The spirit of Lachmann, the spirit of Bédier: Old Norse textual editing in the electronic age

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Introduction

In this paper I would like to discuss some central aspects of textual editing, as it has been practised in Old Norse studies for the past century, and since we now are at the beginning of a new century, I shall venture some opinions on the direction of textual editing in the digital age. I shall do so by beginning with two key figures of modern textual history, the German scholar Karl Lachmann (1793–1851) and the French scholar and author Joseph Bédier (1864–1938). Their approaches to the art and science of editing are still highly relevant.

Lachmann

The scientific foundation of textual editing has been credited to Karl Lachmann and other classical scholars such as Karl Gottlob Zumpt (1792–1849), Johan Nicolai Madvig (1804–1886) and Friedrich Ritschel (1806–1876). Lachmann himself was active in the fields of Medieval editing, with *Nibelungen lied* (1826), in Biblical studies, with his new edition of the Greek New testament (1831), and in Classical scholarship, with his edition of Lucrets' *De rerum natura* (1850). This made Lachmann's name known throughout all fields of textual editing, and with some reservations it is probably fair to attach his name to the great changes of editorial techniques made in the beginning of the 19th century.

However, as Sebastiano Timpanaro (1923–2000) points out in his important study of Lachmann's contribution, *Die Entstehung der Lachmannschen Methode* (1971), the method was basically a method of genealogical analysis. Lachmann was an important contributor, but he was not the only one. Johan Albrecht Bengel, for example, had been discussing the notion of a genealogical table in the preface to his 1734 edition of the Greek New testament, and genealogical models were very much in vogue in other areas. One could mention Carl von Linné (1707–1778), and a century later the *Stammbäume*

of comparative linguists, such as August Schleicher (1821–1868). The particular contribution of Lachmann was a strict genealogical analysis of manuscripts. For this genealogical approach Lachmann justly deserves to be remembered as the father of modern textual criticism, but it would be misleading to attach only his name to the method.

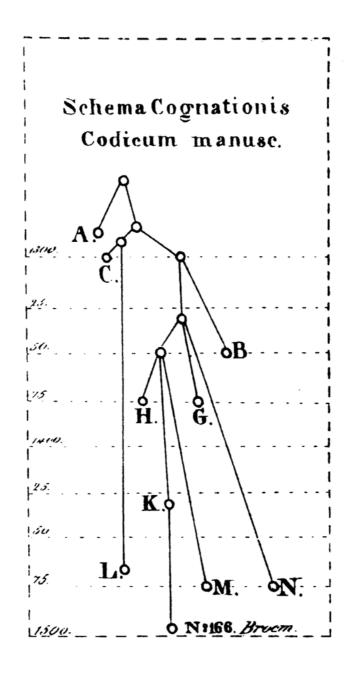


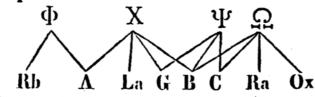
Fig. 1. Schlyter's stemma for Västgötalagen (1827)

The genealogical analysis of a manuscript tradition is typically concluded with a stemma, showing the relationship between the manuscripts of the text. In fact, the stemma is often seen as an integral part of a genealogical analysis. Yet the very first

stemma was not drawn by Lachmann or any of his colleagues on the Continent. Lachmann himself, in fact, never published a stemma. This honour goes to Carl Johan Schlyter in his edition – with Samuel Collin – of the Swedish *Västgötalagen* in 1827 (cf. Holm 1972). His stemma is complete with original and descendants, and it is noteworthy also by the fact that it tries to place all manuscripts, even the lost ones, along a chronological axis (fig. 1).

Schlyter's *schema cognationis* is a modern-looking stemma, far more so than the early stemmata in classical philology, such as the one by Friedrich Ritschel (1832) of Thomas Magister, *Ecloga* (fig. 2).

Utriusque rationis nexum uno in conspectu ponere licet in hanc speciem:



ut X littera significetur optimus quidam codex, Ψ sit quasi pessimus, Φ singularem quandam recensionem sequens, Ω plenissimus b. e. ut infra demonstrabitur interpolatus.

Fig. 2. Ritschel's stemma for Thomas Magister, Ecloga (1832)

The fate of Schlyter's stemma is the fate experienced by many contributions published in minor languages; it simply was not noticed, and had to be developed in a more centrally placed academic environment. At certain points in time, models develop independently of each other.

Lachmann's main contribution is his strict recension of the manuscripts, a process which he thought should be done *sine interpretatione* – without interpretation. In his edition of the *Nibelungen Lied*, he presents the four main manuscripts, and on the basis of a thorough recension of them he demonstrates how the text can be established on the basis of a strict procedure, shown in a sort of mathematical notation:

(1) BG < EM(2) BG < E-M

 $(3) \mathbf{E}\mathbf{M} = \mathbf{B} - \mathbf{G}$

Fig. 3. Lachmann's rules for the selection of readings in Nibelungen Lied (1826)

The first rule means that a reading common to mss. **B** and **G** should be preferred to a reading common to mss. **E** and **M**;

– the second that a reading common to mss. B and G should be preferred to the conflicting readings in mss. E and M;

– and the third that a reading common to mss. ${\bf E}$ and ${\bf M}$ is equal in strength to conflicting readings in mss. ${\bf B}$ and ${\bf G}$

An important consequence of Lachmann's procedure is that the edited text typically will be established as a combination of readings, not necessarily identical with any single manuscript.

In France, Gaston Paris accepted this method and made it almost universal in Romance philology. He claimed that the new method was almost mathematical, "une operation pour ainsi dire mathematique". In his edition of the *Alexis* legend (1872), Gaston Paris established a fairly modern-looking stemma (fig. 4).

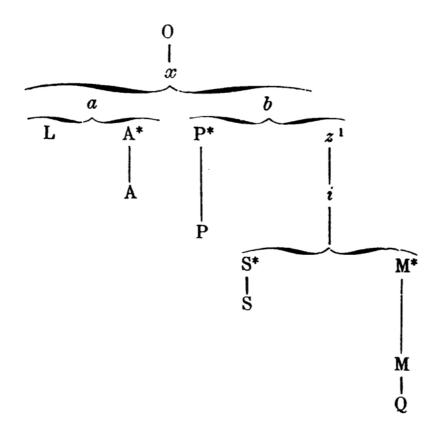


Fig. 4. Paris's stemma for the Alexis legend (1872)

Old Norse editing

At which point was the genealogical method actually introduced into Old Norse editing? One of the first editions to contain a stemma – perhaps the very first – is the one by Kristian Kålund (1844–1919) of *Fljótsdøla saga*, published in 1883, only a decade after the introduction of the genealogical method in Old French philology. Here, Kålund presents a two-branched stemma for the six mss., A–F (fig. 5).

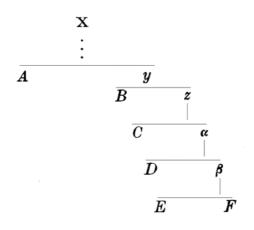


Fig. 5. Kålund's stemma for Fljótsdǿla saga (1883)

Kålund does not go into detail as to the construction of the stemma, but he points out that common errors ("fælles fejl") in all manuscripts demonstrate that \mathbf{X} is not the original manuscript, but must be a copy in which these errors had been introduced (p. xvii). This is a reference to the basic rule of the genealogical method, i.e. that common errors are indicative of common derivation. The text established by Kålund is a diplomatic rendition of the A manuscript, AM 551c 4to, but throughout the edition he emended the text with the help of other manuscripts, notably the B manuscript. In such cases, the reading is shown in expanded type, and the rejected reading of A is cited in the apparatus.

Also noteworthy is the fact that a copy of A, referred to as JM by Kålund, does not appear in the stemma. Since this manuscript is of no critical value from the point of view of the genealogical method it has obviously been left out; this is the process usually referred to as the *eliminatio codicum descriptorum*, the elimination of apographs.

A few years later, Kålund tried his hand at a larger text and a more demanding manuscript tradition, namely that of *Laxdøla saga*. This edition, published in 1889–91, contains a discussion of all manuscripts of the saga and a stemma (fig. 6), much more complex than that of *Fljótsdøla*. The *Laxdøla* edition is based on AM 132 fol., *Möðruvallabók*, an early 14th century manuscript containing a large number of Icelandic sagas. This manuscript is obviously a copy of an older manuscript and contains errors, and Kålund points out that the text has been emended with the help of the other surviving manuscripts (p. iii). In this case, he chose to normalise the orthography of the edition. Kålund gives two reasons for this; one is that the orthography will thus become more authentic, another that emendations on the basis of other manuscripts can be made without changes in orthography. Unlike the fairly homogeneous corpus of manuscripts of *Fljótsdøla saga*, all belonging to the 17th and 18th centuries, the manuscripts of *Laxdøla saga* span the period from around 1300 to 1700. The orthographic variation of these manuscripts is simply too great.

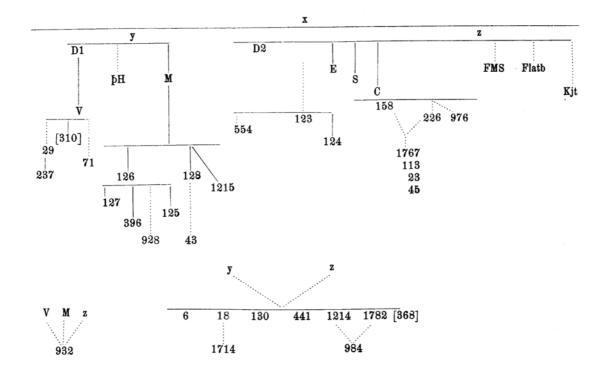


Fig. 6. Kålund's stemma for *Laxdøla saga* (1889–91)

The genealogical method was at that time dominant in classical scholarship. In Norway, this is reflected in the editorial work by Gustav Storm (1845–1903). His edition of Latin texts in *Monumenta Historica Norvegiæ*, published in 1880, contains a valuable recension and a couple of stemmata. In the short preface Storm writes that he intended to present a critical edition of the texts ("en kritisk renset Text").

In the case of the acts of St Olaf, *Acta Sancti Olavi regis et martyris*, this raised considerable problems, since at the time this work was not known in any complete version. Thus, Storm pieced together a text from a number of sources, including the *Acta Sanctorum* edition, and several *breviaria*, but there were still parts of the text which had not been preserved in any source known to Storm. The text appears with several dotted lines to indicate missing parts. The complete text was published only in the following year by Frederick Metcalfe, based on the recently discovered Oxford manuscript, Corpus Christi College 209 (Metcalfe 1881).

Storm points out that he had not been faithful to the late medieval orthography of the sources, since he believed that this orthography only made the reading more difficult and disfigured the orthography of the earlier versions. In this respect, he followed the same tradition as Kålund would be doing a few years later with his edition of $Laxd\phi la$ saga.

In the case of *Historia de antiquitate regum Norwagiensium*, Storm was able to establish a stemma, although this text only survived in a few late copies and in editions based on lost manuscripts. His stemma (fig. 7) is remarkable by the fact that it is a stemma over editions rather than of manuscripts, but from a text-critical point of view, an edition may serve as a textual witness on par with a manuscript.

		* (Thjod :	lriks Origir	nal)	
		tabte Orig c. 1620	inal	Stephanius' funden	tabte Original c. 1640.
JKirchmanns tabte Afskrift, c. 1630-43			anns Noter o krevne c. 163 (B)	-	aius ['] Afskrift c. 1642 ff. (S)
Jacob Meldes Afskrift c. 1680-1700. (A)		irchmanns af 1684. (K)			

Fig. 7. Storm's stemma for Historia de antiquitate regum Norwagiensium (1880).

I shall not go into more detail here, only point out that Storm's approach was typical for classical scholars of his time. As a historian, he was well versed in contemporary critical methodology, and it is worth mentioning that he, at least to my knowledge, is represented with another pioneering contribution in Norwegian editing, namely the first synoptic text edition, in *Sigurd Ranessøns Proces* (1877). Here, he compares four manuscripts of kings' sagas, i.e. Eirspennill, Jöfraskinna, Gullinskinna and Fríssbók, and prints extracts from them in parallel columns.

It is not clear how much impact Storm and the model of classical editing had on the following generations of Norwegian editors. Christiania had been a centre for Old Norse editing in the 1840s to the 1860s, but after the 1880s Norwegian editing focused on two areas, the *Diplomatarium Norvegicum*, on which Carl Richard Unger was working until

his death, and runic inscriptions edited by Sophus Bugge and his pupil Magnus Olsen. Both corpora are suitable for diplomatic editions, and not for critical ones. For this reason, I would claim that there was a break of continuity in Old Norwegian editing around the beginning of the 20th century.

Bédier's criticism

Let us return to the Continental scene. Many critical voices were raised against the genealogical method towards the end of the 19th century. One critic was Eduard Schwarz, who on the basis of his edition of the church history by Eusebius claimed that it was often impossible to construct a stemma; texts were simply not transmitted in a way describable by this model (1903–1909: II: 3: cxlvi).

The most important critic was probably the French scholar Joseph Bédier. For a number of years he had been working on an edition of the Old French *Lai de l'Ombre*, and his first edition of this text – in 1890 – was done in the manner of Gaston Paris, "sous le signe de Lachmann", as Bédier put it. The same goes for his second attempt at coming to terms with the manuscript evidence, in his 1913 edition. Finally, in an important article published in *Romania* in 1928, Bédier discusses his long struggle with this text.

Over the years, Bédier had noticed that the stemmata changed form depending on the context. As long as they were part of the pure and separate recension of manuscripts, they often had three or more main branches. In this context, the edition as such was not a matter of interest for the critic, only the understanding of the manuscripts and their internal filiation. When it came to the actual editing, however, stemmata usually turned up with two and only two main branches. The stemma for the *Alexis* legend is one of many examples of this structure (cf. fig. 4).

How can this shift be explained? Bédier thought that in the preparation of the text, the critics were tempted to break off the third arm of the stemmatic automaton, as he put it. When there were only two main branches left in the stemma, the critic had regained his freedom to establish the text he wanted (1928: 173). If the manuscripts in the two families disagreed, the critic could choose the reading he preferred on subjective or text-internal grounds; in a three-armed stemma, he would typically be forced to choose the reading which was attested in two of the three branches.

Bédier also sifted through other manuscript traditions – the Italian, English and Latin. Everywhere he found the same tendency. However, if he kept to his own domain, Old French recensions and editions, he found a total of 110 stemmata. Of these no fewer than 105 were two-branched (1928: 171). One can easily sympathise with his exclamation: What a remarkable forest of only two-branched trees! *Silva portentosa!*

Bédier actually despaired when it came to the stemma of the *Lai de l'Ombre*. In 1928 he presented 11 different stemmata, and he found all equally convincing. Bédier's solution to this dilemma was to return to the practice of the old humanists, to base the editorial technique on the subjective judgement of the critic, in short to depend on the taste ("le goût"). The editor should choose the best manuscript, and only emend when strictly necessary. Otherwise, the manuscript should speak for itself.

Lachmann in the introduction, Bédier in the text

I have already referred to the break of continuity in Old Norse editing in Norway at the beginning of the 20th century. Whether the same can be said about Denmark is an open question, but it can definitely be said that there is a new *beginning*. This beginning was the two Arnamagnæan series founded by Jón Helgason – *Bibliotheca Arnamagnæana* which published its first volume in 1940 and *Editiones Arnamagnæanæ* in 1958.

To my knowledge, there is no direct reference to Lachmann or to Bédier in the writings of Jón Helgason. This should not be taken to mean that Jón Helgason or the other Arnamagnæan editors worked in a theoretical vacuum, but rather that they did not feel the need to specify their methods or their models; they simply went on with their work, in the same manner as Kålund and Storm had done in their day.

This is how Helle Jensen was introduced to textual editing by Jón Helgason (my translation below):

Jón Helgasons introduktion til udgivelsesvirksomheden var mest af praktisk art. Han udpegede kataloger over forskellige håndskriftsamlinger, samt lup og lampe (de vikgtigste filologiske hjælpemidler) og viste mig de bøger, hvori sagaen allerede var trykt. Årsagen til, at *Eiríks saga víðforla* burde udgives igen, var, forstod jeg, at den ikke tidligere havde været "ordentlig udgivet". … Nu skulle jeg, sagde professoren, bare lige se på alle håndskrifterne og finde ud af, hvordan de var skrevet af efter hinanden. Det var blot at tage fat, og hvis der var noget, jeg var i tvil om, kunne jeg jo altid kigge på, hvordan andre havde gjort – dette hjælpemiddel var nu dog noget tvilsomt. (1985: 500).

(Jón Helgason's introduction to the fine art of editing was essentially of a practical nature. He showed me catalogues of various manuscript collections, stating that the magnifying glass and good lighting were the philologist's best friends. I was also

shown existing editions of the saga. As far as *Eiríks saga víðfǫrla* was concerned, his reason for recommending a new edition appeared to be that it should be "edited properly". ... Now, the professor said, you only have to look at the manuscripts and find out how they have been copied from each other. The main thing was to get down to work. Should any problems arise, his advice was to look at how others had dealt with similar problems – a method, which, however, he regarded as a bit suspect.)

Even in this practical, down-to-earth approach, I believe it is appropriate to say that the spirit of Lachmann and Bédier is present. In the Arnamagnæan tradition since Jón Helgason, the introductions to the editions are on the whole lachmannian. Here, the rule is that all manuscripts should be accounted for, and – if at all possible – their filiation should be presented in the form of a stemma. This applies not only to the introductions of the editions, but also to the separate studies published in the *Bibliotheca*, such as Ludvig Holm-Olsen's recension of the manuscripts of *Konungs skuggsjá* (1952).

However, when it comes to the establishment of the text, the *constitutio textus*, it is Bédier who reigns supreme. To my knowledge, there are no critical editions in the classical sense in the series *Editiones Arnamagnæana*, nor in the Icelandic counterpart, *Rit Stofnunar Árna Magnússonar*. The editions are generally best manuscript editions, or sometimes synoptic editions. Variants are duly recorded in the apparatus, but not allowed to enter the main text. Critical texts, such as the ones established by Gustav Storm and Kristian Kålund, are not in evidence. It can safely be said that the spirit of Lachmann reigns in the recension, the spirit of Bédier in the text constitution.

This ambivalence is reminiscent of the criticism of Bédier; there is one law for the recensions, Bédier claimed, another for the texts. In the recensions, critics brought forth stemmata with more than two main branches. When the editor turned to the text, the stemma usually changed into a bifid form, with two and only two main branches. With a bifid stemma the editor was free to choose those readings he preferred on subjective grounds, since the readings from one branch of the stemma would have the same weight as the readings from the other branch of the tradition. That was the case with Kålund's edition of *Fljótsdøla saga* discussed above. The stemma in this edition has two main branches, so that the weight of manuscript A is equal to the combined weight of manuscripts B, C, D, E and F (cf. fig. 5).

Some years ago, I looked into this matter with respect to the 78 volumes of *Bibliotheca Arnamagnæana* and *Editiones Arnamagnæanæ* published up to 1996 (Haugen 1997). A similar picture emerged for this corpus. Of 64 stemmata, 55 were deemed to be bifid, which is a surprisingly high percentage and not much lower than Bédier's figures, as

	Two brancl	hes Other types	Total
Bédier (1928)	105 (95.5	%) 5 (4.5 %)	110 (100 %)
Arnamagnæan corpus	55 (86.0	%) 9 (14.0%)	64 (100 %)

shown in fig. 8. One may wonder whether Bédier's *silva portentosa* has a northern offshoot.

Fig. 8. Bifidity in Old French and Old Norse stemmatics

There is, however, one major difference. The Old French editors scrutinised by Bédier had a strong motivation for breaking the third arm of the stemmatic automaton; with a bifid stemma, they were free to make their examination of the text, unfettered by the mechanical laws of a lachmannian recension. This is not the case in the Old Norse tradition, since these editions in general are best manuscript editions. Therefore, there is no need for cutting branches in the stemma.

I believe the explanation can be found in the stemmatic methodology itself. When faced with a node with more than two branches, the editor is prone to try and analyse this structure further. The three-branched stemma in fig. 9. can serve as an example of this tendency.

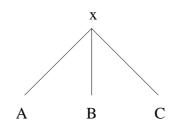


Fig. 9. Stemma with three branches

There is nothing wrong with this stemma. It is not at all unlikely that the text of manuscript \mathbf{x} has been copied in three individual manuscripts, A, B and C. However, upon closer inspection the critic may come to the conclusion that two manuscripts of this group appear to be closer to each other than they are to the third. This is only to be expected, since complete equality as to disagreements between three manuscripts is less likely than there being some degree of inequality. So, on further inspection, some of the readings that appear to group two manuscripts against the third may be seen not only as common readings but as common errors, for example in B and C. In that case, the stemma will be reanalysed as a binary structure, as shown in fig. 10.

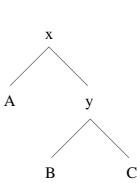


Fig. 10. Stemma with binary branching

Here, the common readings, i.e. errors, in B and C are traced back to \mathbf{y} , and A is shown to be the manuscript closest to the original.

This process reaches its logical conclusion when there are only two branches for each node in the stemma, as exemplified here. This means that the stemma typically takes the form of a binary branching tree. Kålund's stemma of *Fljótsdøla* is a stemma of this type (cf. fig. 5 above).

Whatever the merit of this explanation, I believe that the uneasiness so eloquently formulated by Joseph Bédier is felt by many critics. And the consequences of relying on a stemma which may be proved to be wrong, is devastating. The whole text may crumble, and the mechanical recension may prove itself to be exactly that – mechanical.

The future of Old Norse editing

Old Norse texts have been edited for more than 300 years, beginning in the 1660s in Sweden and Denmark. The editorial activity reached its peak in the 19th century, especially in Norway, but has been carried on by a number of scholars in the 20th century, albeit on a smaller scale. The division of the Arnamagnæan collection has probably led to an increased interest in editing in the Scandinavian countries, since the two Arnamagnæan series, the one in Copenhagen and the other in Reykjavík, continue publishing editions at an impressive rate.

The introduction of computers in the 1970s and the web in the 1990s has created a new situation. The edition as such has not been changed, I think, but there are bound to be a number of changes to distribution, display and storage. For this reason, I think it is appropriate to speak of a digital revolution, which happens to coincide with the new millennium.

Since the late 1970s, a number of Old Norse scholarly editions have been prepared in the electronic format, but, in general, the end product has been a printed edition, and the use of computers has typically been a means to achieve this end. In the last decade, electronic text archives have been established in a number of fields. For medieval texts, however, there are not that many. Seenet, The Society for Early English and Norse Electronic Texts, has published several Old English texts, but not to my knowledge any Old Norse ones. The Digital Middle High German Text-Archive at the University of Trier is still at a planning stage.

The time is therefore ripe for an electronic text archive for Old Norse scholarly editions. An archive of this type was in fact established in September 2001, called Menota, which is short for Medieval Nordic Text Archive. Menota is a collaboration of editing institutions and societies in the Scandinavian countries. It includes the two Arnamagnæan departments, in Copenhagen and Reykjavík, the state archives in Norway and Sweden, Svenska fornskrift-sällskapet, and several university departments, in Bergen, Oslo and Göteborg, in addition to two computing centres – the HIT Centre in Bergen and the Documentation Project in Oslo. For more information on the project, I refer to its website, www.menota.org.

Presently, there are no texts in the archive; time has been spent on the building of infrastructure. However, we expect a large part of the Old Norwegian text corpus to be made available through this archive. These texts were transcribed and lemmatised by scholars at Gammalnorsk ordboksverk from 1940 to the 1990s (cf. Rindal 1991), and have been transferred to an electronic format by the Documentation project in Oslo. In Sweden, a large project on the Vadstena manuscripts will start in 2003, with the aim of making Old Swedish texts electronically available on the Menota site. Also, the other institutions cooperating in Menota will publish some of their texts. How many, and at which rate is still not known.

The building of Menota or any other text archive will take some time, and it raises a number of technical as well as copyright problems. However, I believe we can now see some important consequences of the digital turn in modern editing, and – as promised – I shall try and gaze into the crystal ball.

Versatility of display

The printed edition will not die, at least not in the immediate future. One major advantage of the printed edition, or for that matter, any printed book, is the typographical control it gives to the editor. The text may be positioned and divided in a number of ways; with or without apparatus, with or without facing translation, in synoptical fashion with horizontal or vertical text blocks, with or without variation in font size, etc.

The electronic text is still at a certain disadvantage here. For display on the web, the standard encoding language is presently HTML, i.e. Hypertext Markup Language. This language is fairly basic when it comes to typographical features. It is possible to display text in columns, and also to keep text blocks in parallel, as one would prefer in a synoptical edition. It is also possible to attach notes to words in the text, though not unobtrusively, and not completely in the manner of a traditional apparatus. On the other hand, it is not possible to make text appear justified, i.e. aligned in both margins, it is difficult to make hanging indents, and there is no real tabulator function.

Character sets are also a source of great confusion and frustration. As long as the text is employing the Basic Latin alphabet, it will be correctly displayed on the web by almost any browser. There are four languages for which the Basic Latin alphabet is sufficient – Latin, Swahili, Hawaian, and English. All other languages using the Latin alphabet must resort to some diacritical marks, additional characters or a combination of both.

An increasing number of characters can now be found in the new international standard of Unicode, which is making fast progress and is being supported by all major computer platforms. This standard now encompasses approximately 95,000 characters, of which the Latin alphabet in its various national forms is only a tiny part – the majority of the characters are Chinese, Japanese and Korean. However, all characters for normalised editions of Old Norse texts are now included in Unicode. The "o ogonek", for example, has been accepted by Unicode, not on the basis of its use in Old Norse, but on the fact that it is used in the American Indian language Iroquoian, and the name of the character, "o ogonek" (*ogonek* meaning 'little tail' in Polish) is a further testimony to its international nature. The glyph, i.e. the graphical form of this character, is the same whether it is used in Iroquoian or Old Norse texts (fig. 11). On the typographical properties of the ogonek, cf. Twardoch 1999.

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Fig. 11. The "o ogonek" (Unicode code point 01EB in Latin Extended-B)

Finally, and probably most seriously, there is no control of how the text is displayed by various browsers and on various computer platforms. When a page is printed, it will appear in exactly the same form wherever the book is read. That is not so with a web page, which may be displayed in various fonts, sizes and even various character sets, depending on a number of factors, such as the type of browser and the settings made by the user. Although the essential properties of the text will survive its display on the web,

there are many aspects of the text which may come through in more or less distorted form. The dynamic character of the web display is therefore a great problem for anyone who would like to publish a uniform text edition. For this reason, many electronic journals still insist on parallel printed editions for archival and bibliographical purposes.

The solution chosen by Menota is to encode texts in XML, i.e. Extensible Markup Language. This is a close cousin of HTML (HyperText Markup Language), but is more restricted and allows for a greater control of the encoding. Texts encoded in XML can be displayed on the web since modern browsers read XML as easily as HTML. In addition to the dynamic display on the web, a file encoded in XML can be turned automatically into the PDF format. This format, the Portable Document Format developed by Adobe, is remarkable by the fact that it displays the text with very high typographical specifications. This display is static, and for many purposes, such as searching, inconvenient. But from the point of view of uniformity, it is a very stable format, and it is a welcome supplement to ordinary web display. Fig. 12 shows the essence of this process.

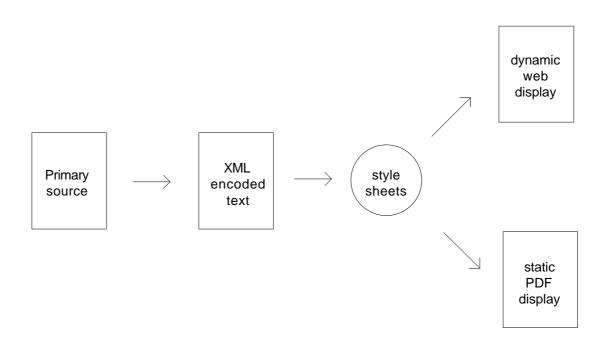


Fig. 12. Alternative displays of an XML text.

The PDF file will have exactly the same characteristics for all users, i.e. the text will be displayed in the same font, with the same margins, with the same line and page divisions etc. In this form, therefore, the text may be cited and referred to with guaranteed line and page properties.

It should be emphasised that the encoding of XML files and their display on screen or in print still have some way to go until they can fully compete with the traditional printed edition of a text. But the distance is diminishing all the time, the versatility is greater and the economics compelling. That is why I believe that the electronic edition will take market shares from the printed edition – not primarily because it is cheaper to produce and maintain, nor because it is more dynamic, but because it is soon able to compete with the printed editions also in the area of typographical control, or – to put it in more general terms – in display control.

The drift towards monotypic editions

In the years to come, I believe there will be a drift towards what I prefer to call monotypic editions. A monotype is a single print made from a metal or glass plate, and transferred to the area of editing, it is thus an edition (some would say transcription) made from a single primary source. Monotypic editions are typically diplomatic, but do not need to be so; one may as well normalise the text (cf. Haugen 1995: 82–86).

Some works are only preserved in a single manuscript, e.g. the Old Norwegian *Streng-leikar* translation. The same applies to the majority of the Eddic poems, preserved in the Codex Regius. In these cases, the editor has no choice but to make a monotypic edition, based on the only manuscript available.

Most works, however, are preserved in several manuscripts. In such cases, the editor may decide to base his edition on a single manuscript, usually the manuscript he believes to be the best, the *codex optimus*. Manuscripts may also be chosen because they are valuable for other reasons, for example because they have specific linguistic or historical value. Possibly the best text of *Heimskringla* is the text reflected in the transcriptions by Ásgeir Jónsson and others, since the Kringla manuscript itself is lost. In spite of this, there are separate editions of other *Heimskringla* manuscripts, such as *Eirspennill* from one branch of the tradition and *Fríssbók* from another. They are what I would like to call monotypic, not necessarily best manuscript editions.

So how can we explain the preference for the monotypic? I believe there are three independent reasons for this tendency.

(a) Firstly, there are technical reasons. It is much easier to encode each textual witness as a separate document than it is to encode variant readings from several documents in a single master document. The latter option is the preferred choice of a typical printed edition, as shown in fig. 13.

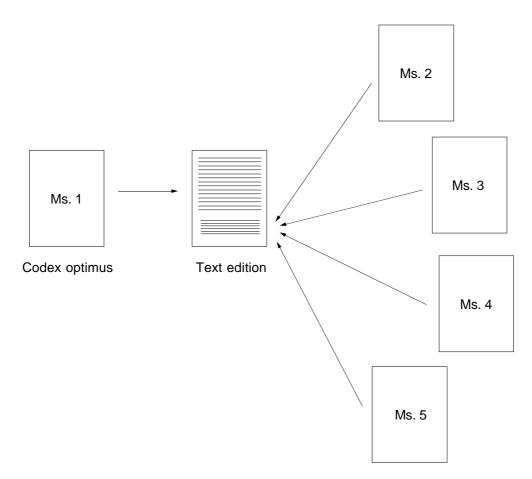


Fig. 13. The main text represents a single manuscript, the codex optimus, while the other manuscripts are given in the apparatus

The guidelines of the Text Encoding Initiative describe how variant readings can be encoded in a single "master" text. With the exception of manuscripts with very little variation, I find this procedure difficult and cumbersome. I would rather suggest that the collection and comparison of readings should be done by separate software, e.g. collation and display programs. An example of this is the recent edition of the general prologue to the *Canterbury Tales* by Elizabeth Solopova and Peter Robinson (Solopova 2000), as illustrated in fig. 14.

This figure illustrates an important question of modern electronic editing. What is the role of the editor? Shall he or she simply present the textual material and leave the actual establishing of the text to the users? Or shall the editor establish a preferred text on the basis of his or her knowledge of the material?

I can not go further into this problem here, only note that the electronic medium in itself is neutral and allows for a whole range of editions, from the do-it-yourself edition to the strictly guided one.

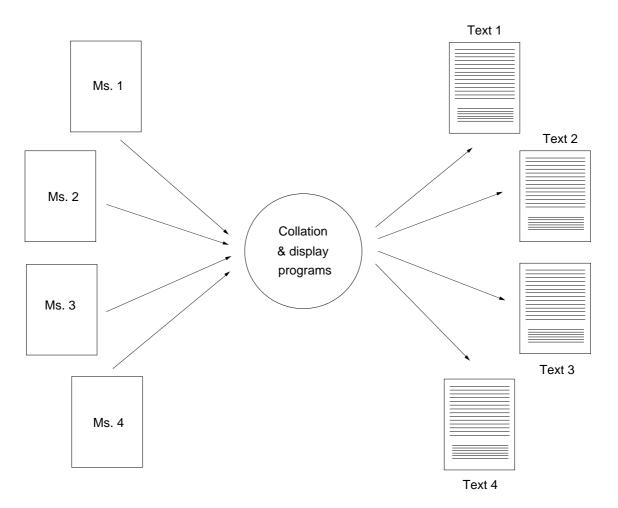


Fig. 14. Each manuscript may be viewed as a representative of the work, with the other manuscripts referred to in the apparatus. There is no privileged view of the text.

(b) Secondly, there are linguistic reasons for the monotypic drift. A text archive will contain individual texts which can be accessed and studied individually, in the same manner as one can pick a book from a bookshelf and read it. But when the archive grows, the texts can also be accessed horizontally, as it were. That is the approach of the text concordance. From a lexicographical point of view, it means that words can be studied in context, supplementing the selection done by dictionaries. From a morphological and syntactical point of view, it means that Old Norse grammar can be described with greater accuracy. From a stylistic point of view, it means that texts can be compared on the basis of their linguistic features and that questions on authorial unity and authorship can be raised in a broader empirical context.

(c) Thirdly, the advent of the New philology, with its focus on the individual history of each manuscript. It is not obvious to me that the New philology is all that new, but what is beyond doubt is that it has led to renewed interest in the individual manuscripts as witnesses to the text, to the scribes behind them and to their cultural context. This means that transcriptions of individual primary sources have become more important. Many manuscripts contain more than one literary work and thus make up an ensemble which to some extent has been lost through the editing of the separate works. And since so much interest has been invested in the textual analysis of individual works, it is only to be expected that the focus will shift towards the carriers of these texts, the manuscript themselves. An example of this shift is the study by Karl G. Johansson of *Codex Wormianus*, in which he attempts to trace scribal habits throughout the manuscript and its background in the Benedictinian monasteries of Iceland (1997).

Back to Lachmann and Bédier

It is time to return to the Scylla and Charybdis of textual editing, to Karl Lachmann and Joseph Bédier. For Lachmann, there is a literary work above the individual text carriers, and the aim of the editor is to make an approximation to this text. For Bédier, the text resides in the manuscripts, and the editor is well advised to search out the best manuscript and stay with it.

I believe that the rise of textual archives for some time will give Bédier the upper hand, in the sense that a greater focus will be on the individual primary sources. This is in line with the basic tenets of the New philology. We will probably see more studies of individual manuscripts rather than of literary works. One reason is simply that individual manuscripts will become more accessible in the electronic archives than literary works, i.e. texts brought together from a number of sources.

However, the fact that texts in an archive can be studied and accessed as a total corpus will lead to a cumulative view of the texts. As the archive grows to include increasing numbers of manuscripts, this tendency will probably become more prominent. At this stage, when a substantial number of primary sources have been made electronically available, tools for collation and variant analysis will be further developed, and transcriptions of individual manuscripts will become sources for new constellations of texts, and also for new editions.

Thus, if the New philology in some sense is a deconstruction of the notion of the literary work, the accumulation of sources in electronic archives may lead to reconstructive efforts – in other words, they may lead towards a more lachmannian conception of texts and their history.

Literature

Bédier, Joseph, ed. 1890. Jean Renart. Le Lai de l'Ombre. Paris.

- ——, ed. 1913. *Jean Renart. Le lai de l'Ombre*. Société des anciens textes français. Paris.
- ——. 1928. "La tradition manuscrite du Lai de l'Ombre. Réflexions sur l'art d'éditer les anciens textes." *Romania* 54: 161–196, 321–356.
- Bengel, Johann Albrecht, ed. 1734. Novum Testamentum Graecum. Tübingen.

Bibliotheca Arnamagnæana. København, 1940–.

- *Digital Middle High German Text-Archiv*. Web site. University of Trier, 2000–. http://rzsun01.uni-trier.de:8083/ (accessed 01.01.2003).
- Diplomatarium Norvegicum. Vol. 1-. Christiania / Kristiania / Oslo, 1847-.
- Editiones Arnamagnæanæ. Series A, vol. 1-; Series B, vol. 1-. København, 1958-.
- Haugen, Odd Einar. 1995. "*Constitutio textus*. Intervensjonisme og konservatisme i utgjevinga av norrøne tekster." *Nordica Bergensia* 7: 69–99.
- ———. 1997. "Silva portentosa. Togreina stemmata i den arnamagnæanske tradisjonen." In *Íslensk málsaga og textafræði*, ed. Úlfar Bragason, 68–90. Rit Stofnunar Sigurðar Nordals, vol. 3. Reykjavík.
- Holm, Gösta. 1972. "Carl Johann Schlyter and Textual Scholarship." Saga och Sed 1972: 48–80.
- Holm-Olsen, Ludvig. 1952. Håndskriftene av Konungs skuggsjá. Bibliotheca Arnamagnæana, vol. 13. København.
- Jensen, Helle. 1985. "Eiríks saga víðforla: Appendiks 3." The Sixth Saga Conference 28/7–2/8 1985. *Workshop Papers*, vol. 1: 499–512. [København.]
- Johansson, Karl G. 1997. Studier i Codex Wormianus: Skrifttradition och avskriftverksamhet vid ett isländskt skriptorium under 1300-talet. Nordistica Gothoburgensia, vol. 20. Göteborg.
- Kålund, Kristian, ed. 1883. *Fljótsdæla hin meiri, eller Den længere Droplaugarsonasaga*. Samfund til Udgivelse af Gammel Nordisk Litteratur, vol. 11. København.
- ——, ed. 1889–91. *Laxdæla saga*. Samfund til Udgivelse af Gammel Nordisk Litteratur, vol. 19. København.
- Lachmann, Karl, ed. 1826. Der Nibelunge Not mit der Klage. Berlin. 2nd ed. 1841; 3rd ed. 1851.
- —, ed. 1831. Novum Testamentum Graece. Berlin.
- , ed. 1850. Lucretii de rerum natura libri VI. Berlin.
- *Menota: Medieval Nordic Text Archive.* Web site. University of Bergen etc., 2001–. www.menota.org (accessed 01.01.2003).
- Metcalfe, Frederick, ed. 1881. Passio et miracula Beati Olavi. Oxford.

Norges Indskrifter med de ældre Runer. 4 vols. Christiania / Kristiania, 1891-1924.

- Paris, Gaston and Léopold Pannier, eds. 1872. *La Vie de Saint Alexis*. Bibliothèque de l'École des Hautes Études. Sciences philologiques et historiques, vol. 7. Paris.
- Rindal, Magnus. 1991. "Gammalnorsk ordboksverk 50 år, 1940–1990." *Maal og Minne* 1991: 29–58.
- Rit Stofnunar Árna Magnússonar á Íslandi. Vol. 1–. Reykjavík, 1972–.

- Ritschl, Friedrich Wilhelm, ed. 1832. *Thomae Magistri sive Theoduli Monachi Ecloga vocum Atticarum*. Halle.
- Schlyter, Carl Johan and Hans Samuel Collin, eds. 1827. *Westgöta-Lagen*. Samling af Sweriges Gamla Lagar, vol. 1. Stockholm.
- Schwarz, Eduard and Theodor Mommsen, eds. 1903–1909. Eusebius Werke. Die Kirchengeschichte. Vols. 2:1; 2:2; 2:3. Die griechischen christlichen Schriftsteller der ersten drei Jahrhunderte. 9:1. 9:2. 9:3. Leipzig 1903; 1908; 1909.
- Seenet: The Society for Early English and Norse Electronic Texts. Web site. University of Virginia. www.iath.virginia.edu/seenet (accessed 01.01.2003).
- Solopova, Elizabeth, ed. 2000. With contributions from Norman Blake, Daniel W. Mosser, Peter Robinson, and Lorna Stevenson. *Geoffrey Chaucer. The General Prologue on cd-rom.* Cambridge.
- Storm, Gustav, ed. 1877. Sigurd Ranessöns Proces. Udgivet efter Haandskrifterne. Kristiania.
 - ——, ed. 1880. Monumenta Historica Norvegiæ. Latinske kildeskrifter til Norges historie i middelalderen. Kristiania.
- Text Encoding Initiative. Web site. www.tei-c.org (accessed 01.01.2003).
- Timpanaro, Sebastiano. 1971. *Die Entstehung der Lachmannschen Methode*. 2nd. ed. Hamburg. (Translated by Dieter Irmer from *La genesi del metodo del Lachmann*, Firenze, 1963.)
- Twardoch, Adam. 1999. "Polish Diacritics how to?" Web article at Font.org.
- http://studweb.euv-frankfurt-o.de/twardoch/f/en/typo/ogonek/ogonek.html (accessed 01.01.2003).
- Unicode: The Unicode Standard. Web site. www.unicode.org (accessed 01.01.2003).