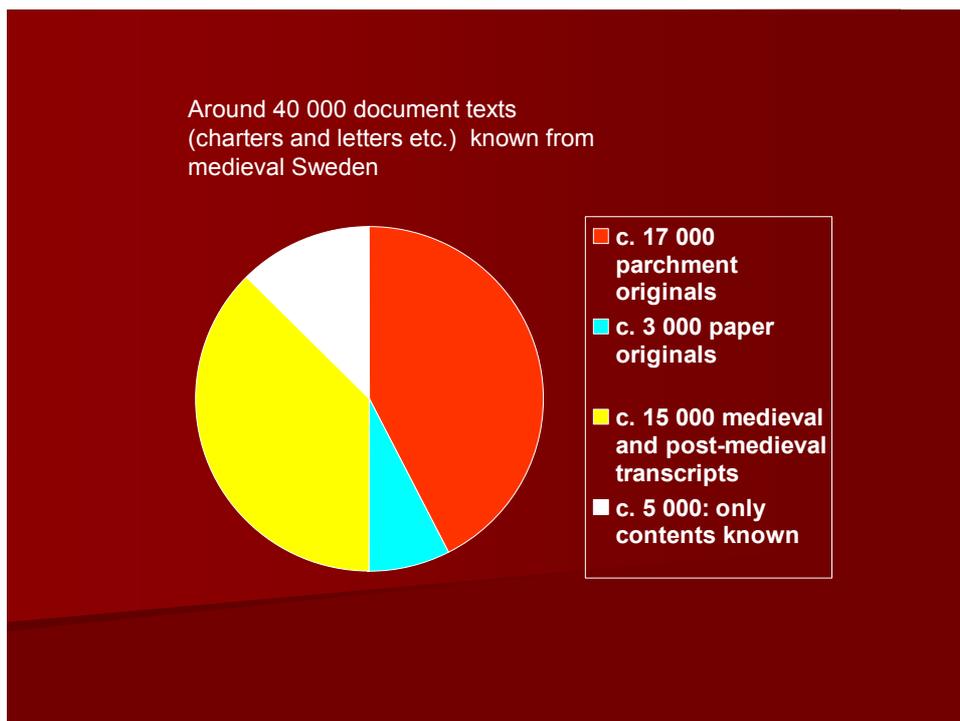


Diplomatarium Suecanum in the Digital World

Claes Gejrot

The *Diplomatarium Suecanum* (*Svenskt Diplomatarium*) is the ongoing publication of Swedish letters and charters from the Middle Ages. But before we learn more about the series of printed books, it is necessary to have a look at some definitions and figures. The documents in question are the medieval charters, privileges, wills, treaties, and some private letters that have a stated issuer. All these categories are covered by the Swedish word *brev*,¹ and in this paper I will use the word "documents".



As to medieval Sweden (including Finland), there are a little more than 40,000 document *texts* preserved from the period between 1160 and 1540.

¹ For definitions of various types of charters and letters, see for instance Guyotjeannin, Olivier & Pycke, Jacques & Tock, Benoît-Michel, *Diplomatique Médiévale: l'atelier du médiéviste*, vol. 2. Brepols 1993, pp. 103–221. For the Nordic situation see Liedgren, Jan, Articles 'Brev' and 'Diplom' in *Kulturhistoriskt lexion för nordisk medeltid*, vol. 2 (1957), cols. 228–229 and vol. 3 (1958), cols. 80–82.

About half of these texts are preserved as original documents, the remaining texts are known to us through transcripts or from secondary references. Of the originals, about 17,000 are parchment documents, for the rest paper was used (after c. 1350).



Johan Gustaf Liljegren



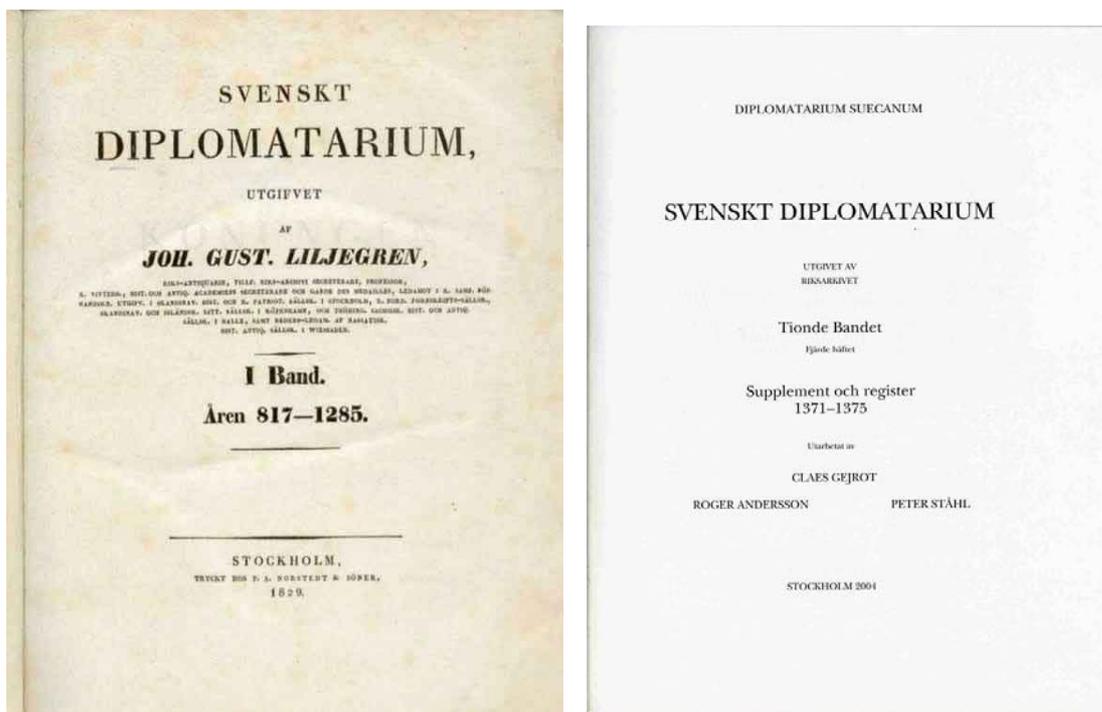
Bror-Emil Hildebrand

The first editor of the series was the learned Johan Gustaf Liljegren (1791–1837), who was the National Archivist and also held other important positions.² The first volume was printed in 1829 after years of preparation and many problems, financial as well as editorial. The idea of a complete publication of the preserved Swedish charter material was not new. Several attempts had been made, but Liljegren was the first one to succeed.³ The first volume was printed as an expensive private endeavour, but from volume 2 (1834) onwards the series has received more or less regular funding. Liljegren's idea was to make as many documents as possible accessible in chronological order. He started with the oldest texts and managed to reach the fourteenth century (1310) in volume 2 before his early death. Liljegren worked fast, sometimes too fast, and he was criticized for printing several

² On J-G Liljegren and his endeavours see Schück, Henrik, *Kgl. Vitterhets Historie och Antikvitets Akademien: dess förhistoria och historia*, vol. 8. Stockholm 1944, pp. 3–176, and Broomé, Bertil, 'Jon (Johan Gustaf) Liljegren', in: *Svenskt Biografiskt Lexikon*, vol 23. Stockholm 1982, pp. 18–22.

³ On the time before Liljegren see Fritz, Birgitta, 'De svenska medeltidsbrevens trädning till 1800-talets början: en arkivhistorisk översikt' in: *Meddelanden från Svenska Riksarkivet för åren 1976–1977*. Stockholm 1980, pp. 68–135.

falsified texts and for a lack of philological accuracy. His successor from 1837, Bror Emil Hildebrand (1806–1884), raised the quality of the editions to a higher standard, bringing the series to the same level as the many international -- mainly German -- medieval source projects that started at the same time. Today, of course, the editorial practices of the *Diplomatarium Suecanum* are in line with modern philological standards.⁴



Diplomatarium Suecanum – Svenskt Diplomatarium, vols. 1 (1829) and 10:4 (2004).

The examples of Liljegren and Hildebrand may serve as a point of reference for the discussions that are still necessary today, i.e. accessibility vs. scientific accuracy. The wave of digitizing material and internet publications has only just begun, and we need to find a balance between the two concepts. In the process of digitizing the old printed volumes, it is also important to know the mechanism behind the original publication.

⁴ On B.-E. Hildebrand, see Hildebrand, Bengt, 'Bror-Emil Hildebrand' in: *Svenskt Biografiskt Lexikon*, vol. 19. Stockholm 1973, pp. 38–42. On the development of the series see also Gejrot, Claes, 'Gamla skinnlappar och digitala dokument: tradition och förnyelse i diplomatariearbetet' in: *Kärlek till Arkiv*, ed. Kerstin Abukhanfusa. Skrifter utgivna av Riksarkivet 20. Stockholm 2002, pp. 192–199.

Survey of printed volumes:

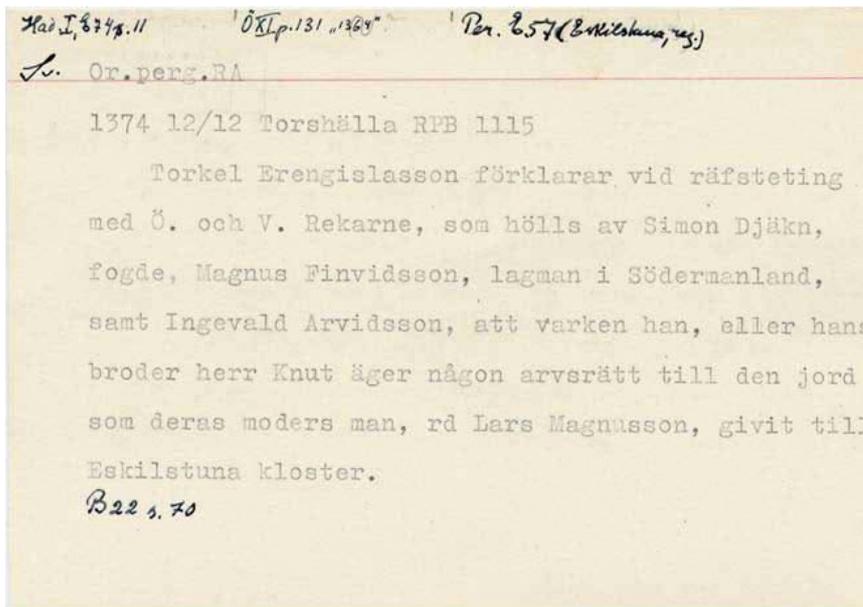
Series	Editor(s)	Covering years	Printed in
<i>Diplomatarium Suecanum / Svenskt Diplomatarium</i>			
= DS			
vol. I	J.G. Liljegren	– 1285	1829–1834
vol. II	J.G. Liljegren (& B.E. Hildebrand)	1286–1310	1834–1837
index to vols. I–II	K.H. Karlsson		1910
vol. III	B.E. Hildebrand	1311–1326	1842–1850
vol. IV	B.E. Hildebrand	1327–1340	1853–1856
vol. V	B.E. Hildebrand	1341–1347	1858–1865
vol. VI:1	E. Hildebrand	1348–1350	1878 (repr. 1967)
vol. VI:2–4	S. Tunberg	1351–1355	1916–1921
vol. VI:5–6 suppl.	E. Nygren		1946–1959
vol. VII:1	E. Nygren & J. Liedgren	1356	1976
vol. VII:2–3	E. Nygren, J. Liedgren, B. Fritz, H. Gunneng & B. Westlund	1357–1358	1979–1982
vol. VII:4	B. Fritz, M. Asztalos & P.-A. Wiktorsson	1359	1985
vol. VII:5	B. Fritz, H. Aili, M. Asztalos & P.-A. Wiktorsson	1360	1987
vol. VII:6 suppl.	B. Fritz, C. Gejrot & P.-A. Wiktorsson		1991
vol. VIII	E. Nygren & J. Liedgren	1361–1365	1953–1976
vol. IX:1	L. Sjödin	1366–1368	June 1970
vol. IX:2	B. Fritz, J. Axelson, C. Gejrot & P.-A. Wiktorsson	1368	July–1369 1995
vol. IX:3	B. Fritz, R. Andersson & C. Gejrot	1370	1998
vol. IX:4 suppl.	C. Gejrot, R. Andersson & B. Fritz		2000
vol. X:1–2	J. Öberg	1371–1374	June 1970–1974
vol. X:3	C. Gejrot, R. Andersson, J. Axelson & P. Ståhl,	1374	July–1375 2002
vol. X:4 suppl.	C. Gejrot, R. Andersson & P. Ståhl	1371–1375	2004
New Series: <i>Svenskt Diplomatarium</i>			
<i>fr.o.m. år 1401</i>			
= SD			
vol. 1–3	C. Silfverstolpe	1401–1420	1875–1902
vol. 4 suppl.	K.H. Karlsson		1903
Appendix: <i>Acta Pontificum Suecica. I</i>			
<i>Acta Cameralia</i>			
vol. I-II	L.M. Bååth	1062–1492	1936–1957

In the 1930s, a plan was developed in order to add new funding and force to the editorial work after some decades of slow progress. The new editor in chief, Ernst Nygren (1889–1968), had fresh ideas. He wanted the *Diplomatarium* to cover a wider range of archival material and to present the texts in a more scientific and detailed way. He soon realised that a great deal of work had to be done before work could be continued on the main series, which had now reached the middle of the fourteenth century. Nygren and his staff began by concentrating on a thorough inventory of *all* the medieval document texts they could find in the archives and libraries all over Sweden. In fact, this registration of texts was to go on for about thirty years, of course prolonging the pure editorial work, but at the same time creating a valuable tool for future editing. Today, Nygren's inventory, or the *Main Catalogue of Diplomatarium Suecanum* ('Svenskt Diplomatariums Huvudkartotek') as it came to be called, is the basis for the work at the *Diplomatarium* and of great importance to scholars using the unedited (and edited) material.

Between 1993 and 1999 the card catalogue was transferred into a database. The work was carried out by additional staff who simply typed in the information from the cards into the computer. New information about the documents was added, and the database registration also covered some collections that had not been completely included in the old card files, for instance all the documents in the preserved copy-books from Vadstena Abbey.⁵ We released a first version of the completed digitized catalogue as a CD-rom at the end of 1999.

A number of medieval scholars started to use the new way of searching for information about the documents. Whereas the old card files had only one possible way of searching entries – the issuing date of the document (if such a date was known) – the database allows searches of various kinds: personal names, place names, topics, language, archival situation, originals, transcriptions, editions, translations, secondary literature and so on. Even the chronological search was widened, as it was now easy to search for documents of a certain kind from a certain period – for instance a century, a decade, a year or a month. For example a document, an original parchment from 12th December 1374 may serve as an illustration of the change from card files to a computer resource:

⁵ Cod. A 19 – A 21, The National Archives, Stockholm



A traditional card file, accessible only at the archives.

The online version of the same file, accessible to users worldwide:

RIKSARKIVET



[Riksarkivet](#) > [Diplomatariet](#) > [Medeltidsregistret](#) > [Söksida](#) > [Träfflista](#) > Post

Svenskt diplomatariums huvudkartotek över medeltidsbrev

[Rapportera fel!](#)

Brevnummer:	10610		
Utfärdandedatum:	13741212 a	Utfärdandeort:	Torshälla
Datum-kommentar:		Språk:	svenska
DS-nummer:	DS 8682	SD-nummer:	
Utfärdare:	Torkel Erengislesson (Barun).		
Innehåll:	<p>Torkel Erengislesson (Barun) kungör att han, när Simon (Petersson) Djäkn, fogde på Henrik Morins vägnar, höll räfsteting med Österrekarnes och Västerrekarnes hundare i närvaro av Magnus Finvidsson, lagman i Södermanland, och Ingevald Anundsson, konungsdомhавande, förlikades med broder Tord, prior i Eskilstuna (kloster), angående den jord som hans mor (tidigare) ägde, men som sedan framlidne riddaren Lars Magnusson för sitt uppehälle och själägagn hade skänkt till Eskilstuna kloster då han blev broder där och antog korssets tecken. Varken Torkel Erengislesson, hans bror herr Knut eller någon annan av deras mors arvingar skall någonsin kunna klandra eller hindra priorn broder Tord, klostret i Eskilstuna eller dess efterkommande förmän angående jorden, eftersom den rättmätigt givits dem med goda brev enligt landets lag. I ett tillägg (se not g-g till utgåva i DS 8682) säger utfärdaren att han har fått kännedom om att han och hans bror inte hade någon rätt till egendomen och därför avstått från den.</p>		
	<input type="button" value="Visa brevtext"/>	<input type="button" value="Dölj brevtext"/>	

Fastar:			
Sigillanter:	Utfärdaren beseglar tillsammans med de ovannämnda herrarna.		
Sigill:	Nr 1 av mörkbrunt vax, omskriften otydlig och bitvis skadad (båt balkvis i sköld under hjälm, vilken omges av hjärta och bokstaven T): [...]rkili * Erenghista[...]; nr 2 bortfallet från den kvarhängande sigillremsan; nr 3 av brunt vax, omskriften bitvis skadad (balk belagd med tre sparrar i sköld): [...] Sigmvn[.] * Petr[...].		
Original:	Or.perg. RA 0101		
Medeltida avskrifter:			
Medeltida register/notiser:			
Brocman:		Hadorph:	IE 74, p.11
Peringskiöld:	E 57 (Eskilstuna; reg.)	Örnhielm:	XI p.131 ("1346")
Övr. efter-medeltida avskrifter:			
Övr. efter-medeltida register/notiser:	B 22, s.70, RA 0202		
Hänv. till annat brev:	Jfr Lars Magnussons gåvobrev 1360 21/3 (DS nr 6252) med kommentarer.		
Fotokopia:	digital bild, Diplomatariet	Faksimil:	
Tryckt:	DS 8682	Tryckt regest:	RPB 1115
Litteratur o. komm.:	Om prior Tord i johannitklostret i Eskilstuna och detta brev se D. Danell & C. Eriksson, Eskilstuna historia (2000), s. 255 ff. - Torkel och Knut Erengislesson (Barun) var söner till Lars Magnussons hustru Katarina Persdotter i hennes tidigare äktenskap med Erengisle Torkelsson (ÄSF I, s. 174a).		

An online version of the database was ready in 2003. Before the site opened to the general public, we established a network of scholars who partook in an evaluation of the functionality of the site. Many useful suggestions from this group helped us to make the resource work better.

Several scholars and users wanted more. We kept getting questions on how long it would take before the already printed material was to be published online. In fact, this was happening in several other similar source-text projects around us, but, realising the bulk of our material we were somewhat cautious. However, an 'Online Diplomatarium' seemed to be a natural next step, and, as a parallel development to the database work, we launched a large-scale scanning project in 2002. The printed volumes of the *Diplomatarium Suecanum*, amounting to about 12,000 documents and about the same number of printed pages, were transferred into electronic files by a

company specializing in optical character reading (OCR).⁶ Funds for the project were provided by the Swedish National Archives and the Royal Academy of Letters, History and Antiquities ('Vitterhetsakademien') in a joint effort. Now we had to decide how to display the electronic files.

A quick look at the trend of creating digital versions of the Nordic *diplomataria* revealed several different solutions. The Norwegians, who in the 1990s hired typists as part of a large digitizing project on a national basis, 'dokumentasjonsprosjektet', were the first on stage. Finland followed, and a couple of years later an internet version of *Finlands medeltidsurkunder* could be found on the Internet after some years of scanning and optical reading. In Denmark the situation was different. The texts that the scholars find online today (February 2005) were not previously printed but form a continuation of the printed book series. Thus, the latest volume of the *Diplomatarium Danicum* is available only on the Internet.



Diplomatarium Danicum (printed to 1400, online 1401-1412)

<http://dd.dsl.dk/>



Diplomatarium Fennicum / *Finlands medeltidsurkunder* (all texts online)

<http://www.sls.fi/fmu>



Diplomatarium Norvegicum (all texts online)

http://www.dokpro.uio.no/dipl_norv/diplom_felt.html



Svenskt Diplomatarium (printed to 1375 and 1401-1420, all texts online)

<http://www.ra.se/ra/diplomat.html>

The Nordic diplomataria – online projects.

⁶ Ytterlids Infodesign AB.

The transformation of the Swedish texts into electronic files followed the Finnish example. The work involved several stages: scanning and OCR of the printed texts, as was mentioned previously, but also proof-reading and, last but not least, a technical solution that could answer the demands of our users.

We realised that the existence of the digitized catalogue, 'Huvudkartoteket', was a great asset, and it felt natural to add the full source texts to this resource. The files that we received after the optical reading were formatted as an XML database. This involved some planning since the printed volumes were made according to differing editorial principles and with various printing techniques.

After some adaptation, the texts were exported into the existing database, each text being matched to a corresponding entry. This way, every word in the source texts became searchable within the frame of the 'Huvudkartotek'. Along with the information about the document, a new button was added ('Visa brevtext' / 'Show document text'), which opens up the text. Let us again look at the document from 1374:

		Visa brevtext	Dölj brevtext
Visa boktryck		10610.pdf	
Brevtext:	<p>Allom mannom them thetta breff høra eller se gør iak Thørkil /Ærngislason(a) viterlikt oc kunnokt medh thesso wpno brewre / at arum efter wars Herra byrdh thusandha thryhundradha sythyghi a fierda areno næsta daghin fore sancte Lucie dagh ij Thorsarghe / tha Symon Diækn foghathe a Henrik Morins wæegna hioth kunungx ræfstathingh(b) medh Østerrek oc Westerreek hundarom / nærwær(an)dhe(c) hedherlikom manne Magnus Finwidsonne laghmanne(d) ij Sudhermannalande / oc hedherlikom manne Jngeualdh Anundasone sitiande ij kunungx dom / medh samthykkio oc godhra manna radhe som ther nær waro / tha sandhe iak mik medh brodher Thorde priara ij Eskilstunum / wm the jordh ther herra Laurinz Magnusson riddare godhra aminnise ther mina modhor atte / hafdhe giwit til Eskilstuna kloster / tha han ther brodhor wardh / oc (1-)kors thok(-1) / fore sith wphældhe men(e) han lifdhe oc sina sæel / swa at iak / eller min kære brodher herra Knutar eller nokar ther arftaki war medh os efter wara kiæra modhor / sculum aldrih then fornæmpda brodher Thord priara / klostrith ij Eskilstun(u)m (f) eller thes formæn efter komandha nokor tima meer quælia eller the jordh oftarmer fore them hindra for thy hon er thøm rætlika a komin medh godhom brewum oc fullum skælum efter lanzlaghum (g-)for thy iak hørdhe / os engin ræt til thet gozit hawa thy læt iak thes aff.(-g) Til withnisbyrdh / withrelse / oc thes mere skæl / tha beedhes iak thera hedherlika manna jnsigle som næmpnas(h) før ij breweno at sætias fore thetta næ[r]juarandhe(i) breeff medh mino jnsigle / Scriwat ij stadh / a aar oc dagh som før æru næmpd ij breweno.</p>		
Extratext:			
Sigillinformation:	<p>Sigill: nr 1 av mörkbrunt vax, omskriften otydlig och bitvis skadad (båt balkvis i sköld under hjälm, vilken omges av hjärta och bokstaven T): [...]rkili * Erenghisla[...]; nr 2 bortfallet från den kvarhängande sigillremsan; nr 3 av brunt vax, omskriften bitvis skadad (balk belagd med tre sparrar i sköld): [...] Sigmvrn[.]i * Petr[...].</p>		

Some information from the printed volumes, for instance about preserved seals, has been added in a field of its own. The textual notes were as a rule not included⁷, and the layout is generally simplified, i.e. italic script is not shown and superscript has been marked by round brackets.

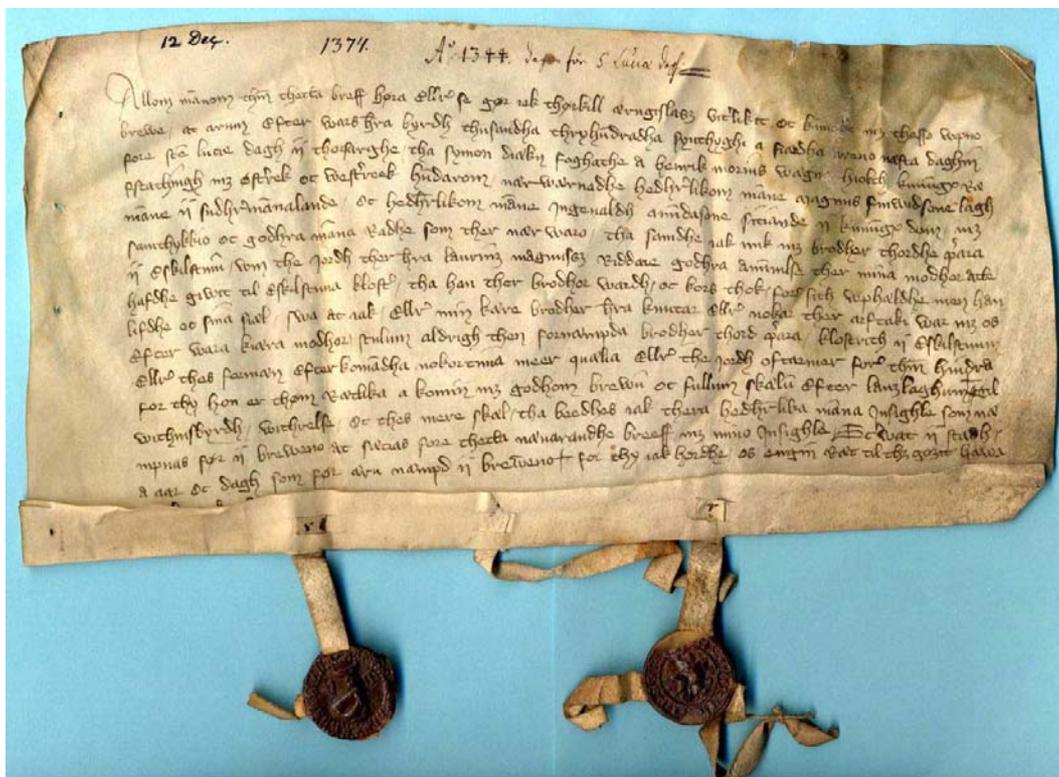
The database texts are easy to use for quick searches, but there is one obvious drawback to this method. When the correct text has been found, they are quite hard to read on the screen and difficult to work with, especially the longer ones. We therefore added another function. A link (in the field 'Visa boktryck' / 'Show print') is added to show an image of a page with an ordinary book layout:

8682.	1374 december 12.	Torshälla.
<p>Torkel Erengisleson (Barun) kungör att han, när Simon (Petersson) Djäken, fogde på Henrik Morins vägnar, höll räfsteting med Österrekarnes och Västerrekarnes hundare i närvaro av Magnus Finvidsson, lagman i Södermanland, och Ingevald Anundsson, konungsdomhavande, förlikades med broder Tord, prior i Eskilstuna (kloster), angående den jord som hans mor (tidigare) ägde, men som sedan framlidne riddaren Lars Magnusson för sitt uppehälle och själagagn hade skänkt till Eskilstuna kloster då han blev broder där och antog korsets tecken. Varken Torkel Erengisleson, hans bror herr Knut eller någon annan av deras mors arvingar skall någonsin kunna klandra eller hindra priorn broder Tord, klostret i Eskilstuna eller dess efterkommande förmän angående jorden, eftersom den rättmätigt givits dem med goda brev enligt landets lag. I ett tillägg (se not g-g) säger utfärdaren att han har fått kännedom om att han och hans bror inte hade någon rätt till egendomen och därför avstått från den.</p> <p>Utfärdaren beseglar tillsammans med de ovannämnda herrarna.</p> <p>Orig. på perg. (27.6 x 14.4 cm, uppveck 1.7 cm; 16 rader), Sv. Riksarkivet (RPB nr 1115).</p> <p>Om prior Tord i johannitklostret i Eskilstuna och detta brev se D. Danell & C. Eriksson, Eskilstuna historia (2000), s. 255 ff. – Torkel och Knut Erengisleson (Barun) var söner till Lars Magnussons hustru Katarina Persdotter i hennes tidigare äktenskap med Erengisle Torkelsson (ÅSF I, s. 174a).</p> <p>Jfr Lars Magnussons gåvobrev 1360 21/3 (DS nr 6252) med kommentarer.</p> <p>Allom mamom them thetta breff höra eller se gör iak Thörkill Ærengislasøn^a viterlikt oc kumokt medh thesso wpno brewe / at arum efter wars Herra byrdh thusandha thryhvdradha sythyghi a fiærda areno næsta daghin fore <i>sancte</i> Lucie dagh ij Thorsarghe / tha Symon Diækn foghathe a Henrik Morins wægna hiolth kunuwx ræfstathingh^b medh Osterrek oc Westerrek huvdarom / nærwær[an]dhe^c hedherlikom mæme Magnus Finwidson e laghumæ^d ij Sudhermamalande / oc hedherlikom mæme Ingeualdh Anuudason e sitiande ij kunuwx dom / medh samthykkio oc godhra mæma radhe som ther nær waro / tha samdhe iak mik medh brodher Thorde priara ij Eskilstunum / wm the jordh ther herra Laurinz Magnusson riddare godhra amimilse ther mina modhor atte / hafdhe giwit til Eskilstuna kloster / tha han ther brodhor wardh / oc ¹-kors thok¹ / fore sith wphældhe men^e han lifdhe oc sina siæl / swa at iak / eller min kære brodher herra Knutar eller nokar ther arftaki war medh os efter wara kiæra modhor / sculum aldrigh then fornæmpda brodher Thord priara / klostrith ij Eskilstun[ur]m^f eller thes formæn efter komandha nokor tima meer quælia eller the jordh oftaner fore them hindra for thy hon er thom rætlika a komin medh godhom brewun oc fullum skælun^g efter lanzlaghum^g for thy iak hordhe / os engin ræt til thet gozit hawa thy læt iak thes aff^g Til withnisbyrdh / withrelse / oc thes mere skæl / tha beedhes iak thera hedherlika mæma jnsighle som næmpnas^h for ij breweno at sætias fore thetta næ[r]uarandheⁱ breff medh mino jnsighle / Scrwat ij stadh / a aar oc dagh som for æru næmpd ij breweno.</p> <p>Sigill: nr 1 av mörkbrunt vax, omskriften otydlig och bitvis skadad (båt balkvis i sköld under hjälm, vilken omges av hjärta och bokstaven T): [...].rkili * Erenghisla[...]; nr 2 bortfallet från den kvarhängande sigillremsan; nr 3 av brunt vax, omskriften bitvis skadad (balk belagd med tre sparrar i sköld): [...] Sigmvn[.]i * Petr[...].</p> <p>^a D.v.s. Ærengislasøn. ^b ræ fsthathingh utan avstavningstecken vid radskifte ms. ^c nærwæmadhe ms. ^d lagh mæme utan avstavningstecken vid radskifte ms. ^e D.v.s. medhan; se Söderwall: män 2. ^f Eskilstunm ms. ^g Tillagt längst ned på sidan och här insignerat ms. ^h næmpnas utan avstavningstecken vid radskifte ms. ⁱ næuarandhe ms.</p> <p>¹⁻¹ Jfr Söderwall med suppl.: kors 3 med anförd betydelse 'taga korset (vid anträdande av korståg el. pilgrimsfärd)'.</p>		

⁷ For technical reasons, the notes could only be included in searchable database fields from volumes 9:2–9:4 and 10:3–4.

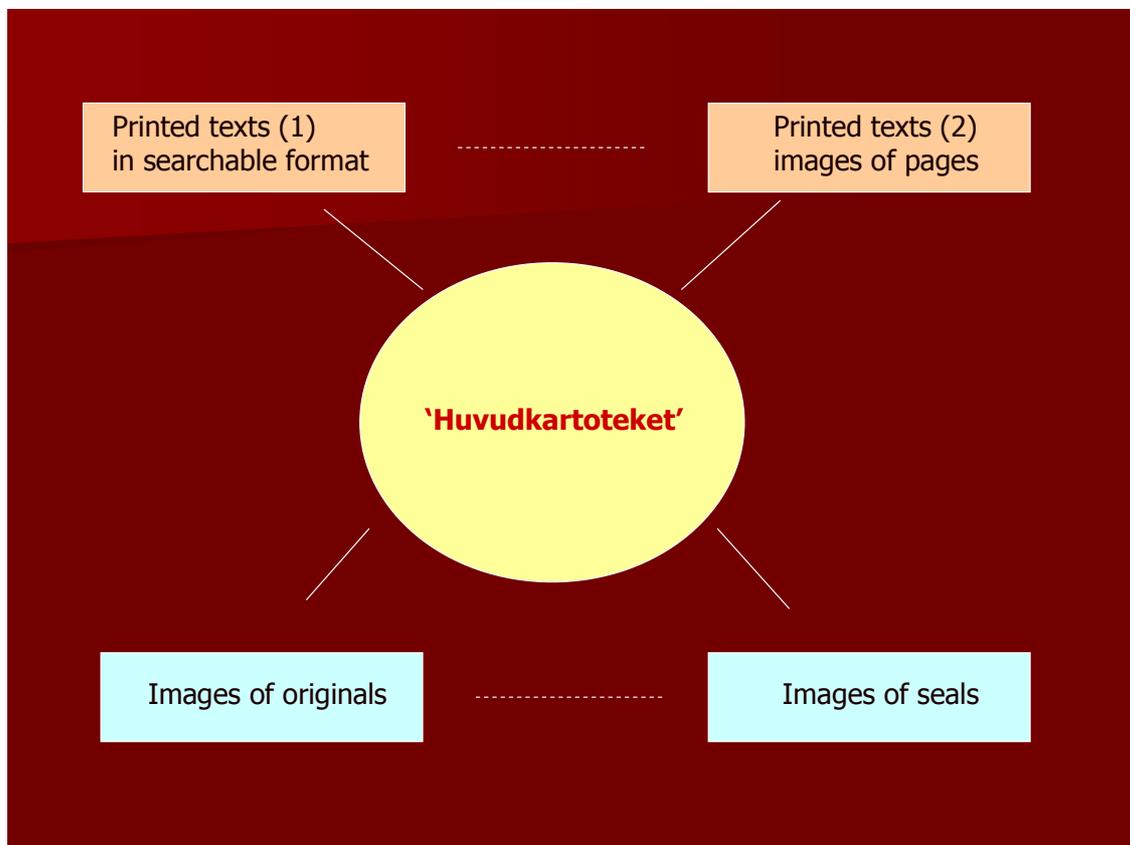
An added advantage with this system is that the reader will find here all the critical notes to the texts that were not included in the database files. This 'double representation' of the texts solves many problems. Since these images have not gone through the optical character reading process, they can be used to check for errors in the searchable texts. With such a large number of texts delivered for proof reading, it is only to be expected that some errors remain undetected. In order to make it easy to report errors we added another link at the top of each page of the 'Huvudkartoteket'. The link 'Rapportera fel' ('Report errors') can be used by anyone who finds any kind of error.⁸

This is where we stand in 2005. The next step towards even greater accessibility will be to connect images of the actual parchment and paper originals to the existing online resources. The plan is to scan the around 20,000 originals together with all the remaining seals. The work will be made with a high-resolution scanner, and the resulting pictures will allow users to enlarge details of the picture on their screens. Another button will be added to the database, permitting the users to see the sources in an instant, for instance the original of our example from 1374 (here seen in a low-resolution image):



⁸ In fact, this facility has been much used since the launch of the new site. Comments and additions to the original information in the database are as common as reports on errors.

In this way, the digitized *'Huvudkartotek'*, serves – and will serve – as the central hub for the new digital resources, naturally connecting each edited text, each original and seal with a corresponding entry.



In conclusion, the *Diplomatarium Suecanum* has travelled a long way from the first editions in the early nineteenth century to the digital editions and search facilities that we offer today. But the aim of the editors has been the same throughout: to give to scholars and readers as many tools as possible to help them to penetrate, understand and analyze the medieval material, neglecting neither Liljegren's struggle for accessibility nor Hildebrand's beliefs in scientific accuracy.

Claes Gejrot

Editor in chief of *Diplomatarium Suecanum*

The National Archives of Sweden

claes.gejrot@riksarkivet.ra.se