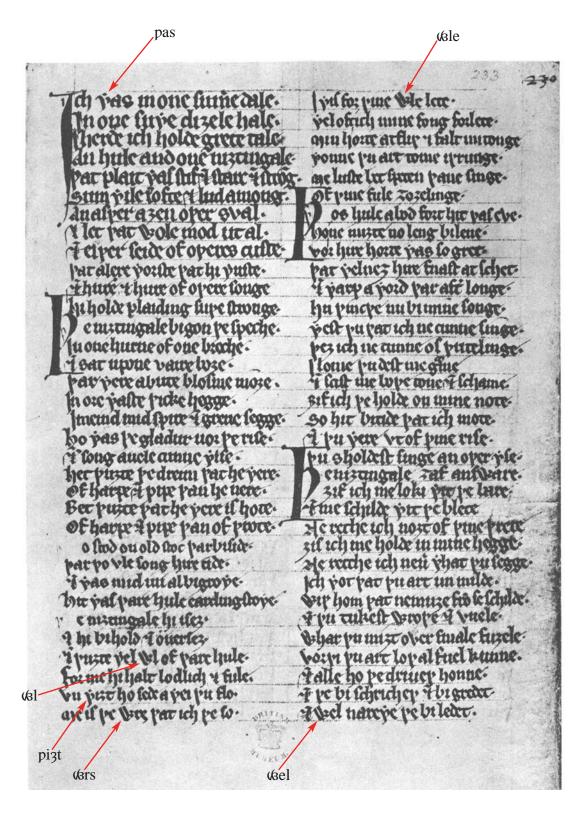


Figure 2. English text, "The Owl and the Nightengale", written c. 1250, British Museum Cotton MS Caligula A.ix, fol. 233r. This text has both Wynn (dotted to distinguish it from Thorn) and Anglicana W, the latter appearing to be essentially two pointed V's atop one another (*). From Wright 1960, Plate 7.

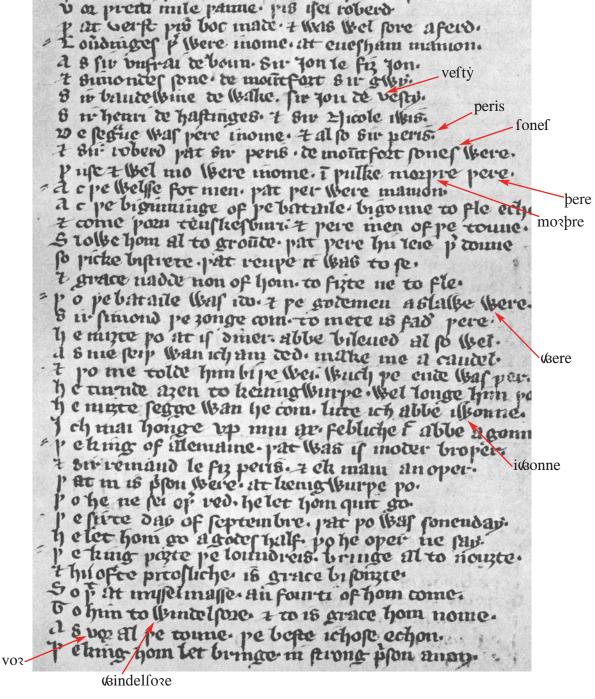


Figure 3. English text, "Chronicle of Robert of Gloucester", written between 1300 and 1325, British Museum Cotton MS Caligula A.xi, fol. 165r. An ordinary pointed V is used; the Anglicana W has simplified to two angled strokes and the 3-shaped right-hand element. Long and short s are distinguished, as are r and r-rotunda. From Wright 1960, Plate 10.

n map he majget Chen he saleg encen po come Bib Come to come In Donner Orf pur Sucre plater Orf Glofmen a Orf Gridos jonne Ante left is light on lande Be at be public primach Ulafines Gedep on pe lo Ber Styce yer in fir sales al Pit Oplde Ophtor Ou Ber mores flere of nonregallo, go Bel poh conder finde wer ford fong fingel mot non to ficoh plans be Diefteleur him piecep oo age asico per Gep byphe in bonis A Cody of Inice Opner Co Orf Cono ORo miles han Gonde To Borto Opmmen are & Och Ben Deservice Ginge !pro funter fingel perto fele one of hem ich heprie De from wond in so pride the Obref on huese Opnier Och Bonmen Bese be liefte pine Bett al Pe Code vonget They once have bearer byong pe sufe saplet line sode Gele Roll Pale never re leng on be bolice Obde **Gymmen** Bester to pas open more jed Bapon al Oil Oile To lone per me hem lafter led be more mander ane blev Then be frule forge fore pe like is loffor to fear be femple be plue Cox in Donde size to leu hap me hom made mante sone Bo Oct pro Olde States fortcharie as says spiles mingel brice males Dian Ection But is gonte pulp afe from p fetep stille Coppor be hap po piece Do woods mency to sol mo 686 he line oper of Beje Tehor peram on of por Birmmon Bar be Out Be or line & lites ille ARE few ant from the collins be more mandel bye lahe Ponn de To Dof be femle forme lividic po fine is a co Ro Open in Borto of longe U When by 1900 finges breme Seal Der Sonfles se Somes m well a come con go be in on vnder Device Bib linese Derne jonnes from Hopcoffe to Downder Figure my be dehone note Domes force Deme Porce be balle to Othe popular Warmer Bolbes wider Monde Dommen Ongel Comider provide ac frenching Combe fromto ah pope lendor be on Car No Bel ha Bol hem feme 30fme that Donce Dille of on to late come be seen char & Dinne Deale i Bole forgon When love on hat phomodo and Bobe in Oode be flome

Figure 4. English text, "Harley Lyrics", written between 1314 and 1325, British Museum Harley MS 2253, fol. 71v. The pointed v with descending left swash is used, along with a strongly circular Anglicana W, looking rather like an @-shaped reversed epsilon ®. From Wright 1960, Plate 9.

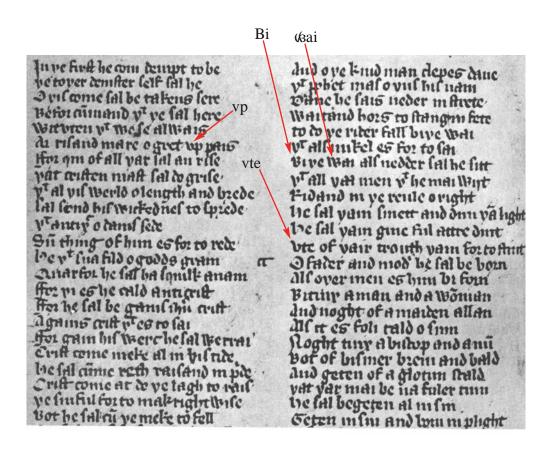


Figure 5. English text, "Cursor Mundi", written c. 1340, British Museum Cotton MS Vespasian A.iii, fol. 123v. An ordinary pointed v is used; the Anglicana W has the same simplified shape to its two slightly angled strokes with a slightly raised 3-shaped right-hand element. Note the similarity in stroke of the right hand of the Anglicana W and of the two bowls in the capital B. From Wright 1960, Plate 11.

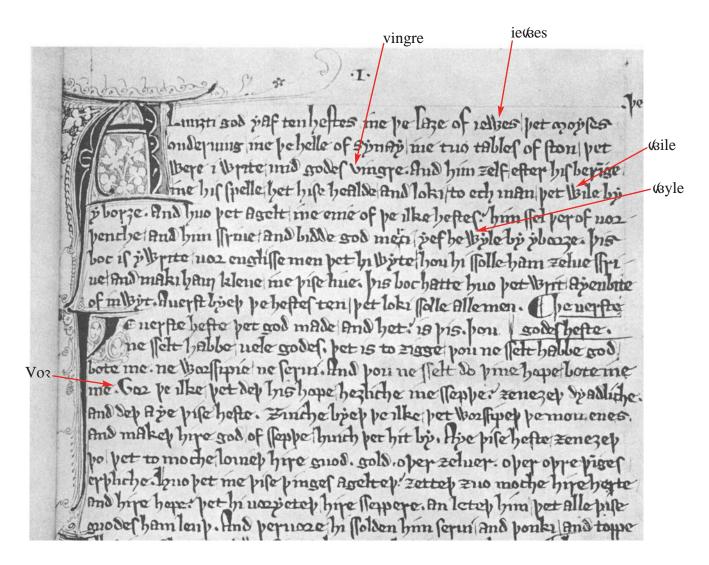


Figure 6. English text, "Ayenbite of Inwyt", written c. 1340, British Museum Arundel MS 57, fol. 13r. The Anglicana W has two straight diagonal strokes meeting the 3-shaped element, which in some cases extends below the antapex of the letter. Capital V is quite rounded; lower-case v is unremarkable. From Wright 1960, Plate 12.

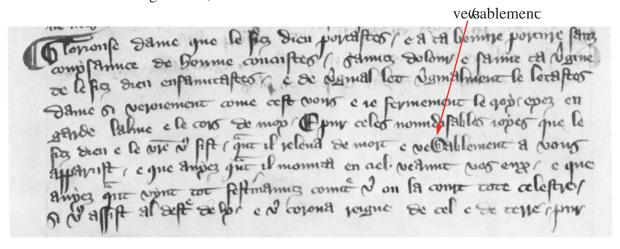


Figure 7. Example c. 1340–50, British Museum MS Harley 2253, fol. 134v. The French text has a lower-case *v* with a left swash stroke, and in one instance has a strongly circular Anglicana W in the word *vewablement*. From Parkes 1979, Plate 1 (ii).

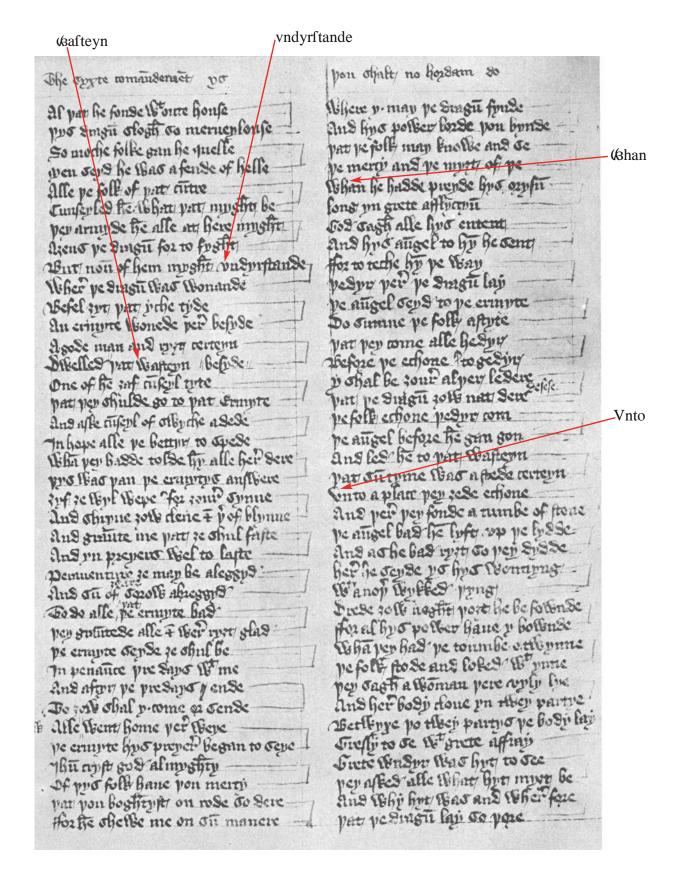


Figure 8. English text, "Handlyng Synne", written c. 1380, British Museum Harley MS 1701, fol. 12v. Here both capital V and capital Anglicana W are seen, both with a similarly-curved leftmost stroke (in *Vnto* and *Whan* for instance). Lower case Anglicana W has the same structure, but lower-case *v* is more conventional and is shorter. From Wright 1960, Plate 13.

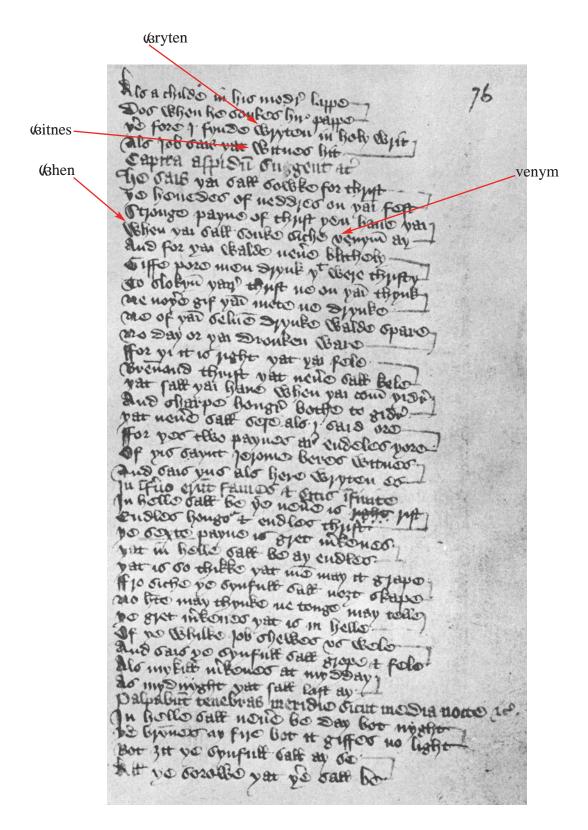


Figure 9. English text, "The Pricke of Conscience", written 1405 by John Farnelay, British Museum Additional MS 32578, fol. 76r. Here the Anglicana W has a loop at the top of each of the slightly curved left-hand strokes. Lower-case v is short and rounded. From Wright 1960, Plate 16.

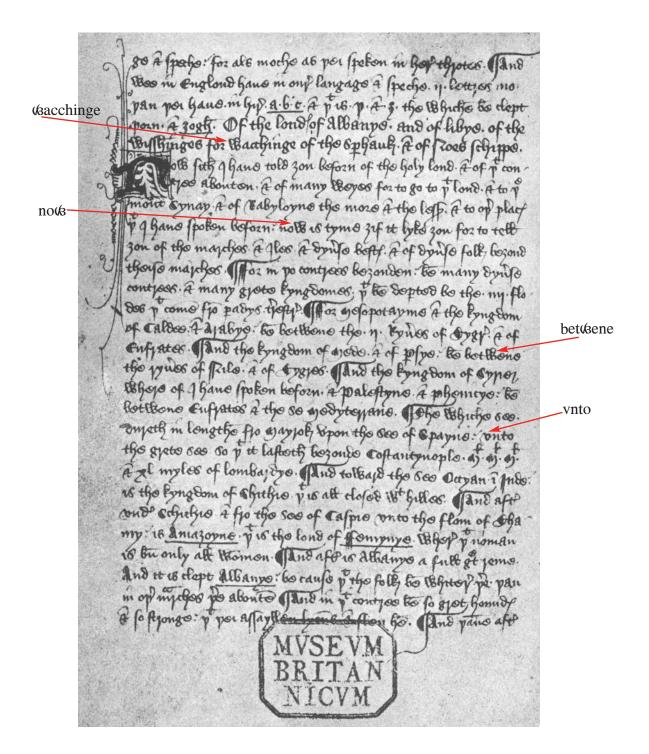


Figure 10. English text, "Travels of Sir John Mandeville", written c. 1410–20, British Museum Cotton MS Titus C.xvi, fol. 60v. Here the Anglicana W has a loop at the top of each of the slightly curved left-hand strokes, in the same way lower-case *b* has. Lower-case v is short and has the short thin left swash stroke. From Wright 1960, Plate 17.

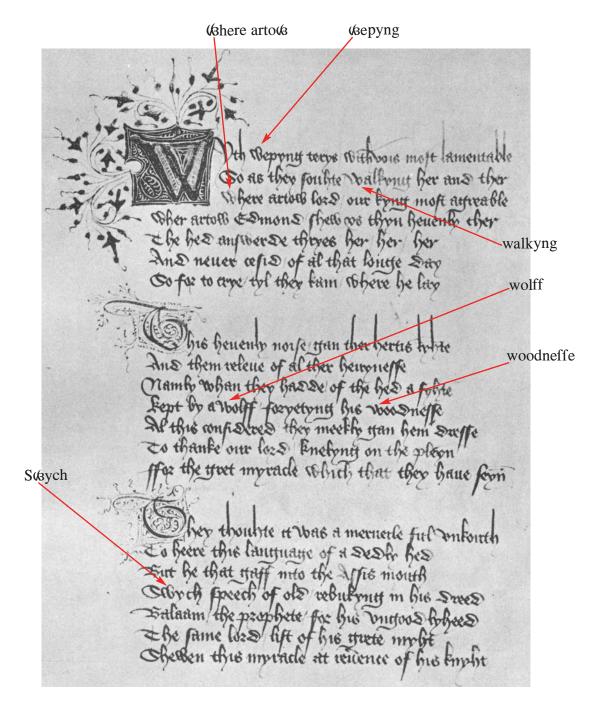


Figure 11. English text, "The Life of St Edmund", written 1433, British Museum Harley MS 2278, fol. 66v. This pointed "bastard" hand makes use of both a Secretary w is found in *walkyng*, *wolff* and *woodneffe*, alongside the Anglicana W in *wepyng*, *Wher artow*, *Swych*. Because both of the left verticals have a loop at the top, the bottom right has only a single loop. The effect is of a ligature of two Welsh v's: 66 > 66. From Wright 1960, Plate 18.

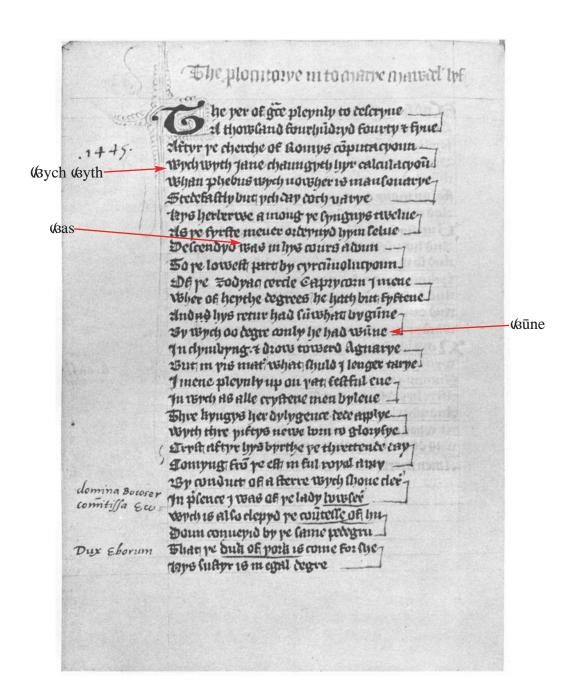


Figure 12. English text, "Legendys of Hooly Wummen", written 1447 by Friar Thomas Burgh, British Museum Additional MS 32578, fol. 76r. Here the Anglicana W has a rounded shape, somewhat similar to a rounded italic w, but with two curves on the right, deriving from the original ligature and still in the minds of the writers as an essential part of the glyph. From Wright 1960, Plate 20.

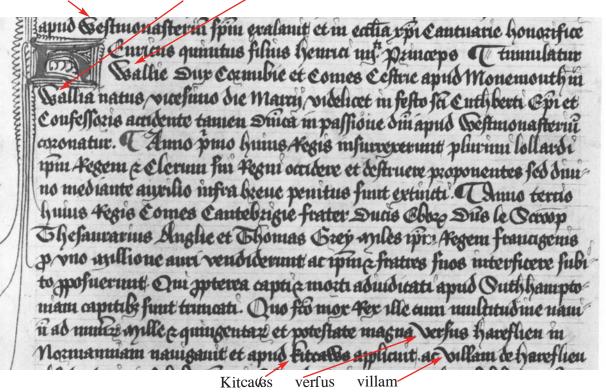


Figure 13. Example from the Latin "Brut" from the second half of the 15th century, Bodleian MS Rawlinson C.398, fol. 49r. The Anglicana Formata hand has a lower-case *v* with a strong left stroke, and a stylized Anglicana W with two main strokes and the figure-3 curves on the right. Both capital and small Anglicana W are shown, in the words *Westmonasteriū*, *Walle*, *Wallia*, and *Kitcaws*. From Parkes 1979, Plate 8 (i). To the right of *Kitcaws* at the bottom of the figure are two words beginning with v, *versus* and *villam*.

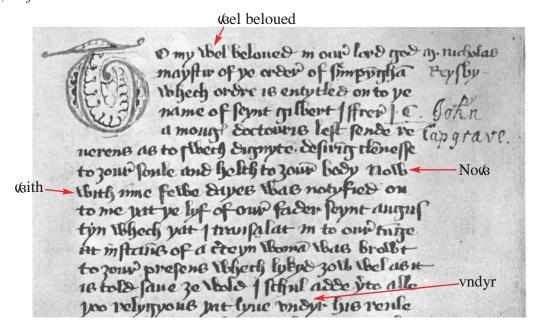


Figure 14. English text, "Lives of St Augustine of Hippo and St Gilbert of Sempringham", written 1451, British Museum Additional MS 36704, fol. 46r. In this slightly irregular hand the Anglicana W has two small bowls at the top of each stem, and one below on the right. Compare lowercase b and Anglicana W. From Wright 1960, Plate 21.

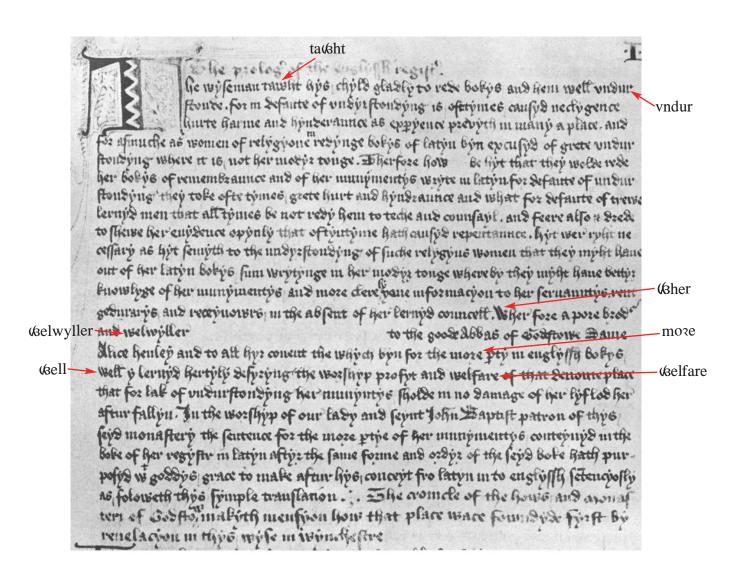


Figure 15. English text, "Register of Charters", written 1450-1560, Bodleian Library, Rawlinson MS B.408, fol. 13r. Here the Anglicana W has two left diagonals and two bowls on the right. In the first line a u-based glyph is used for this in *tatht*. In the word *telwyller* both Anglicana and Secretary forms are used. Other parings, like s/f and r/2 are also found. From Wright 1960, Plate 22.

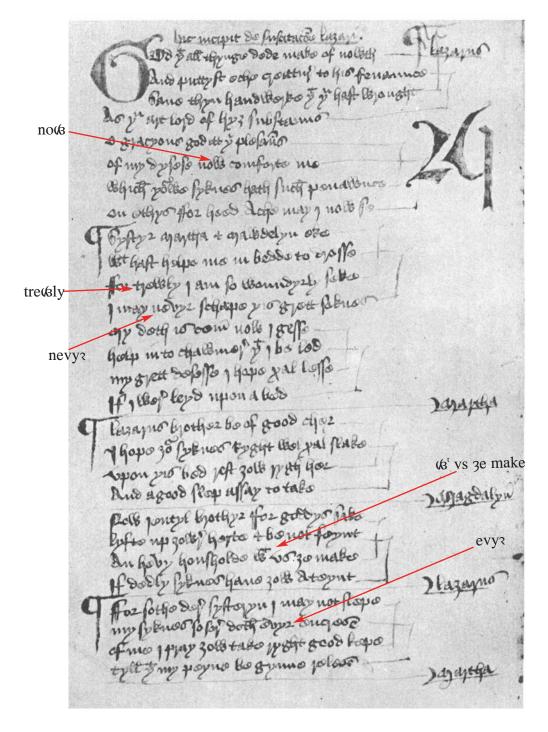


Figure 16. English text, "Ludus Coventriae", written 1450-1475, British Museum Cotton MS Vespasian D.viii, fol. 127v. Here the Anglicana W has a rounded shape, with two curves on the right, and retaining the two bowls on the left. From Wright 1960, Plate 23.

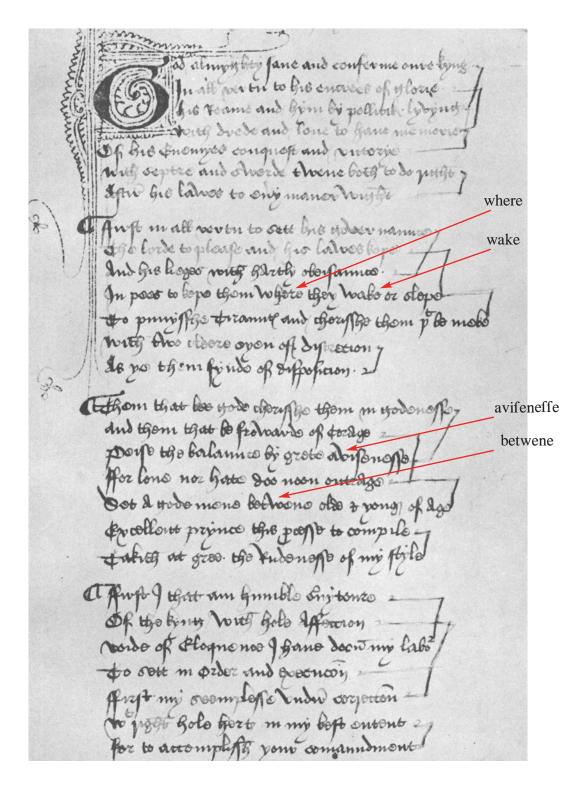


Figure 17. English text, "Secrees of Old Philisoffres", written 1469 by William Ebesham, British Museum Lansdowne MS 285, fol. 152r. Here the Anglicana W is not used, but only the pointed Secretary W. From Wright 1960, Plate 24.

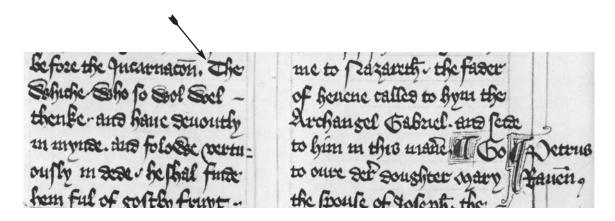


Figure 18. Example 1475, Glasgow University Library Hunterian MS T.3.15, fol. 15v. The Anglicana Formata hand has a lower-case v with a left swash stroke, and a very stylized Anglicana W with two main strokes and the figure-3 curves on the right. From Parkes 1979, Plate 6 (ii). The sentence pointed to with the arrow reads: *The Chiche Cho fo Col Chel thenke and have devoutly in mynde, and foloChe vertuoufly in dede...*

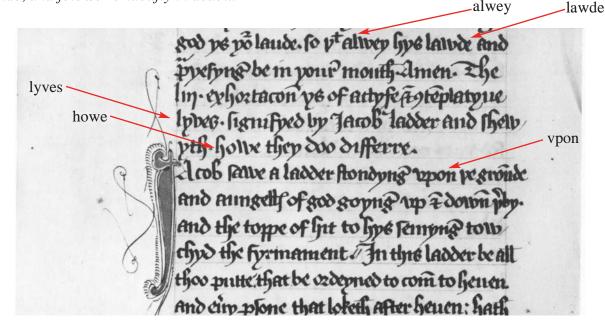


Figure 19. English text, "The Manere of Good Lyuynge", written c. 1500 by William Darker, Bodleian MS Laud Misc. 517, fol. 126v. In this "Fere textura' hand the Secretary forms are used, so *alwey, lawde, lyves, howe, vpon*, etc all have the more familiar pointed form we are used to today. From Parkes 1979, Plate 8 (ii).

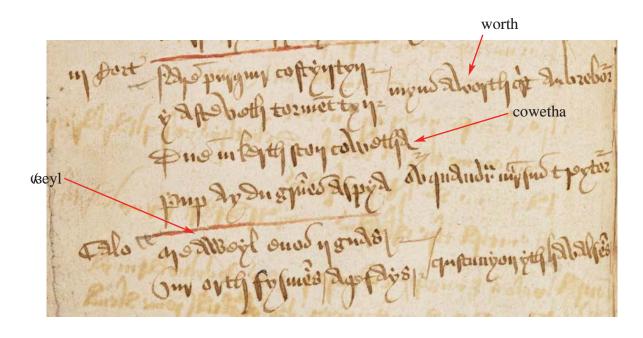


Figure 20. Cornish text, "Beunans Meriasek", written 1504, Peniarth MS 105, fol. 23v. The text reads, showing both Secretary W and Anglicana W:

| iij To2t' | Na rê purguir costyntyn • y asteveth to2met tyn | 1198 • 1199 |
|-----------|--|-------------|
| | myns a w orth ċft an b2ebõ2 | |
| | Deu in kerth fcon cowetha • pup ay du grûes afpya | 1201 • 1202 |
| | ov quandr mr fus treytõ2 | |
| Calo | Me a (B eyl enos ij guas • Sur orth fyfmês age fays | 1204 • 1205 |
| | cruftuyon yth havalfês | |

Inweth Joly Joly Johnson Sally my gut myob

Figure 21. Cornish text, "Beunans Meriasek", written 1504, Peniarth MS 105, fol. 45v. The text reads, showing both Secretary W and Anglicana W:

| iij To2t' | Clo G ys a2luth galofek • eff yv gel w ys meryafek | 2224 • 2225 |
|-----------|--|-------------|
| | de gaaffyes in y dethyov | |
| | gans pub ol ythyv kerys • In w eth del yv leferys | 2227 • 2228 |
| | dadder mur y ruk in pov | |

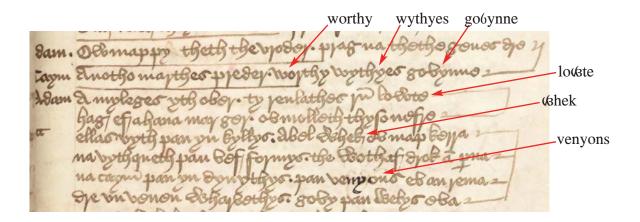


Figure 21. Cornish text, "Origo Mundi", written late 14th century, Bodley MS 791, fol. 6r. The text shows both Secretary W and Anglicana W, as well as Middle Welsh V and Secretary V.

Unicode Character Properties. Character properties are proposed here.

A7C2; LATIN CAPITAL LETTER ANGLICANA W;Lu;0;L;;;;N;;;;A7C3; A7C3; LATIN SMALL LETTER ANGLICANA W;Lu;0;L;;;;N;;;A7C2;;A7C2

Bibliography,

Parkes, M. B. 1979. English Cursive Book Hands 1250-1500. London: Scolar Press. ISBN 0-85967-535-1

Wright, C. E. 1960. *English vernacular hands from the twelfth to the fifteenth centuries*. (Oxford Palaeographical Handbooks.) Oxford: Clarendon Press.

A. Administrative

1 Title

Proposal to add LATIN LETTER ANGLICANA W to the UCS

2. Requester's name

Michael Everson

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

Individual contribution.

4. Submission date

2017-07-26

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

6a. This is a complete proposal

Ves

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

Latin Extended-D

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. Examples of such properties are: Casing information, Numeric information, Currency information, Display behaviour information such as line breaks, widths etc., Combining behaviour, Spacing behaviour, Directional behaviour, Default Collation behaviour, relevance in Mark Up contexts, Compatibility equivalence and other Unicode normalization related information. See the Unicode standard at http://www.unicode.org for such information on other scripts. Also see Unicode Character Database http://www.unicode.org/Public/UNIDATA/UnicodeCharacterDatabase.html and associated Unicode Technical Reports for information needed for consideration by the Unicode Technical Committee for inclusion in the Unicode Standard.

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?

Andrew Dunning, Michael Everson, Andreas Stötzner, Andrew West, Nicholas Williams.

- 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?

Linguists, Anglicists, Celticists.

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?

Various publications.

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

6b. If YES, is a rationale provided?

Yes.

6c. If YES, reference

Accordance with the Roadmap. Keep with other Latin characters.

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

No.

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

8a. (

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?

No.

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?