

# Tool making, technological determinism and the role of memory: absolute alphabetical organisation in medieval glossaries

Julianne Nyhan

April 2010, Arbeitsgespräch zur historischen Lexikographie,  
Bullay

Today, absolute alphabetical order is the usual method of arranging the content of print dictionaries and of enabling headwords to be located and consulted. This has not always been the case, and as innocuous a technique as alphabetical ordering may seem, throughout history its development and application has interacted in complex ways with such factors as learning, philosophy, technology, economics and material culture. While absolute alphabetisation was known and used in ancient Ancient Greece,<sup>1</sup> it was not used in Latin lexicographical works compiled in antiquity. In Roman Antiquity and the middle ages thematic organisation held sway. However, from at least the eight-century onwards evidence of initial letter alphabetisation can be seen in lexicographical works. For example, sections of the Epinal glossary have been shown

---

<sup>1</sup>The system of alphabetic organisation had been refined and used by the creators of the Alexandrian glossaries: Galen's *Interpretation of the Hippocratic glosses*. is considered to be the earliest example of a work that displays absolute alphabetisation. Daly has noted, however, that in his preface Galen indicates that the work will be alphabetised by the first letter or first syllable, thus raising the possibility that the absolute alphabetisation was performed by a later redactor. See Lloyd D. Daly, *Contributions to a history of alphabetisation*, 35. The *Oxyrhynchus Papyrus* no. 1802, dated to about AD 200, is a polyglot glossary that contains about twenty glosses all beginning with the letter *mu* and arranged in absolute alphabetic order, *ibid.* 30.

to contain A-<sup>2</sup> and AB- order<sup>3</sup> So too, other alphabet-based schemes, not necessarily based on the abc-order of the Roman alphabet have been identified<sup>4</sup>.

From the thirteenth century onwards, absolute order can be noticed. The two medieval Latin works that achieved absolute alphabetisation were completed quite close together: the first was the *Summa* of Guillelmus Brito published in 1272. This was closely followed by the *Catholicon* of Giovanni di Genoa (also referred to as Balbus and Johannes Januensis de Balbis). Daly and Daly state that the *Catholicon* was probably the first Latin dictionary to be printed with movable type and was printed on vellum at Mainz in 1460, probably by Gutenberg.<sup>5</sup> However, absolute alphabetisation did not become wide spread until after the advent of the printing press and did not become usual until at least the sixteenth century. In sketching the broad outlines of such a history it is important to remember that strict periodisation of developments is not only impossible, but distorts our view.

The history of the use and development of alphabetical and thematic ordering systems used in medieval Irish glossaries, and how they relate to the broad outlines sketched above have been given comparatively little attention by scholars. This is problematic for two interconnected reasons.

---

<sup>2</sup>A-order indicates that alphabetisation has been applied to a text only in terms of grouping together all the words that begin with the letter A, AB-order indicates the same process has been performed on the words beginning with AB, and so on.

<sup>3</sup>Healey has stated 'this glossary clearly belongs to an early stage in the development of fully-alphabetised dictionaries, for here glosses gathered from various sources are only partially assimilated into the new construct. The presence of two alphabetic systems clearly demonstrates its process of accretion'. Antonette diPaolo Healey, 'Old English glossaries: creating a vernacular', *Computing in the Humanities Working Papers* B.36 (1997) 4.

<sup>4</sup>For example, Hugo of Pisa's *Derivationes* completed some time in the late twelfth century was held to have implemented first letter alphabetisation only. Weijers has rejected this view and argued that Hugo followed another alphabetic system, used by lexicographers such as Johannes de Mera, where: 'The words starting with a consonant are first arranged according to the following vowels, then according to the consonants in second position, for instance for the letter *f*, words with *fa*, *fe*, *fi*, *fo*, *fu* are treated before those with *fl* and *fr* ... (*fiton* is followed by *fonos* etc.; *flaneo* comes only after *fusco*). Olga Weijers, 'Lexicography in the Middle Ages', *Viator* 20 (1989) 150.; See Daly op. cit. p. 70 on the system of the *glossae affatim*.

<sup>5</sup>Lloyd W. Daly and Bernardine A. Daly, 'Some techniques in medieval Latin lexicography', *Speculum* 39 no. 2 (1964) 237.

Firstly, as I will argue in my talk, our understanding of this history is incomplete. Secondly, the incomplete nature of this understanding is problematic in terms of our present day scholarly tools and resources, especially in the context of the opportunities and problems that modern day computing technology is raising. That such issues cannot be ignored has been emphasised by Jerome McGann: 'The depth and character of the change can be measured by one simple but profound fact: the entirety of our cultural inheritance will have to be reorganized and re-edited within a digital horizon'<sup>6</sup>.

Acknowledging that we are still at the most incunabular stages of such a process, the fields of Digital Humanities and Digital Textual Studies argue that essential to this process is a more refined understanding of that cultural inheritance. As McCarty has written 'It we are to build genres that are as least as powerful as the old ones, we need to understand in their own terms what the makers of the codex genres were trying to do'<sup>7</sup>.

In 1907, the great scholar Kuno Meyer discussed what he identified as the three stages that went into the making of medieval glossaries. The first involves the gleaning from a text sentences and phrases with marginal or interlinear glosses, and the grouping of them, in another text, in original document order.<sup>8</sup> The second stage involves recasting the excerpts, with the lemma at the head, followed by a phrase such as *ut est*, *ut dixit*, *amal atá*, *amal adeir*, *ocus deismirecht air*, that serves to introduce the explanatory material.<sup>9</sup> The third stage is the alphabetisation of the lemmata.<sup>10</sup> Regarding the ordering systems used in the glossaries, Meyer states that 'it is but one step'<sup>11</sup> from the third stage in glossary making (when the lemmata are arranged under a letter of the alphabet) to the fully alphabetised glossary of O'Clery.

Here I want to question both the nature and the implications of the statement that 'it is but one step' from initial letter to absolute

---

<sup>6</sup>Jerome McGann, 'Introduction', Jerome McGann (ed) *Online Humanities Scholarship: the shape of things to come* (Rice University Press 2010).

<sup>7</sup>Willard McCarty, Guest Editorial, *Interdisciplinary Science Reviews* 2005, Vol. 30, No. 2, 97-101:98.

<sup>8</sup>Kuno Meyer, 'The sources of some Middle-Irish glossaries', *Archiv für celtische Lexicographie* 3 (1907) 138-144:138.

<sup>9</sup>ibid. 139.

<sup>10</sup>ibid. 140.

<sup>11</sup>ibid.

alphabetisation. I will do this by:

- Considering briefly the history of alphabetisation in traditions that could have influenced the Irish in order to establish a framework in which to comparatively assess that of the Irish
- Review the major medieval Irish glossaries themselves in terms of their ordering structures.

I will argue that the evidence contained in the major glossaries of medieval Irish does not support the interpretation that it was literally 'but one step' from initial letter to absolute alphabetisation. Rather, absolute alphabetisation was not achieved in the indigenous Irish context but was a product of Renaissance print culture and the Louvain experience. I will then briefly consider the wider question of the factors that gave rise to the widespread adoption and use of absolute alphabetical ordering systems. Drawing on the results of an initial synthesis of the work of cultural and medieval historians, as well as historians of science and technology such as, inter alia, Walter Ong, McArthur, Eisenstein, Mary Carruthers and the Rouses I will argue that the move from initial letter to absolute alphabetisation did not involve but 'one step' but rather was related to a host of technological, philosophical, economic and cultural changes. Within this constellation of factors, scholars such as Eisenstein and McArthur have given prominence to the role of the printing press, and scholars such as Daly and Kuhn to the role of other technologies such as paper. I shall argue that when more recent scholarship from the fields of digital humanities and the history of memory is taken into account the possibility of reinterpreting, or at least rebalancing what are considered to be the dominant factors is raised.