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# The Selection of Compound Numerals in Cursor Mundi: 

A Comparison of Four Manuscripts*

Momoko KIHARA

## 1. Introduction

The notation of numerals has changed in most languages, with the form and word order of English numerals changing between Old English (OE) and Modern English (ModE). Over the past several decades, much research has been conducted in various fields of linguistics, including morphology, syntax, and comparative linguistics (e.g., Hogg and Fulk, Hurford, and Mengden). However, while numerals such as units and tens have been studied extensively, there are few studies on compound numerals such as "twenty-one." In particular, the details and factors of their syntactic changes that occurred mainly in Middle English (ME), such as the change from one and twenty to twenty and one, have not been clarified. ${ }^{1}$

This paper examines Cursor Mundi, which is a text comprising almost 24,000 lines of rhymed verse that was originally composed around 1300 in the north of England, after which four of its extant manuscripts are compared to shed light on the factors leading to the syntactic variation of compound numerals in ME. The following manuscripts are compared: London, British Library, Cotton Vespasian A iii (Cotton); Oxford, Bodleian Library, Fairfax MS 14 (Fairfax); Göttingen MS theol. 107 (Göttingen); and Cambridge, Trinity College, MS R.3.8 (Trinity). The Cotton MS is considered to have been copied around 1340, the Fairfax MS and the Göttingen MS in the late fourteenth century, and the Trinity MS around 1400 (Horrall 14-20). The contents of these manuscripts are almost identical, thus allowing for parallel comparisons of the position and type of compound numerals. This paper analyses them and shows the characteristics of the type selection of compound numerals in Cursor Mundi.

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## 2. Previous Studies

With regard to compound numerals in ME, three types are described in many textbooks and studies, with Mustanoja stating the following:

In OE and ME composite numerals from twenty-one to ninety-nine the units come before the tens: -- wel nyne and twenty in a compaignye (Ch. CT A Prol. 24). The same applies to the ordinals: -- in pe sixe and prittipe zer (RGlouc. 9129). A somewhat different type is seen in thritty dayes and two (Ch. CT B NP 4380) and twenty degrees and oon (Ch. CT B NP 4385). The modern type twenty-one does not appear until the end of the ME period: -- the twenty-five day of September (Plumpton Corr. 27 [1471-6]). (qtd. in CT, Plumpton Corr. and RGlouc. 305) ${ }^{2}$

Two types will be primarily investigated in this paper, but numerals such as twenty-one (i.e., the 20-1 type) are excluded as they rarely appear in Cursor Mundi. For the two types, numerals such as one and twenty will be referred to as the "1-and-20 type," and numerals such as twenty and one are referred to as the " 20 -and- 1 type."

Several textbooks and studies delineate the possible factors that led to syntactic change in compound numerals. For example, Hashimoto analyses three types of numerals, mainly in translations of the Bible into English, and notes that ". . . in the ME and EModE Biblical versions they [occurrences of the 20-and-1 type] appear as a result of the influence of the Hebrew middle type and/or the Latin middle and modern types" ("Development" 56). In addition, he examines numerals such as four score and eight, noting that this word order contributed to the rise of the 20-and-1 type ("Eigo" 98). In this paper, numerals such as four score and eight will be referred to as the "score-and-1 type," and numerals such as eight and four score will be referred to as the " 1 -and-score type," which are also investigated herein to compare them with the syntactic variation trends for the 1 -and- 20 and 20 -and- 1 types.

Schibsbye notes that the 20-1 type emerged under French influence (112), while Rissanen remarks that the occurrence of the 20 -and- 1 type is due to poetic diction and that it can be considered a predecessor of the 20-1 type (31-32). Although these statements are not accompanied by detailed data, the French influence has been examined (Kihara, Old and Middle 40-42). This paper examines the use of these numerals in a rhymed verse.

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## 3. Methodology and Data Collection

Firstly, the lines in which compound numerals appear in Cursor Mundi were collected. As the work comprises octosyllabic couplets, the data were classified according to whether the units or tens are included at the end of the line or not. For example, couplet (1) is the former, and couplets (2) and (3) are the latter:
(1) He pat sa weli was o win;

His eild was fourti yeir and tuin. (Cotton 9135-36)
(2) Tua and sexti fathum brad,

Was pe grundwall pat pai made; (Cotton 2241-42)
(3) Asa his sun, bath hale and fere, Regnd an and fourti yere; (Cotton 9145-46)

Additionally, compound numerals that are written only in Roman numerals or that clearly involve scribal errors were excluded from the data, and the numerals with more than two digits were included in the survey.

Table 1. The frequency of the four numeral types in the four manuscripts

|  | Beginning or middle of the line |  |  | End of the line |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Cotton | Fairfax | Göttingen | Trinity | Cotton | Fairfax | Göttingen | Trinity |
| The 1-and-20 type | 15 | 12 | 16 | 15 | 2 | 1 | 2 | 2 |
| The 20-and-1 type | 2 | 3 | 2 | 4 | 9 | 8 | 8 | 7 |
| The 1-and-score type | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 0 |
| The score-and-1 type | 3 | 5 | 5 | 6 | 3 | 3 | 3 | 3 |

The results are presented in Table 1. All four manuscripts showed similar trends in the use of numbers: With respect to the 1 -and- 20 and 20 -and- 1 types, most of the compound numerals located at the beginning or middle of the lines consisted of the 1 -and- 20 type, while the majority of the compound numerals located at the end of the lines comprised the 20-and-1 type. With regard to the 1 -and-score and score-and- 1 types, the score-and- 1 type accounted for the majority of the compound numerals, regardless of which part of the line they were located in. This indicates that rhyme influences the selection of the 1 -and-20 and 20-and-1 types in Cursor Mundi, which contrasts with the ways in which the 1 -and-score and score-and-1 types are employed.

## 4. Analysis

The various compound numerals in the four manuscripts were then investigated. Couplets (4) to (7) are examples of compound numerals being located in the middle of the line, with the 20-and-1 type only being employed in couplet (4):
(4) How he heled on al vnfere bat seke was thritte and aht yeir; (Cotton 187-88)
(5) and how he heled an laser.
bat seke was viij. and xxx. зere. (Fairfax 187-88)
(6) How he heled a man vnfere bat seke was eght and tuenti 弓ere; (Göttingen 187-88)
(7) How he heled a mon vnfere Pat seke was eizte \& twenty 3 ere (Trinity 187-88)

Furthermore, couplets (8) to (11) are examples of a compound numeral being positioned at the beginning of a line, with the 20-and-1 type only being used in couplet (11):
(8) Pan it was, hir eild al halle,

Thre and sexti yerr in talle. (Cotton 20833-34)
(9) Ben hit was hir elde al hale.
iij. \& sexti zere in tale. (Fairfax 20833-34)
(10) Pen it was, hir eld all hale,

(11) Sixty zeer \& pre bi tale

Foure monepes \& two wokes al hale (Trinity 20833-34)

In the fourteenth century, when Cursor Mundi was copied, the 1-and-20 and 20-and-1 types coexisted. Indeed, examples (4) to (11) show that when compound numerals were located at the beginning or middle of a line, the 1-and-20 type was more likely to be selected, but the 20 -and- 1 type was also chosen with some liberty.

This liberty in selection can also be observed in the compound numerals chosen for the end of lines, although examples such as couplets (12) to (15) below also exist:
(12) He regnd thritte yeir and nine,

Wel he luued was wit drightin. (Cotton 9179-80)
(13) he regned xxx. zere and neyen
\& wele was loued wib god of heyuen. (Fairfax 9179-80)
(14) He reyned nine and thritti zere, wele was he loued wid iesu dere. (Göttingen 9179-80)
(15) he regned nyne \& twenti zeere wel was he loued wip god dere (Trinity 9179-80)

In addition to the results in Section 3, the above examples show that there are trends in the selection of compound numerals in Cursor Mundi, with the 1-and-20 type being more likely to be selected at the beginning of a line or in the middle of a line and the 20 -and- 1 type being employed at the end of a line. Indeed, placing the 1-and-20 type at or near the end of a line would only allow for rhyming with a limited number of words, such as those ending in -ti/-te, the tens' suffix of compound numerals, and zere. Therefore, it could be asserted that placing the 20 -and -1 type at the end of a line was a potent means of rhyming.

## 5. Conclusion

This paper investigated the syntactic variation of compound numerals in Cursor Mundi by considering where in the line they are located. Therefore, two conclusions can be made. Firstly, while there is some liberty in the syntactic selection of compound numerals in Cursor Mundi, certain tendencies can be observed: The 1-and-20 type is more likely to be used at the beginning or middle of lines, and the 20-and-1 type can be found more commonly at the end of lines. Secondly, although the 1 -and-score type was also identified, the score-and-1 type was used almost exclusively in Cursor Mundi, unlike the 1-and-20 and 20-and-1 types, the selection of which showed certain tendencies.

Rissanen states that the emergence of the 20 -and- 1 type, which he considers the predecessor of the 20-1 type, is due to the poetic diction (31-32). In this paper, rhyming was observed to have a particularly large impact. Moreover, the numerals with score in this work were almost fixed in word order by the use of the score-and-1 type. This aligns with Hashimoto's observation that the score-and-1 type contributed to the emergence of the 20-and-1 type ("Eigo" 98).

Further individual studies need to address the syntax variation of compound numerals. In addition, during the research for this paper, the following examples were found:
(16) Quen abram was fiuescor and nine
til him pan spak our lauer drightin:- (Cotton 2643-44)
(17) quen he was .v. skore 3 ere and .ix.
til him spac our lorde of heyuen. (Fairfax 2643-44)

In these examples as well as couplets (12) and (13) in Section 4 above, nine rhymes with drightin and neyen/ix with heyuen. Thus, certain numerals may rhyme with certain words, and their analysis needs to be extended.

## Appendix

The four types of compound numerals are listed according to the line number in accordance with Richard Morris's lineation.

The 1-and-20 type: [Beginning or middle of the line] (Cotton) 188, 1462, 1494, 2158, 2160, 2164, 2241, 5233, 9146, 10999, 13779, 13820, 18586, 20834, 20907. (Fairfax) 188, 1462, 1494, 2158, 2160, 2164, 2241, 5233, 9146, 18586, 20834, 20907. (Göttingen) 188, 1462, 1494, 2158, 2160, 2164, 2241, 5233, 9146, 9179, 10999, 13779, 13820, 18586, 20834, 20907. (Trinity) 188, 1462, 1494, 2158, 2160, 2164, 2241, 5233, 9146, 9179, 10999, 13779, 13820, 18586, 20907. [End of the line] (Cotton) 2166, 10926. (Fairfax) 2166. (Göttingen) 2166, 10926. (Trinity) 2166, 10926.

The 20-and-1 type: [Beginning or middle of the line] (Cotton) 2699, 10929. (Fairfax) 2162, 10929, 11579. (Göttingen) 2699, 10929. (Trinity) 2699, 10929, 11579, 20833. [End of the line] (Cotton) 1488, 2162, 2270, 3399, 7841, 9136, 9148, 9179, 21059. (Fairfax) 1488, 2270, 3399, 7841, 9136, 9148, 9179, 21059. (Göttingen) 1488, 2162, 2270, 3399, 7841, 9136, 9148, 21059. (Trinity) 1488, 2162, 2270, 3399, 7841, 9136, 9148.

The 1-and-score type: [Beginning or middle of the line] (Cotton) 2640. (Fairfax) 2640. [End of the line] (Cotton) 2172. (Fairfax) 2172. (Göttingen) 2172.

The score-and-1 type: [Beginning or middle of the line] (Cotton) 3209, 5353, 7843. (Fairfax) 2273, 2699, 3209, 5353, 11315. (Göttingen) 2273, 2640, 3209, 5353, 7843. (Trinity) 2172, 2273, 2640, 3209, 5353, 7843. [End of the line] (Cotton) 1675, 2643, 21160. (Fairfax) 1675, 2643, 21160. (Göttingen) 1675, 2643, 21160. (Trinity) 1675, 2643, 21160.

## Bibliography

## Primary Source

Morris, Richard, editor. Cursor Mundi (The Cursur o the World): A Northumbrian Poem of the XIVth Century in Four Versions. 7 vols., The Early English Text Society by N. Trübner, 1874-1893.

## Secondary Sources

Hashimoto, Isao. "The Development of Compound Numerals in English Biblical Translations." Middle and Modern English Corpus Linguistics: A Multi-dimensional Approach, edited by Manfred Markus et al., John Benjamins Publishing Company, 2012, pp. 49-58.
---. "Eigo ni okeru Sushi Hyogen no Hensen ni tsuite [On the Transition of Numeral Notations in English]." Eibungaku Kenkyu: Shibu Togo Go, vol. 8, 2016, pp. 95-104.

Hogg, Richard M. and R. D. Fulk. A Grammar of Old English. vol. 2: Morphology, Wiley-Blackwell, 2011.

Horrall, Sarah M., editor. The Southern Version of Cursor Mundi. vol. I, The University of Ottawa Press, 1978.

Hurford, James R. The Linguistic Theory of Numerals. Cambridge University Press, 1975.
Kihara, Momoko. "A Corpus-Based Analysis of Compound Numerals in Middle English." Colloquia, vol. 41, 2020.
---. A Corpus-Based Analysis of Compound Numerals in Old and Middle English. Master Thesis, Keio University, Jan. 2021.

Mengden, Ferdinand von. Cardinal Numbers: Old English from a Cross-Linguistic Perspective. De Gruyter Mouton, 2010.

Mustanoja, Tauno F. A Middle English Syntax. Société Néophilologique, 1960.
Rissanen, Matti. The Use of 'One' in Old and Early Middle English. Société Néophilologique, 1967.
Schibsbye, Knud. Origin and Development of the English Language. vol. III, Nordisk Sprog Kulyurforlag, 1977.


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[^1]:    ${ }^{2}$ CT $=$ Canterbury Tales, Plumpton Corr. $=$ Plumpton Correspondence, and RGlouc. $=$ The Metrical Chronicle of Robert of Gloucester (Mustanoja 14-28).

