

Dating hitherto undated Old English texts based on text-internal criteria

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1 Early English texts

Period	Texts	# Words	# Observations
850-910	Alfredian translations	c. 310,000	10
	The Old English Martyrology		
	The Letter of Alexander to Aristotle		
	Marvels of the East		
	Sections of the Anglo-Saxon Chronicle		
910-990	9 th century Charters	c. 200,000	7
	Blickling Homilies		
	Vercelli Homilies		
	Rule of St. Benedict		
	The Rule of Chrodegang of Metz		
	West-Saxon Gospels		
	Sections of the Anglo-Saxon Chronicle		
990-1100	10 th century Charters	c. 530,000	14
	Ælfric's texts		
	Wulfstan's texts		
	Apollonius of Tyre		
	Alcuin's De Virtutibus et Vitiis		
	Byrhtferth's Manual		
	Sections of the Anglo-Saxon Chronicle		
1100-1200	11 th century Charters	c. 80,000	6
	Sermo in festis Sancti Marie & Elucidarius		
	Lambeth Homilies		
	Trinity Homilies		
	Vices and Virtues		
1200-1230	Sections of the Anglo-Saxon Chronicle	c. 100,000	6
	Ancrene Riwe		
	Katherine Group		

Table 1: Early English periods and their texts used as reference classes

Text	DOE	Ker	Ms. date	# Words	Periods
1. Saint Chad	LS 3	333.1	s. XII ¹	2,659	1-2
2. Saint Christopher	LS 4	216.1	s. X/XI	1,426	1-2
3. Mary of Egypt	LS 23	162.31	s. XI in.	8,181	1-3
4. Saint Euphrosyne	LS 7	162.44	s. XI in.	3,658	1-3
5. Saint Eustace	LS 8	162.41	s. XI in.	5,271	1-3
6. Seven Sleepers	LS 34	162.30	s. XI in	9,143	1-3
7. Holy Rood-Tree	LS 5	310.12	s. XII ²	6,920	1-3
8. James the Greater	LS 11	209.11	s. XII med.	1,659	1-4
9. Saint Neot	LS 28	209.43	s. XII med.	2,003	3-4
10. Saint Margaret	LS 14	57.23	s. XII ¹	4,196	3-4
11. Saint Margaret	LS 16	186.15	s. XI med.	3,661	1-3
12. Herbarium	Lch I	219.1	s. XI ¹	22,213	1-3
13. Quadrupedibus	Med 1.1	219.1	s. XI ¹	4,276	1-3
14. Leechbook	Lch II	264.1-3	s. X med.	34,727	1-2
15. Lacnunga	Med 3	231.2	s. X/XI, XI ¹	7,099	2-3
16. Nicodemus	Nic(A)	20.2	s. XI ^{3/4}	8,197	1-3
17. Vindicta	VSa(1)	20.3	s. XI ^{3/4}	3,655	1-3
18. De Ascensione	Nic(D)	32.13	s. XI ¹	1,798	1-3
19. Distichs of Cato	Prov 1	89.2	s. XI/XII	2,180	2-3

Table 2: Undated early English texts

2 Criteria used for dating process - examples

data from YCOE (Taylor et al. 2003) and PPCME2 (Kroch & Taylor 2000)

1. IP headedness (Pintzuk 1999)

- (1) a. ... þæt he þæt gehat **gelæstan wolde**
... that he that vow fulfill would
'... that he would fulfill that vow'
(cobede,Bede_2:8.124.3.1170) (c. 890 A.D.)
- b. ... þæt he **wolde** swyþe lytel **drincan**
... that he would very little drink
'... that he would drink very little'
(coeofri,Leof:23.27) (c. 1050 A.D.)

2. Pronominal scrambling (Bergen 2003)

- (2) a. ... ða hatheortan **hie** [mid nane foreðonce] nyllað gestillan
... the furious them with no reflection not-will calm
'... the furious won't calm themselves with any reflection'
(cocura,CP:40.297.3.1955) (c.890 A.D.)
- b. ... his bigleofa moste [mid ealle] **him** losian
... his money could with all him become-lost
'... he could lose his money altogether'
(coaelhom,ÆHom_22:609.3665) (c. 1000 A.D.)

3. Genitives (Crisma 2012)

- (3) a. Her endað nu [seo æftre froferboc **Boeties**]
 here ends now the second joy-book Boethius'
 'Here now ends the second book of consolation of Boethius'
 (coboeth,Bo:21.50.5.909) (c. 890 A.D.)
- b. he awrat [ða forman **Cristes** boc]
 he wrote the first Christ's book
 'He wrote the first book of Christ'
 (cocathom2,ÆCHom_II,_37:272.21.6135) (c. 1000 A.D.)

3 Results

- classification with naïve Bayes classifier

Text	Periods	1	2	3	4	5
1. Saint Chad	1-2	1.000	0.000	0.000	0.000	0.000
2. Saint Christopher	1-2	0.735	0.260	0.005	0.000	0.000
3. Mary of Egypt	1-3	0.991	0.009	0.000	0.000	0.000
4. Saint Euphrosyne	1-3	0.015	0.978	0.007	0.000	0.000
5. Saint Eustace	1-3	0.003	0.212	0.785	0.000	0.000
6. Seven Sleepers	1-3	0.134	0.657	0.209	0.000	0.000
7. Holy Rood-Tree	1-3	1.000	0.000	0.000	0.000	0.000
8. James the Greater	1-4	0.000	0.000	0.861	0.139	0.000
9. Saint Neot	3-4	0.149	0.000	0.851	0.000	0.000
10. Saint Margaret C	3-4	0.000	0.998	0.002	0.000	0.000
11. Saint Margaret T	1-3	0.000	0.000	0.994	0.006	0.000
12. Herbarium	1-3	1.000	0.000	0.000	0.000	0.000
13. Quadrupedibus	1-3	0.000	0.000	1.000	0.000	0.000
14. Leechbook	1-2	0.149	0.196	0.655	0.000	0.000
15. Lacnunga	2-3	0.000	0.000	1.000	0.000	0.000
16. Nicodemus	1-3	0.998	0.000	0.002	0.000	0.000
17. Vindicta	1-3	0.746	0.000	0.254	0.000	0.000
18. De Ascensione	1-3	0.000	0.334	0.665	0.001	0.000
19. Distichs of Cato	2-3	0.999	0.000	0.001	0.000	0.000

Table 3: Predicted class membership of undated texts

References

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