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Edition and Analysis of four Old Norwegian Law Fragments from
Norway's Riksarkivet

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PREFACE

This master thesis was a long project that I did with the greatest help of my supervisor Odd Einar Haugen and my co-supervisor Nina Stensaker.

I would like to thank them for all the advices they have given me throughout the course of these two years, for the help during the creation of the editions and the analysis. This thesis would have been far less precise without their help.

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Finally, I would like to thank all those close to me for supporting me emotionally, for being there whenever I needed some time off. It has been a strange ride, but you made it worth it.

ABSTRACT

Denne masteroppgåva vert skriven av Valerio Nazario Rossetti, og har tittelen *Edition and Linguistic Analysis of four Old Norwegian Law Fragments from Norway's Riksarkivet*.

Oppgåva er delt i to deler: utgåva og lingvistikkspanalyse av dei fire fragmentane, som finnast i Noregs nasjonal arkivet, Riksarkivet, i Oslo.

Utgåva er ei elektronisk utgåve, ei type utgåve der kvar tekst kan sjåast i tre representasjonsnivå basert på forskjellige typar av trykka utgåva.

- faksimileutgåva, der teksten er koda og kan sjåast slik det ser ut i manuskriptet, med same grafem, forkortingar og teiknsetjing.
- Den diplomatarisk utgåva, der teksten er koda slik det ser ut i manuskriptet, men forkortingar vert løyst opp.
- Den normalisert utgåva, der teksten vert redigert på ein rekonstruert og fast ortografi basert på det norrøne språket frå 1100-tallet, med moderne teiknsetjing.

Utgåvene vert publiserte på MENOTA, Arkiv for nordiske middelalderstekstar. Verka vert laga ved hjelp av rettleiarar og av MENOTA-handboka.

Den andre delen er lingvistisk analyse. Formålet er å finna opphavet til dei fire fragmenta, både når det gjeld tid og stad. Analysen er delt opp i tre kapittel. Det første kapittelet er paleografisk analyse av de fire fragmentane, og ser på dei forskjellige grafema som finst i teksten, og prøver å gi ei foreløpig datering av dei. Det andre kapittelet, den ortografiske analysen, ser på forhold mellom grafem og fonem dei stå for. Det tredje kapittelet er ekte lingvistisk analyse, som prøver å finna ikkje berre datering, men også kva for ein dialekt dei fire skrivarane brukte i tekstane. Både det første og det tredje kapittelet brukar sekundærlitteratur som viser hovudtrekka av kvar gammalnorsk dialekt.

Utgåva er ikkje berre ein del av oppgåva, den er også staden kor trekka for datering og lokalisering har vorte funne. Resultata frå både datering og lokalisering er:

- NRA 3 kjem frå Sørøust-Noreg, og er skriven i slutten av 1200-tallet, rundt 1275-1300.
- NRA 5 kjem frå Sørøust-Noreg, og er skriven i byrjinga av 1300-tallet, sjølv om nokre trekk peikar på ei mogleg tidlegare datering.
- NRA 6 kjem frå Nordvest-Noreg, og er skriven sannsynlegvis mellom 1300-1325.

NRA 13 kjem frå Noreg, utan ein spesifikk dialekt, og har vart sannsynlegvis skriven mellom 1325-1350.

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“Writing seems to be necessary for the reproduction of the centralised, stratified state[...] The one phenomenon which has invariably accompanied it is the formation of cities and empires: the integration into a political system, that is to say, of a considerable number of individuals, and the distribution of those individuals into a hierarchy of castes and classes.[...] it seems to favour rather the exploitation than the enlightenment of mankind¹” (Lévi-Strauss, 1961, p. 290)

INTRODUCTION

People hold many stereotypes about Old Norse literature that generally involve kings, warriors, gods, and Vikings. It is a simplified and romanticised image of a far more complex society. In reality, like most cultures, there were rules, regulations, a bureaucracy, and a tax system. These were all obviously written down in different places, ways, and periods of time. We may assume by reading the *Heimskringla*, that Hákon *góði* Haraldsson (c. 920- 961) was the first king to make a substantial division of the law system in Norway. If this information (which cannot be guaranteed, since kings' sagas can never be fully believed) is true, that means that a law system existed in Norway already by the 10th century. Earlier sagas suggest a law system was in place in Norway already at the time of the legendary Halfdán *svarte* Guðrøðsson (Jørgensen, 2013, s. 262) but what Hákon brought was a division into districts, with their different laws (Finlay & Faulkes, 2011, p. 100). However, the most famous work when it comes to legislation and law-making is the *Magnus Lagabøtes Landslov*. A mammoth of Old Norse writing, it is found in different forms and for different purposes and was in use in Norway until Christian the V of Denmark (1646-1699) replaced it with the *Norske Lov* in 1687 (Øyrehagen Sunde, 2021). The law takes the name of the king who completed it, Magnús *lagabótir* Hákonsson (1238-1280), and was used since 1274. Only two years later, his entourage also gave, based on the *Landslov*, the *Bergens Bylov*, which then came into use in all other Norwegian cities. Both laws are divided into sections, which are (using Modern Norwegian terms):

- Tingfarebolken - about the court system.
- Kristendomsbolken - about royal power.
- Landevernsbolken - about the defence of the kingdom.
- Mannhelgebolken - on the protection of life and property.
- Arvebolken - about marriage and inheritance.
- Odelsbolken - about land heirship.

¹ Translation by John Russell

- Landsleigebolken - about legal matters related to land ownership and more.
- Kjøpebolken - about debt, collateral, and trading activities.
- Tjuvebolken - about property crime and oaths as evidence.

There are many different manuscripts including most or all the *Landslov*. Furthermore, there are even more fragments. If we assume that the latest edition of the work includes every single text from the middle ages, either full or fragmentary, there are between 101 manuscripts and fragments of the work (Rindal & Spørck, 2018, pp. 15-17).

This thesis has been divided into two main parts: an analysis of the four fragments, which will be the entirety of this document, and an electronic edition of the four fragments which is going to be published on MENOTA, the Medieval Nordic Text Archive, an electronic archive where editors, scholars and researchers can publish their editions and translation of different texts, mostly from the Scandinavian high middle ages. The analysis *per se* was written after the four fragments had been edited on the MENOTA in a test mode. The thesis has therefore two main objectives.

The first objective is to publish these four fragments on MENOTA, to enrich its catalogue, making it possible to future researchers, in whichever field, being it legal history, linguistics, philology or palaeography. Once they are published online, they could be of help for those who lacks the skill needed for reading Old Norse as it appears in the medieval sources. As such, each fragment has been edited in three different editions:

- Facsimile edition, which reproduces the fragment in its entirety, leaving the text as it was written in the original parchment, with the same mistakes, cuts, abbreviation, superscripted words and/or sentences.
- Diplomatic edition, which reproduces the fragment with a certain level of editing, expanding the abbreviations, in some cases correcting the mistakes or reproducing only the correction made by the scribe, rather than, as in the facsimile, both the mistake and its correction. However, graphemes, punctuation and layout are left as in the fragment itself.
- Normalized edition, the edition most used when reading the actual texts. It is an edition with a heavier degree of editing: the graphemes used are for the most part the one used nowadays, the abbreviations are expanded, the mistakes corrected, the punctuation turned from medieval to modern. Moreover, the language itself is based on a reconstructed form of Old Norse, agreed by scholars (to a certain extent), based on the language as it might have been between the 12th and 13th century.

The electronic editions are still in the test catalogue as of the deadline for this master thesis. This means that there are still some minor corrections and editing to be done. Nonetheless, they can still be found on these links:

- NRA 3: <https://clarino.uib.no/menota-test/document-element?session-id=251103163499664&cpos=299122&corpus=menota-test>.
- NRA 5: <https://clarino.uib.no/menota-test/document-element?session-id=251103163499664&cpos=301637&corpus=menota-test>.
- NRA 6: <https://clarino.uib.no/menota-test/document-element?session-id=251103163499664&cpos=305080&corpus=menota-test>.
- NRA 13: <https://clarino.uib.no/menota-test/document-element?session-id=251103163499664&cpos=297279&corpus=menota-test>.

The public archive, where the fragments will be once they completely edited, can be found on this link: <https://clarino.uib.no/menota/catalogue>.

The second objective of this master thesis is to analyse these four fragments. The analysis is not regarding the contents themselves, which is the work of historians, legal historians in particular. This analysis will cover the language and the palaeography for the most part. Both these fields when interconnected, can give us an idea, with a high level of certainty, about who the scribes of these fragments are. Finding the full names of these people is of course impossible. What is not impossible, is to find out when and where these people lived and “learned” Old Norwegian. The first of these two factors can be found by looking at the palaeography and the language features. The second one can be found only by looking at the linguistic features of the work. Palaeography and languages are not fixed, they evolve just like any other human creations. In a time lacking authorities that regulated languages, where the figure of the prescriptive grammarian is yet to be born, where customs are indeed as relevant as fixed rules, as it was in 13th and 14th century Norway, it is no surprise to find different versions of the same texts regarding language (and script, to a smaller extent).

These four fragments are all kept in the National Archives of Norway, *Riksarkivet*, in Oslo. The parchment fragments kept in this archive which contain law fragments are the one going from NRA 1 to NRA 50.

The first chapter of this thesis will be a palaeographical analysis of the important graphemes, which can help us in the dating of the text. This will be a starting point for the dating of the fragments, which is then going to be combined to the linguistic phenomenon which can help for the same goal.

The second chapter will focus on the orthography of the text, which is useful for the linguistic analysis, since it will cover which graphemes were used for each phoneme of 13th-14th century Old Norwegian.

The third chapter will be the linguistic analysis of the fragments. A linguistic analysis can be either extremely precise in every aspect of the language or can use certain evolution of the language to prove or disprove a point. This thesis will take into consideration seventeen traits, fifteen of them belonging to the field of phonology and two of them from morphology. These traits are among the easiest to spot and common of texts from Old Norwegian between the 13th and 14th century, when the fragments presumably were written.

Before the proper analysis begins, a short summary of the symbols used both in this chapter and in the following ones is needed. The symbols are the following:

- <...> for the different graphemes.
- |...| for the different allographs, that is, the variants of each grapheme.
- /.../ for the different phonemes.
- [...] for the different allophones, that is, the variants of each phoneme.
- <...> for the examples taken from the diplomatic editions and inserted into the full text. Most of the time they will not be used, since the examples will be incorporated into tables. They might be followed by the same word as it appears in the normalized editions, which will be rendered in italics.

The four fragments: Their histories, contents and codicological features

NRA 3

The fragment NRA 3 has been seen and studied by Gustav Storm in the fourth volume of *Norges gamle Love* (NGL 4 from now on), published in 1885. This volume, which will be quoted for all four fragments, says:

2 Blade af et Haandskrift, hvis Høide er 26 cm. og Bredde 20 cm. Haanden er god og tydelig, meget regelmæssig og I Form beslæget med AM 315 F; den synes at være ældre end c. 1300. Indhold: **Landsloven** (Frostathingslov), Dele af Odelsbrigde og Landsleiebolck. Trykt NgL IV, 134- 138. Bladene er funde i det svenske Kammarcollegium 1862, af Overbibliothekar Klemming frærede til P. A. Munch, af denne til Rigsarkivet. ((Storm, 1885, p. 765).

This information is not that extensive, but Storm did however, as stated, make a diplomatic edition of the text in pages 134-138 of the volume. I do not fully agree with Storm's opinion on the writing style. It is steady and clear, but not as much as the other three fragments. The dating he gives is 1300 or later.

Starting from this information, some codicological description can be given: the text is made of 2 leaves (4 pages), with a height of 260 mm and width of 200 mm. The parchment of the manuscript is not well kept, as it has 3 holes in 1r-1v, and one hole in 2r-2v. Holed parchment was not normally sewed, but rather used for manuscript of slightly less importance (Clemens & Graham, 2008, p. 13). Additionally, 1r, and 1v have on the side some small cuts, which might have been made later or at the time of production to bind the book. All these holes are small and there is no loss of words or graphemes, which means they were there before the scribe wrote the fragment. This, together with the fast *ductus* of the writing, raises the question whether this fragment was originally written for everyday use rather than for more official occasions, something kept in the “office” rather than showed to a public service. The text has missing initials, and there is no rubrication or *litterae notabiliores*, which might also indicate an everyday use of the fragment. There was space made for initials, but nobody made them. The ink is only iron gall ink, the most common of the time.

The parts of the book are from Odelsbolken and Landsleiebolken, two tightly connected themes. Again, since we have only these few leaves, it is impossible to know if just those parts of the *Landslov* were copied or if they were part of a bigger complete manuscript. The first hypothesis, which might seem strange to the modern reader, was quite common in the middle ages: very few entire bibles were copied, since the work required lots of parchment and time to write, making it an extremely costly production. Therefore, only the needed part was copied and made into small manuscripts. The story of the fragment is not that long: it found its way into Sweden at some point in time, impossible to know when, and it was in the Kammarkollegiet when Peter Andreas Munch (1810-1863), a larger-than-life figure of the *Nasjonalromantikken*, an eminent historian and philologist, got it back into Norway and gave it to the Oslo’s Riksarkivet.

NRA 5

In the page that followed the one describing NRA 3, Storm even more concisely described NRA 5:

2 ½ Blade skrevne med en Frakturhaand fra Tiden om 1300; Bladene er 28 cm. høje og 20 cm. brede. Indhold: **Landsloven** (Borgarthingslov?), Landværnsbolk C. 3-4, 11-13, og Mandhelgebolk C. 3-5. Trykt NgL. IV, 145-49. Stykkerne ere fundne om Regnskaber fra Bergenhus 1614 og Søndfjord 1617. (Storm, 1885, p. 766).

The same volume, the fourth, also has a diplomatic edition on pages 145-149. It is made up of two and a half leaves. The first two leaves are intact, while the last one is cut vertically, leaving every sentence in that leaf cut in half, having the left side of the writing on 3r and the right one on 3v. The measurement, as given by Storm, are 280 mm in height and 200 mm in width. Each leaf also still has the marks for the layout of the page, which is quite common for manuscript. Since there are no inked

marks but there is a relief, it was done either with a knife, not particularly sharp, or with a compass. These are called rulings, and when done in the best possible way they would not be fully visible (Clemens & Graham, 2008, p. 15). The last half page is actually made up of four fragments: the upper and lower one, which for this work have been organised into from four to two: 3r and 4r become 3r and 3v and 4v become 3v.

The ink is iron gall, but there is also red for the initials and *litterae notabiliores* (red lead probably), and either two shades of green or one of green and one of blue for the initials (it is hard to recognise). A green initial is the one present in 2v, while the initial at the bottom of 1r could either be green or blue.

The contents are from the *Landsloven*, possibly from the *Borgarþing* (the area that is now called Sørøstlandet, encompassing the whole Oslofjord, Telemark, Buskerud, Oslo, Østfold and parts of Akershus. The question mark put by Storm could be there because technically the *Borgarþing* was replaced by the *Landslov*, but each of the original district developed their own version of the *Landslov*, with laws that only applied to their area. The parts are from Landvernesbolk and Mannhelgebolk. Given the higher quality of the fragment compared to NRA 3, it could be concluded they are just parts of a whole *Landslov*.

The fragments were found partly in Bergen and partly in Sunnefjord.

NRA 6

The fragment NRA 6 is the only one of the three which is not from the *Landslov* and the biggest fragment of the four which are part of this analysis. Storm writes, on *NGL 4* of it:

5 ½ Blade af et Haandskrift, hvis Blade er 25,5 cm. høie og 17,5 cm. brede skrevet a fen stor og stiv Frakturhaand fra c. 1300 med røde eller blaa Initialer. Indhold: **Bergens Bylov**, indeholdende Mandhelgebolk C. 23-26, Byordning C. 12-13, Kjøbebolck C. 4-6, 13-15, 25 og Tyvebolck 4-6. Stykkerne er fundne om Regnskaber fra Helgeland 1630-32. Med Hænder fra 17de Aarhundrede staar paa 1ste Blad skrevet: Peter Jacobsen Kong. May. Foget offuer Helgeland, paa 5te Blad: Jacobus dischington with my hand og paa 6te: James δεζεντοβοζ. (Storm, 1885, p. 766)

As Storm says, the fragment is made of five and a half leaves, most of them cut into smaller pieces that have been, for the sake of this analysis, organised back together into 12 pages. This fragment has 6 full pages (although most of them are made up of 2 different fragment that have been united), 5r and 5v miss one quite big piece on the side, right for 5r, and left for 5v. 1r to 2v are not full pages, they miss some lines in the lower part of the pages. The ruling of this fragment is invisible in some pages and visible in some others. This time, when visible, it is drawn in with some ink (as opposite to drypoint, the other type of ruling), as it can be seen on 1v, clearly creating margins. Since the manuscript is from

the 14th century most probably, and the most common type of ruling at the time was done with plummet, I would imagine this fragment is no different, since plummet generally left a brownish-red streak, as it does here (Clemens & Graham, 2008, p. 17). As far as measurements goes, Storm says they are 255 mm high and 175 mm wide.

The ink is as usual iron gall ink, with red and blue as colours for the initials. The initials have many thin lines which spring to all sides of the page, as it can be seen on 6v. Rubrics and *litterae notabiliores* are all with the classic red ink, most probably red lead (Clemens & Graham, 2008, p. 25).

The fragment is *Bergens Bylov*, the second of the three major law texts redacted under Magnús *lagabótir* Hákonsson, which, although based on *Landslov*, had some specific rules for the cities, such as the *byordning*, the city organisation (partly present in the fragment as well). It was probably part of a bigger manuscript that included the full text, since the craftsmanship of the fragment is remarkable compared to NRA 3, and quite like NRA 5.

The pieces were found in Helgeland, the part south of the arctic circle of Nordland, in North Norway. Different people from the 17th century wrote on them.

NRA 13 A and B

The last fragment of the group, NRA 13 (divided in A and B originally but studied as a single fragment here) has many unique features compared to the previous three. First and foremost, it is the only one that instead of having one large column that takes the whole layout, was originally written with two smaller columns. All the fragments have either simply one single column, or one full column and the beginning/end of the one beside. Storm writes on the fragment:

4 Blade langsefter overklippede, hvis Høide er 28 cm., Bredden ubestemmelig skrevne med stor Frakturhaand fra 1ste halvdel af 14de Aarhundrede. Indhold: **Landslov** for "N: Þing" med Magnus's Epilog til Gulathing, bevaret er Dele af Thingfarebolk c 5-6, Manhelgebolk c. 16-17, Kjøbebolk c. 5-7 og af Magnus's Rettebøder med Epilog. Paa sidste overklippede Blad findes Spor af Haakon Magnussøns Rettebod om Landskyld i Viken (jfr. NgL. III 71), tilskrevet med Cursiv-haand fra 2den Havldel af 14de Aarhundrede. Stykkerne er fuudne om Regnskaber fra Bratsberg 1648, Bamble 1649 og Thelemarken 1650 (Storm, 1885, p. 767).

The fragment is made of 4 leaves, of which the last two are made up of two pieces each. As Storm says, it is not possible to take the measurements of the full page, since we only have one column for each page, but the height is 280 mm. The ruling and pricking are invisible in all of the pages. The ink is still iron gall, with, as usual, red for rubrics and initials and green for initials.

The fragment includes different parts of the *Landslov*, including the Epilogue to the *Gulathing*, (Western Norway, encompassing the counties of Hordaland and Rogaland), including the towns

Bergen and Stavanger. It features an extensive use of Latin words compared to the previous fragments, but the majority of the text is still in vernacular Old Norwegian. Moreover, there is the addition of a fine, made for the the area of Viken, during Hákon Magnússon reign (1270-1319). This helps with the dating, since it must be from at least the reign of Hákon or a bit later.

From the variety of the pieces, which include the epilogue for the *Guláping* (Western Norway) and one fine that was applied in Viken (eastern Norway), it most probably was a full manuscript containing *Landslov* and later additions.

The pieces were collected from different areas in the 17th century: Bratsberg (either the one in Trøndelag but most probably the one in Telemark) and Bamble (Telemark).

CHAPTER 1: THE PALAEOGRAPHY OF THE FRAGMENTS

The palaeography of the fragments of this corpus is one of the three main parts of this thesis. It serves, for the most part, two purposes: to pinpoint a possible dating, and to see those graphemes which can be considered of interest not only for the time in which they were used, but also to see how they were made. There are many possible sources a researcher can use to better analyse the different graphemes in their evolutions and development. All these fragments are written in Northern Textualis, one of the two main variants of the Gothic Script, together with Southern Textualis, also called Rotunda. The main difference between the two scripts is the more general roundness of the Southern Textualis, plus the fact that Northern Textualis tends, even with its evolutions and divisions, to be more regular, while many differences are to be found from place to place in the Southern Textualis. One very important secondary source was used for this analysis. The book is *The Palaeography of Gothic Manuscript Books: From the Twelfth to the Early Sixteenth Century*, written by the palaeographer Albert Derolez. It analyses both the Pre-Gothic script and its evolutions, mostly the Northern and Southern Textualis, in their developments and tentative divisions. It covers obviously the graphemes, their ligatures and the abbreviation marks used from the 12th to the 16th century. Being a book on the general script, which covers also quite a large period of time, it cannot cover the specific Norwegian and Scandinavian differences, except the most general ones, such as the grapheme <þ> (Derolez 2006, 189). In order to cover them, another source is vital for this study: *Palæografi Norge og Island* by the philologist and linguist Didrik Arup Seip. The book covers both Icelandic and Norwegian scripts, with a great focus on two periods: 1200 to 1300 and 1300 to 1370, although there are parts and paragraphs on the evolutions of the graphemes both before and after this period. It has been a tool of the outmost importance for this text.

By looking at the different types of Northern Textualis that Derolez shows in his textbook, the same type of Gothic script is present in all 4 of them: Rotundus Textualis (not to be confused with Rotunda, the Southern Textualis). This is the most common one in the Northern Textualis period (Derolez 2006, 75). It can be called Scandinavian Textualis Rotundus because it features, as all texts in vernacular from Scandinavia between 13th and 14th, the graphemes which were introduced through the British Isles: the <þ>, the <ð> and the insular <ƿ>. Furthermore, all four fragments follow in different ways the Meyer rules, a typical characteristics of Northern Textualis *codices*: They all feature the rounded |ʀ| instead of <r> when the grapheme is preceded by a round grapheme (such as <o>, <ð> and) and, although less systematically, they tend to make ligatures of rounded characters together, such as <bo>, <oð> and more.

Whereas each fragment has its own graphemes and allographs important for the dating, some of them are very important to all four or at least three of them:

- <a> and its allographs |ɑ| and |a|.
- the use of insular <ƿ>, (and its allographs |ƿ̇|, |ƿ̆| and |ƿ̅|) instead of <f>.
- the distribution of the different allographs of <s>, mostly |ſ|, |ẛ|, |s| and |s̅|.
- the presence or lack of |ʋ| for the grapheme <v>.
- Whether the <τ>, which is present in all four fragments, has the vertical line that goes above the headline.
- Which abbreviations appear, especially <ʀ> and <ʒ>.

Three out of four fragments have a tentative dating given by Bjørg Dale Spørck and Magnus Rindal in their *Kong Magnus Håkonsson Lagabøtes landslov*, which is a recent and very complete edition of the Landslov. The tentative dating given by them is based on the already mentioned older ones given by Gustav Storm, who edited *NGL 4*. Since NRA 6 is not a fragment of the *Landslov*, Rindal and Spørck did not give it a possible dating.

1.1 Palaeography of NRA 3

The palaeography of NRA 3 is an interesting mixture of conservative and more recent developments within Latin Palaeography from Northern Europe.

Firstly, the text has a high variation on how to write the different graphemes. This, together with the fact that the parchment had probably holes even before it was written on, gives me the impression that the fragment and the whole manuscript itself was intended for everyday use. This variation betrays therefore a fast ductus. This quickness is not only shown from the codicological features, such as the parchment, or the ink, but also by the way the different graphemes have been written down.

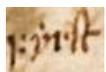
The important graphemes, which are helpful to the analysis, are the one that can either argue for or against the assumptions made by both Storm over a century ago, and more recently by Rindal and Spørck. That is, those that fit, or do not, the assumption that the text was written between 1275 and 1300.



pa (1r, 5)

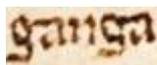
For the grapheme <a>, which could be important in the dating, the text does not give us much help. Normally, for a text from the second half of the 13th century or early 14th century can feature either the closed <a> or open <a>, or the boxed one as well (Seip 1954, 70), while in central Europe the

boxed-a was generally more common earlier (Derolez 2006, 84). However, the open <a> is the only one that was also present before the second half of the 13th century.



fyrft (1r, 3)

The <f> in use throughout the document is the one that was used the most in the period given by Rindal and Spørck (2018, 31), the insular <ƿ>. This grapheme, which in its original form resembled the Carolingian <f>, had many evolutions. The one present in this fragment is the one with a descender on the left and two dots on the right, <ƿ>, one touching baseline and one touching headline, which began to appear in the second half of the 13th century and was still in use throughout the 14th century (Seip 1954, 72).



ganga (1r, 8)

Another grapheme that could pinpoint toward the late 13th century is the <g>. While the <g> was generally closed after 1100, what really matters is the proportion between the two lobes. In Pre-Gothic script the upper lobe is clearly smaller than the lower one, and throughout the centuries it gets steadily larger, becoming bigger than the lower one at the beginning of the 14th century. In the text it is not always bigger than the lower one, but they are generally the same size (Derolez, 2006, p. 89). Since the text was done in a fast ductus, the size has some variations, but it is pointing towards a manuscript from the period estimated by Storm, Rindal and Spørck.

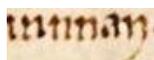


han (1r, 8)

Around the beginning of the 13th century the <h> becomes also the one present here, the one that creates both an ascender and a descender, the ascender on the straight left line and the descender on the right curved part. The fact that the two parts are dislocated is another proof of a fast ductus, as stated by Derolez (2006, 89).



uetrom (1r, 7)



innan (1r, 7)

The treatment of the rightmost minim in <m> and <n> at the end of the word also helps for the dating. Derolez affirms that the last minim becomes a descender curving leftwards in these two

graphemes around half the 13th century. This feature also indicates that it is a fast ductus, since it is common among manuscripts that were written in this style.



hanf (1r,8)

To argue that the manuscript is indeed not from a later date, the grapheme that helps the most is <s>. Until the 14th century, it is quite common to find the half-uncial <f> as the only one in a text regardless of the position, except maybe when it was capital. This fragment features only <f> as a minuscule, which supports this statement (Seip 1954, 74). From around the first half of the 14th century on the other hand, the half-uncial <f> gradually disappears, at least in word-final position (Derolez 2006, 92).



til (1r,12)

Another grapheme, possibly the one that mostly supports the fact that the fragment belongs to the late 13th century is the <τ>. The vertical line crossing and not rising flat on the horizontal line starts to be common only after the second half of the 13th century and becomes a true ascender only much later.



var (1r,20)

The other grapheme which becomes steadily more common in Northern Textualis only during the 13th century is <v>. Before this period <v> was the capital form and <u> the minuscule form. From the pre-gothic period on the other hand the <v> starts being used, in two forms, either the form that creates an ascender, and a smaller one that is within baseline and headline (Derolez, 2006, p. 94). In this fragment there are both allographs of this phoneme, used for both the normalized graphemes <v> and <u>. This grapheme became more common after the 13th century as well. In Old Norse script, this form was present as well as a form called insular, <ϥ>, taken also from the British Isles. The lack of insular <ϥ> in the text can also be used as a proof of dating, since the grapheme becomes obsolete around 1300 in Norwegian manuscripts (Seip 1954, 74-5).



ok (1r,8)

Finally, amongst the abbreviations, the only one that also appeared in the 13th century is the crossed Tironian note, <ε>, while in the 12th century and earlier there is, to abbreviate the same conjunction, either the non-crossed Tironian note or the ampersand (Derolez, 2006, p. 97).

To conclude, the palaeography of the text can indeed be used to help us giving a date to the fragment, albeit not entirely as precise as the one given by Rindal and Spørck. The grapheme <h> and <τ> can be used to set as a *terminus post quem* 1250, and the use of semi-uncial <f> even as an ending consonant can give at most a date before the early 14th century. Therefore, simply looking at the palaeography, the dating could be considered 1250-1300, but with a higher chance of being from the later part of this period.

1.2 Palaeography of NRA 5

NRA 5 is another fragment written in a Gothic script, albeit a far more calligraphic one than NRA 3. It is also a Northern Textualis Rotundus (Derolez 2006, 75) with the typical Scandinavian developments and characteristics. Namely, the presence of certain graphemes, such as the insular <ƿ> and the insular <ϥ> and their evolutions. The ductus is not fast, is quite precise, and the graphemes show very little variation in form. There are at least two types of serifs, flicked and flat which are present in intermitted cases on every ascender. This means that the same grapheme can appear with one type of serif in one case, and then the other one in the following case.

The fragment also features a high presence of *litterae notabiliores*, decorated initials and rubrics. The first one is generally done in a larger format (not always in majuscule) and red fillings, while the other ones are properly decorated initials, featuring different colours, for the most part red and different shades of green, which sometimes seems blue. The rubrics, on the other hand, are simply red. I am not fully sure the scribe of the main text and that of the rubrics are the same people, but I would suppose he or she is not the same person, since two graphemes, the insular <ϥ> and the <l> are quite different from those done in the main text. However, a different pen might also make those differences. Rindal and Spørck (2018, 31) have given a general dating between 1300-1325.



aτ (1r, 1)



aðum (1r, 12);

The grapheme <a> in this case is the one expected from a text which belongs in the given timeframe: there is no open <a> in the text, all those found are closed, either of a more boxed type, or just the normal <a> that closes the upper part. As noted by Seip, it is quite hard to find in the 14th century the

open <a> (Seip 1954, 116). However, in a few cases, we do find <ɑ>, which would become in Norway the most common by the end of that century. Finding it already in the text can be used as confirmation of at least a 14th century dating.

 **ɑc** (1r, 4)

The grapheme <c> is also in the form common at the end of the 13th and beginning of 14th century, a form that is far less curved (Seip 1954, 117).

 **eða** (1r, 1)

 **fem** (1v, 1)

The grapheme <e> can also be used for dating. From the 14th century onwards, the right side of the <e> is either finished with a very thin hairline or just left open (Seip, 1954, p. 117), and both can appear here.

 **parþ** (1r, 5)

The insular <ƿ> is still heavily in use in this period, this time with another evolution, the close insular <þ>, which is the only one present in the fragment. It helps, for dating, that the Carolingian <f> is not present at all. It reappeared in this period and by the end of the century would be the only one in use. The total lack of it, can help indeed setting the 1320s as the youngest dating possible.

 **fkıollðz** (2r, 3)

 **parðhus** (1v, 2)

The distribution of the different <s> also is very helpful for the dating. Between the late 13th century and early 14th, most manuscripts in Scandinavia and Europe feature only the half-uncial <f>, in any position. This trend changes in the new century, starting to feature back again the uncial <s>, which then becomes the standard, together with another, the 8-shaped <ε>, which is consistently featured in NRA 5 in the last position (Seip 1954, 120). As such, it is safe to say that the fragment is not even from the first few years of the 14th century, but maybe closer to the 1320s.

 **γapn** (2r, 17)

However, a grapheme that can create insecurities in the dating of the fragment is the insular <ʋ>. As stated by Seip, this grapheme becomes increasingly rare at the turn of the 14th century (Seip 1954, 74-5). It is therefore possible that it was still in use in certain *scriptoria*, such as one of the scribes here, and being the sole grapheme that create confusion, it can indeed be considered a conservative trait of the scribe rather than the norm.

 puu (1v, 5)

Another grapheme that can help for the dating is the <þ>, which in the early 14th century leaves the upper point of the bow open in many cases, not touching the straight line on the headline, and with a very short ascender, making it look like one of the forms of the insular <ƿ>: |ƿ| (Seip 1954, 120-121).

The abbreviations of the texts are not useful in the dating, since they are the same that can be found in earlier texts. It could have been helpful if the scribe used the Tironian note for the conjunction <ok>, but he always writes <oc> instead of using an abbreviation.

In conclusion, despite the insular <ʋ> that can create some problems in the dating, there is more than one clue that can help dating the fragment in precisely the timeframe given by Rindal and Spørck. It could be added that, considering the distribution of long <s> and 8-shaped <s>, together with the presence of <ɑ>, can pinpoint to the later part of this period, between 1310 and 1325.

1.3 Palaeography of NRA 6

The fragment NRA 6 is also written in Northern Textualis Rotundus, with the Western Scandinavian particularities, which have already been seen in NRA 3 and 5. Differently from the other two fragments, and the one to follow, this one has only been tentatively dated by Gustav Storm in *NGL 4*, while Rindal and Spørck did not consider it for their work on Magnus *Lagabøtes* Landslov. The tentative dating given is circa 1300 (Storm 1885, 766). The fragment features also several initials, and in this case the two colours used are red and blue. The red is also used for the *litterae notabiliores*, which are present many times throughout the fragment. This fragment also features rubrics, which in this case seem to be made by the same scribe, since there is no difference between the two writings other than the colour of the ink.

As usual, this section will analyse the palaeography of the fragment to see which graphemes and abbreviations can help in dating the fragment more precisely, or if what Storm assumed was correct or in need of correction.

 **ka** *ka*l (1r, 3)

The text has only one grapheme for <a>: the closed <a>. It is never open, but neither can it be called a boxed one. This form did appear originally around 1250 in Norway, but it still took a few decades before it reached a more common use. As Seip noted, it is, together with the boxed form, the one found in the majority of from the turn of the 14th century (Seip 1954, 70, 116).

 **dæ**me (1r, 1)

The grapheme for <d> used in the fragment is still the uncial <ð>, but in this case, the oblique shaft is so short that, while it extends above the headline, it only does very little. This practice was a bit more common around the end of the 13th century and beginning of the 14th, originally in French or British manuscripts, which does help confirming the tentative dating given by Storm (Derolez 2006, 87).

 **Ep** (1r, 1)

The grapheme used in this case for the insular <ƿ> is |p|, the one most similar to a <p>, with a closed bow on the baseline and a hairline creating a descender. This form became common, together with the form seen in NRA 5, only after 1300, albeit it was used for a relatively short period of time, since the double bowed form was the most common throughout the century, before disappearing in favour of the most common Carolingian <f> used elsewhere in Europe (Seip 1954, 118).

 **hinn** (1r, 5)

The grapheme <h> is the one that would be expected at this period, or rather, a mixture of the two main form: the <h> that close on the baseline with a hairline and the one that goes beyond the baseline, creating a descender, on the right stroke. In this fragment both characteristics are present at the same time in many cases. However, while is it possible to find open <h> with a descender, the opposite is not present. Therefore, the presence of a descender is more important than the closing with a hairline. It could be therefore argued that, since Seip affirms that the closed <h> became the most present in the 14th century, since the fragment might be from the beginning of the century, a co-existence of both forms could be expected (Seip 1954, 118). As Derolez points out, the ascenders of all types of <h> in Northern Textualis, are very short, as it is also here (Derolez 2006, 89-90).

 *fkiri* (1r, 4)

The position of half-uncial <f> is, as usual, very important for the dating. In the fragment we have both the uncial <s>, in the allographic form of the 8-shaped |ε|, and the half-uncial one. The distribution is in favour of the half-uncial <f>, but in final position there is almost only the uncial <s>, and even in a few cases at the beginning of a word and in one specific abbreviation, where uncial <s> is used for *silfrs*, while half-uncial <s> is used for all other cases, and, when the grapheme before is <i>, in word-final position. This shows, following both Seip and Derolez, that the text is at least from 1300, since at the end of the 13th century the half-uncial <f> is generally the only one used (Seip 1954, 120; Derolez 2006, 92-93).

 *til* (1v, 1)

 *at* (1r, 5)

The grapheme used for <τ> has two allographs, very similar. One has the horizontal line on the headline as the highest point, the other has a small point higher than the horizontal line. This last form, affirms Derolez, is common mostly after 1250 but only takes fully over in the 14th century (Derolez 2006, 93).

 *var* (1r, 4)

The grapheme used for <v> is not the insular <ϐ>, which started to disappear around 1300 (Seip 1954, 75), but the minuscule <v>, which does not normally rise above the headline, nor is it made of minims connected at the baseline, like <u>. It came from the gothic cursive script (Derolez 2006, 94). As Seip points, it took over the insular <ϐ> in all positions where it was used previously, which is often at the beginning of words and other positions as well (Seip 1954, 75).

 *æptir* (1r, 4)

 *ækkī* (1r, 6)

The ligature <æ> is written in two ways in the text, either very similar to modern day <œ>, or with a flick that comes out of the upper right part of the <α>. Both forms are attested after 1300, but the first one is not very common before the same date (Seip 1954, 121).



mēð (2r, 6)

As far as abbreviations goes, it is not common, before 1300 to find the abbreviated form *mz* for the word *mēð*, which however is present in the fragment (Seip 1954, 125). As with most other graphemes seen here, it is a strong helper in dating the fragment.

To conclude, the dating given by Storm seems correct, especially as far as the the earliest possible date, 1300. It is however possible to extend the possible dating to at least 1300-1325. Many of these elements seen became the norm around 1300, but there is nothing, as far as it is discernible, to say that the fragment is from precisely that period. Possibly, the very short uncial <d>, which was not commonly in use, can set as a *terminus ante quem* the turn of the century, but a more precise estimation is indeed not fully possible.

1.4 Palaeography of NRA 13

The fragment NRA 13 was divided into A and B but will be treated the same way. The scribe seems indeed to be the same person, as there is no major difference between the two parts. The palaeography of this fragment is very interesting, as it stands out from the former three analysed, as it has more characteristic graphemes which will be seen. It is also written in Textualis Rotundus, as it has a very limited number of serifs, only of the flicked type. The ductus, as far as I could see, was not entirely fast nor very calligraphic. It is not the extremely calligraphic, since many graphemes have a dislocation between the left side and right side, which is common when writing with a faster ductus, but at the same time the variation between the thicker and slimmer parts, typical of gothic writing, is always very precise. Moreover, some graphemes show hardly any variation, as the half-uncial <f>, which is always made in precisely the same way. Rindal and Spørck, and Storm as well, write that the fragment was written around 1320-1350 (Rindal and Spørck, 2018, 33; Storm 1885, 767).



aτ (1r, 11)

The grapheme for <a> is one of the most curious. It is what Seip calls the neckless <a>, which is simply made with a minim on the right that creates a bow from the headline. This bow is never closed, it stops once it reaches the baseline. This grapheme appeared in the first half of the 13th century and became by the end of the 14th century the only one present in the period. Seip cannot give a precise dating for the first appearance in Norway, but considering the dating given is surprising to find it as the only form present (Seip 1954, 116).



fram (1r, 20)



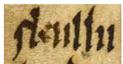
ffínico (2v, 27)

We can find both types of <f> in this fragment, although with the most obvious of divisions: insular <f> (of the double dotted type |f|) for the vernacular in Norwegian, and <f> for the Latin parts (although this fragment tends to write grapheme meant as initials twice, and therefore it appears as <ff>). As such, these two graphemes do not offer much in the dating, since the double dotted insular <f> was present even in the 12th century, but the appearance of the normal <f> among in this fragment makes for an interesting first in the four fragments investigated in this thesis.



Johannis (2v, 22)

Another interesting grapheme in use in this fragment is <J>. It is only used for names of people and in a few cases, as <i> in the preposition *i*. Haugen noted that it became more common after a while to use it in Scandinavia, not only as a numeral, but even in the preposition (Haugen 2013, 230).



fkullu (2v, 2)



fua (2v, 12)

The presence of both the uncial <s> and half-uncial <f> is not strange for the first half of the 14th century, and it is precisely what to be expected by a text of this age. However, there are two main types of half-uncial <s> in the fragment, the main difference being that in many cases, the line goes below the baseline, creating a short descender, |f|. This was not very common in the 13th century but became more common during the 14th century, and by the end of the century was the most common way to write this grapheme (Seip 1954, 120). The fragment has a quite even distribution of both, without any specific rule. It must be noted however that there is a dislocation in this form as well. Instead of simply curving, once it reaches the top of the ascender, there is a dislocation to the right. The type of uncial <s> present in the fragment is the most common of the 14th century, the 8-shaped <ε> (Seip 1954, 120).



vetar (2v, 3)

The grapheme for <τ> has the horizontal line almost fully to the right of the curving part, without any projection above this line. This grapheme, common in the 13th century (Derolez 2006, 93), seems

a bit out of place in this fragment, since by this point one should almost only find the <t> that projects above the horizontal line without going over the headline.



værdā (3r, 10)

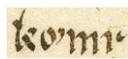


nʏ (1v, 2)

The grapheme <v> is present rarely in this text, only after initials or *litterae notabiliores*. In all other cases we find <u>. This is very common in the first half of the 14th century, since the palaeography of the period saw both the disappearance of the insular <v> and the introduction of this <v> (Seip 1954, 74-5). In one case we also find the insular <ʏ>, still in the same position as all other <v>, which is precisely the same shape as a <y> in this fragment but lacking any dot on top. The singular use of insular <ʏ> in favour of normal <v> or <u> is indeed useful for the dating, setting it, I would suggest, in the period Rindal and Spørck suggested.



ær (1v, 3)



kœmr (1v, 21)

The grapheme <æ> is very similar to the one seen in NRA 6, with <ɑ>, that is very similar to the normal <ɑ> of the entire manuscript, that bows down even more, creating an even more oblique stroke, from which an upward flick starts on the lowest part, reaching the height of the normal <ɑ>. The grapheme for <œ> is also very similar, but the flick starts at half the height of the <o>. Both forms are very common in this time (Seip 1954, 121).



mʒ (2r, 19)

As far as abbreviations are concerned, the only one which could help in the dating is still the *mʒ*, for *með*, which as stated for NRA 6, became common only after the beginning of the 14th century.

To conclude, there are many interesting graphemes in the fragment, but the ones that can help the most in the dating are the descending half-uncial <ʃ>, the neckless <ɑ> and the presence of <ɰ> in a few cases for initials and for the preposition *i*, all three elements much more common in the later part of the 14th century, but their use, combined with the use of conservative graphemes, like the one for <τ> and the very rare use of insular <ʏ> as well, speak of a period where these developments were becoming more common, yet the writing was still not fully changed, which is precisely the period that Rindal and Spørck gave, the first half of the 14th century. I am not fully sure that it can be considered from the middle of the century, but taking it as *terminus post quem* is possible

CHAPTER 2: THE ORTHOGRAPHY OF THE FRAGMENTS

The orthography is related to the palaeography, and while generally studied together, is another field of study. Palaeography investigates the written shape of the different graphemes, with what type of pen, and how the same grapheme, for example <p>, evolves with time in its execution. What never changes, however, is the fact that this grapheme means first and foremost the phoneme <p>, a plosive bilabial voiceless consonant. The orthography therefore analyses the relationship between the phonemes of a language and the reflection of these in the inventory of graphemes. I will give an example out of these four fragments. From around the 15th century there is, in Icelandic, a delabialisation of the phonemes /y/ and /y:/, which turn into /i/ and /i:/. This change can be seen in manuscripts from the 15th, 16th and 17th century manuscripts from Iceland, which have a very high variation between the graphemes <i>, <y>, <ý> and <í> (Bernharðsson, 2012, bls. 159). In other words, one linguistic change, delabialisation of the two phonemes /y/ and /y:/ is reflected in a variation between four graphemes.

To better show the evolutions that happened throughout the centuries and territories where Old Norwegian was spoken and written, this analysis will show the difference by taking examples both in their normalized forms and the actual forms we find in the manuscript. The normalized form is based on a reconstructed scholarly spelling of Old Norse, generally as it would have applied to Old Norwegian in the mid-13th century. The diplomatic forms show what is written in the manuscript, with the abbreviation expanded (Hagland, 2013, ss. 604-605). I have not taken examples from the facsimile editions, since it is very similar to the diplomatic, without the abbreviation expanded. Some general information on the most common orthographic conventions of each period of Old Norwegian do indeed exist, and, when needed, they will be mentioned.

There is technically no need to specify all the graphemes and phonemes of these fragments, since many of them are the same throughout the four fragments and, generally, in the whole period of Old Norwegian.

In the ensuing discussion, I will illustrate the phonemes of Old Norwegian in the earliest written phase with a selection of tables, of which tables 1-2 og 4-6 are based on Haugen (2018, 252-256, 274), and table 3 on Haugen (2001, 38). These tables can be taken as a reference point for the phonological development of the language during the 13th and 14th centuries. Note that the vowels in stressed position made a completely symmetrical system, as shown in table 1, but that due to a couple of mergers in the early 13th century, the vowel system became less symmetrical, as shown in table 3.

	front		back	
	unrounded	rounded	unrounded	rounded
high	/i/ /i:/	/y/ /y:/		/u/ /u:/
mid	/e/ /e:/	/ø/ /ø:/		/o/ /o:/
low	/æ/ /æ:/		/a/ /a:/	/ɔ/ /ɔ:/

Table 1. Vowels in stressed position in Old Norwegian in the mid-12th century

	front	back
high & mid-high	[i] /i/ [e]	[u] /u/ [o]
low	/a/	

Table 2. Vowels in unstressed position in Old Norwegian in the mid-13th century. Allophones are displayed in light grey colour.

After the symmetrical vowel system of the mid-12th century, two important vowel mergers take place: the short /e/ and /æ/ merge, and the long /a:/ and /ɔ:/ likewise. In normalized orthography, the former vowel is usually rendered as *e*, and the latter as *á*. This state is shown in table 3.

	front		back	
	unrounded	rounded	unrounded	rounded
high	/i/ /i:/	/y/ /y:/		/u/ /u:/
mid	/e/ /e:/	/ø/ /ø:/		/o/ /o:/
low	/æ:/		/a/	/ɔ/ /a:/

Table 3. Vowels in stressed position in Old Norwegian in the mid-13th century.

Tables 2 and 3 display the vowels of Old Norwegian between the 13th and 14th century, which is the period of time in which all four fragments were written down. There are two different tables, one for

the vowels in stressed position, and one for the vowels in unstressed position. This orthographic analysis will not see the differences between these two types of vowels, while it will be important in the linguistic analysis for the Vowel Harmony, where the allophones which appear in table 2 will be discussed at length.

One thing that I will not fully include in this analysis, but will be part of the linguistic analysis, is the evolution, present in all four fragments, which turns stressed /y/ into /i/ under the influence of the unstressed final /i/. Therefore every fragment has the prepositions *fyrir* and *yfir* turn into <firir>.

Since the phonemes /u/, /u:/ and /w/ are rendered throughout the four fragments always as either <u> or <v> (although sometimes in its allographic forms |v|), I have decided to not consider it among those graphemes and phonemes who need a more thorough analysis. These are, however, the only vowels (and semivowels) who are constant in the fragments. Some examples, taken from NRA 5, are:

<v>	vmbod̥z̥f maðz̥	/u/	<i>umbod̥smaðr</i>
<u>	huf (1r, 8)	/u:/	<i>hús</i>
<v>	v̥ið (1r, 22)	/w/	<i>við</i>

front		back
unrounded	rounded	rounded
/æi/	/øy/	/ɔu/

Table 4. Diphthongs in Old Norwegian in the mid-13th century.

The diphthongs shown in table 4 are rendered all three of them with two graphemes, as it would be expected. They are of central interest for the linguistic analysis, since they show a degree of variation which is important for the possible dating and the dialect.

	labial		coronal		dorsal		laryngeal
	unvoiced	voiced	unvoiced	voiced	unvoiced	voiced	
nasal	/m/		/n/		[ŋ]		
plosive	/p/	/b/	/t/	/d/	/k/	[g] /g/	
fricative	[f] /f/ [v]		[θ] /θ/ [ð]			[ɣ]	/h/
			/s/				
vibrant			/r/				
lateral			/l/				
semivowel	[v]				[j]		

Table 5. Consonants in Old Norwegian in the mid-13th century. Allophones are displayed in light grey colour.

The consonants shown in table 5 are slightly more stable than the vowels and are therefore of less interest for both the linguistic analysis and the orthographic analysis. Moreover, since both the International Phonetic Alphabet (IPA) and the Old Norwegian script are both based on the Latin alphabet, most graphemes and phonemes use the same symbol. The exceptions are:

- /w/ is generally written in the normalized forms as <v> while in the manuscripts (and also all four the fragments in this thesis) there is many instances <u> as well.
- /j/ is rendered as <j> in normalized texts, but in the manuscripts, we mostly find <i> and its allographs |i| and |j|.
- The fricative allophone [ɣ] of /g/ is, in some manuscripts, written as <gh>. It will be noticed when it appears.
- The phoneme /θ/ and its allophone [ð] are distinguished in all four fragments, with <þ> for the voiceless allophone (which is always in word-beginning position), and <ð> (or <d>) in the other positions.

- the allograph [ɲ] of the phoneme /n/ is written down as <n> both in normalized forms and in the manuscripts from Medieval Scandinavia.

Furthermore, another noticeable aspect of manuscripts which are written in Old Norse (and the four fragments are no different in this), is the high degree of variation regarding long and short consonants, where long consonants are written with one single grapheme or short consonant written with a repetition of the grapheme, which generally indicates that they are long. The consonant who is most commonly “victim” of this phenomenon is <n>, but it is never the only one: NRA 6 and 13 especially have repeated cases of <l>, <t>, <k> and even in rare cases <r>. Some examples of this phenomenon are:

fkilldi (NRA 6 1r, 12), mæte (NRA 3 2r, 9), fuarra (NRA 13 1r, 1), krifcín (NRA 5 1r, 2)	<i>skilði, mátti, svara, kristinn</i>
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2.1 The orthography of NRA 3

The orthography of this fragment is a combination of both conservative and newly developed forms from the period identified in the palaeography chapter. It will start from the vowels, move to the diphthongs later and finish with the consonants.

The grapheme <a> was used for two vowels: /a/, and /ɔ:/, written in normalized old Norse as <á>. The only one of interest for the future analysis is /ɔ:/, whose evolution will be seen in the paragraph concerning the merger of /ɔ:/ and /a:/. The examples are:

Grapheme	Example	Phoneme/allophone	Normalized
<a>	farenn (2v, 17)	/a/	<i>farinn</i>
	Baðer (1v, 10)	/ɔ:/	<i>báðir</i>

The grapheme <æ> was used for /æ:/, written in normalized spelling as <ǣ>, and /e/, generally written as <e> in normalized spelling. The examples are:

<æ>	ætlan (1r, 16)	/æ:/	átlun
	Hvær (1v, 28)	/e/	hverr

The grapheme <e> was used for /e/, written in normalized spelling as <e>, /æ:/, written in normalized spelling as <æ>, which shows therefore, the confusion present in the orthography of this period in comparison to the normalized spelling, since these are the same phonemes used for <æ>. However, it was also used for another phoneme, namely /e:/, which is always written in the text with <e>. The examples are:

<e>	þeffom (1r, 11)	/e/	þessum
	þrendom (1r, 11)	/æ:/	frændum
	fe (2r, 8)	/e:/	fé

The grapheme /i/ was used for /i/ and /i:/, normalized as <i> and <í> and for the phoneme /j/, normalized with <j>, which is always followed by another vowel. The examples are:

<i>	brigðir (1v, 4)	/i/	brigðir
	flíku (2r, 24)	/i:/	slíku
	bíoða (1r, 22)	/j/	bjóða

The grapheme <y> is used for two phonemes, <y> and <y:>, which are normalized, respectively, with the graphemes <y> and <ý>. The examples for each are:

<y>	býgia (2v, 16)	/y/	byggja
	nýtτ (2v, 8)	/y:/	nýtt

The grapheme /o/ has three uses: obviously, the two phonemes /o/ and /o:/, which are normalized with the graphemes <o> and <ó> respectively, but also /ɔ/, normalized as <ɔ>. Examples are:

<o>	boðeτ (2r, 2)	/o/	<i>boðit</i>
	noττ (2r, 4)	/o:/	<i>nótt</i>
	iozð (1r, 19)	/ɔ/	<i>jørð</i>

The grapheme <œ>, written here with the allograph |œ|, has mostly the use of /ø/ and /ø:/, normalized respectively as <ø> and <ø̇>. In one case, which is important for the linguistic analysis, we have a grapheme for the diphthong /øy/, which is normalized with <ey>. One example for each phoneme is:

<œ>	kœmr (1v, 22)	/ø/	<i>kømr</i>
	fœkianðe (1v, 10)	/ø:/	<i>søkjandi</i>
	kœpti (2r, 10)	/øy/	<i>keypti</i>

The three diphthongs of Old Norwegian are treated separately since they are all three particulars in this fragment.

The allographs |ei| and |æi| of the graphemes <ei> which are the normalized forms of the diphthong, are treated together because they are used only for this diphthong and will be of importance in the linguistic analysis.

<ei> and <æi>	eig1 (1r, 10)	/æi/	<i>eigi</i>
	æig1 (1r, 18)		

The graphemes <au> which is the normalized form of the diphthong /ɔu/, has different graphic representation in this fragment: <au>, and <ou>. This last form in particular is important, since it is a strong trait of South-eastern dialects and writing styles in 13th-14th century Norway (Rindal and Spørck 2018, 32; Seip 1954, 78). Moreover, we find these graphemes in one case for the vowel <ɔ>, normalized with <ɔ̇>. This is a quite conservative spelling for this phoneme and very common in the early 13th century (Seip 1954, 78).

<au> and <ou>	kaup (2v, 23)	/ɔu/	<i>kaup</i>
	nouzum (1v, 9)		<i>nautum</i>
	haulfu (2v, 21)	/ɔ/	<i>hɔlfu</i>

The last important graphemes for the diphthongs are <oÿ> and <oÿ>, used mostly for the diphthong /ey/. They also have two other uses in the fragment: for /ɔu/ in 2 cases, for /e/ in one case (which is treated in the linguistic analysis).

<oÿ> and <oÿ>	koÿpt (2v, 21)	/øy/	<i>keypt</i>
	uerðoÿrum (1r, 4)	/ɔu/	<i>verðaurum</i>
	hoÿlgu	/e/	<i>helgu</i>

The consonants show less evolutions. Most cases feature the same consonants that editors would use when creating a normalised edition. Of course, there are the allographs which have been seen in the palaeographic paragraph on this fragment, but other than that, whether a half-uncial |f| or an uncial |s| is present, it still represents the same phoneme, /s/. There are small exceptions, but even those are quite normal in manuscripts:

The grapheme <v> is used in rare cases for the phoneme /f/. This is no surprise: the phoneme /f/ had an allophone when positioned between vowels, /v/. The scribe does not always use the grapheme <v> for this allophone. One example for this double use is:

hava (1v, 20), haṽa (2r, 15)	<i>hafa</i>
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The grapheme <z>, which has two allographic forms in this fragment, |z| and |z̥|, is used for: <sk> <ds>, <z> (which phonologically should be considered the affricate /ts/), and <s>. Except for the particular use, which will be seen in the linguistic analysis, connected to the reflexive forms, and the affricate /ts/, the other forms are far rarer than the more common orthographies:

<z> and <z>	andez (2v, 19)	<sk> /sk/	<i>andisk</i>
	lanz (2v, 3)	<ds> /ds/	<i>lands</i>
	utbeizlu (2v, 11)	<z> /ts/	<i>útbeizlu</i>
	manz (1v, 20)	/s/	<i>manns</i>

2.2 The Orthography of NRA 5

Just like the analysis of NRA 3, this section will look into the different orthographic decisions used by the scribe of NRA 5. It will follow the same process of NRA 3, starting from the vowels, then the diphthongs and finally the consonants.

The grapheme <a>, in the forms seen in the palaeographic analysis, is used for not only /a/ and /ɔ:/, which are normalized with <a> and <á>, but also for /ɔ/, which is normalized with <ɔ>, which is important for the linguistic analysis. The examples are:

<a>	manna (1r, 1)	/a/	<i>manna</i>
	rað (1v, 20)	/ɔ:/	<i>ráð</i>
	mannum (1r, 12)	/ɔ/	<i>mɔnnum</i>

The grapheme <æ> is used for two phonemes, /æ:/, which is normalized as <æ>, and /e/, which is normalized as <e>. Other than the two, which is common for a manuscript of the time, we also have it in a few cases instead for the phoneme /ø/. Two examples are:

<æ>	mælt (2v, 21)	/æ:/	<i>mált</i>
	ftæpnu (1r, 23)	/e/	<i>stefnu</i>
	ærtogum (1v, 28)	/ø/	<i>ørtogum</i>

The grapheme <e> is used for the same phonemes seen in NRA 3, namely /e/, /æ:/ and /e:/, normalized as <e>, <æ> and <é>. Some examples are:

<e>	lengz (2v, 12)	/e/	<i>lengr</i>
	ner (1v, 19)	/æ:/	<i>nær</i>
	tre fkiollðz (2r, 3)	/e:/	<i>tréskjöldr</i>

The graphemes <ɪ> and <í>, are used for /i/ and /i:/, normalized as <i> and <í> and for the semivowel /j/, normalized as <j>. The accent on the grapheme does not correspond to the accent used for the lengthened vowel, it was used to distinguish the |ɪ| from the other minims <m> and <n>. Some examples are:

ɪ and í	gerízτ (3v, 5)	/i/	<i>gerísk</i>
	níðingf værk (3r, 5)	/i:/	<i>níðingsverk</i>
	þjópa (3r, 7)	/j/	<i>þjófa</i>

The grapheme <y> is used in the fragment for both /y/ and /y:/, normalized as <y> and <ý>. Some examples are:

<y>	hýgðz (3r,17)	/y/	<i>hyggsk</i>
	týnir (3r, 18)	/y:/	<i>týnir</i>

The grapheme <o> is used for three different phonemes. The obvious /o/ and /o:/, normalized as <o> and <ó>, but also the less obvious /ɔ/, normalized as <ɔ>. The reason why some /ɔ/ are rendered with <a>, and others with <o>, is very important in the linguistic analysis. Some examples are:

<o>	foða (1v, 14)	/o/	<i>sofa</i>
	bondanum (2v, 23)	/o:/	<i>bóndanum</i>
	fkiollð (2r, 7)	/ɔ/	<i>skjöld</i>

The grapheme <œ>, in another allographic form |ó| is used in most cases for two phonemes, the /ø/ and /ø:/, normalized as <ø> and <ø>. In one single case, the grapheme is used for the phoneme /æ:/. The examples are:

<œ>	ðxi (2r, 6)	/ø/	<i>øxi</i>
	bðnðr (1v, 5)	/ø:/	<i>bðnðr</i>
	nðzfr (1v, 23)	/æ:/	<i>nástr</i>

The graphemes used for the diphthongs are very important as well:

The different allographs |e|, |eí|, |æ| and |æí| are all used in the fragment for the diphthong /æi/, normalized with as <ei>. The fragment has some cases where these graphemes are used instead of the normalized <é>. This will be explained in the linguistic analysis. Some examples are:

<ei>	reiða (1r, 26)	/æi/	<i>reiða</i>
	gzæiða (1v, 27)		<i>greiða</i>
	eín (2r, 2)		<i>ein</i>
	læígu (2r, 6)		<i>leigu</i>
	ðzæípír (3r, 23)	/æ:/	<i>drápir</i>

There is one rendering, <ðý>, throughout the text for the diphthong /øy/, normalized as <ey>. One example of it is:

<ðý>	ðýrí (2v, 4)	/øy/	<i>eyri</i>
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The last rendering, <au>, is also always used for the diphthong /ou/, normalized as <au>. One example would be:

<au>	nauðíg (3v, 20)	/ou/	<i>nauðig</i>
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Concerning the consonants, the orthography is fairly consistent, presenting very little worth of notice. Most of the differences between the actual fragment and the normalized orthography are quite common throughout the history of Western Scandinavian manuscripts: just as in NRA 3, there is a small number of times where the scribe used the graphemes <v> and <f> (both in insular forms) interchangeably. Differently from NRA 3, where the scribe used <v> instead of <f> in a few cases,

here both graphemes are used for the opposite. This orthographic trait is, however, not particularly common. One example for each is:

<f>	hærboðf oꝛþær (1r, 17)	/w/	<i>herboðsǫrvar</i>
<u>	hueruir (2v, 8)	[v]	<i>hverfir</i>

In the text the digraph <gh>, which is generally used for the fricative allophone of /g/, [ɣ], can be found. In both cases, it does not have the value of the allophone, since it's in final position, while the allophone was present only between vowels, as in *veg*, rendered as *vegh* (2v, 26).

The use of <z> in this fragment is quite varied. However, it's clear from a quick glance, that is mostly used in two cases: for the reflexive forms (see 3.16.3), and in a few cases for word-final position, although mostly in compound words at the end of the first word. Three graphemes can be beside <z>: <d> and <ð> when is in end position, and <τ> when is a reflexive. Except where we do not find it with the graphemes close, there is no other use of the <z> present in the fragment, not even when we would find it in most other manuscripts, as in the word <þæiflu menn> (2v,1), which is normalized as *veizlumenn*. In general, the grapheme is used for both the phoneme /s/, for the cluster <sk> and for the affricate /ts/, which is generally normalized with <z>:

<z>	heraðz manna (1v, 2)	/s/	<i>heraðsmanna</i>
	fækkiazτ (1v, 7)	/sk/ > /st/	<i>sekisk</i>
	herlenzkír (1v, 10)	/ts/	<i>hérlezkír</i>

2.3 The orthography of NRA 6

Similar to the previous fragments, the orthography of NRA 6 will be analysed in order to see what characters have variation between the normalized edition and the diplomatic. These will be of importance for the linguistic analysis. It will therefore follow the same process.

The grapheme <a> is used for the /a/, /ɔ:/, normalized as <a> and <á>, and for a part of the /ɔ/, normalized as <ǫ>. Moreover, in one case, <a> is used for the phoneme /æ:/, normalized as <æ>. As with NRA 5, this last one is very important for the linguistic analysis. The examples are:

<a>	fmiðar (3v, 4)	/a/	<i>smíðar</i>
	vatnom (5r, 13)	/ɔ:/	<i>váttum</i>
	mannum (1r, 19)	/ɔ/	<i>mǫnnum</i>
	malr (1r, 9)	/æ:/	<i>mált</i>

The grapheme <a> is used for the phonemes /æ:/ and for the phoneme /e/, normalized as <é> and <e>. It must be noted that <a> is much more common for <e>, than <e> is for <é>. Therefore, the majority of /e/ appear as <a> in the fragment, especially in words that are longer than one syllable, but never as an ending vowel, where the <e> is the only one used. There is a case where the grapheme is used for the phonemes /ø/ normalized as <ø> Some examples are:

<a>	æfter (5r, 6)	/æ:/	<i>ástir</i>
	þællr (6v, 2)	/e/	<i>fellr</i>
	ærtogum (5r, 5)	/ø/	<i>ørtogum</i>

The grapheme <e> is used for the /e/, /æ:/ and /e:/, normalized as <e>, <é> and <é>. As usual, /e:/ is steadily written with <e>. There is only one case of /æ:/ written with <e> in the whole fragment. The examples are:

<e>	eþtir (4r, 15)	/e/	<i>eftir</i>
	rener (6r, 8)	/æ:/	<i>ránir</i>
	reclauf (4v, 2)	/e:/	<i>rétlaus</i>

The grapheme <i>, with the allographs |i|, |í| and |j| are used for the phonemes /i/, /i:/ and /j/, normalized as <i>, <í> and <j>. Some examples are:

<i> and <j>	vínna (5v, 1)	/i/	<i>vinna</i>
	jnnan (2v, 1)	/i/	<i>innan</i>
	fiðar (3r, 12)	/i:/	<i>síðar</i>
	kræþja (5v, 6)	/j/	<i>krefja</i>

The grapheme <ý> is used for the phonemes /y/, /y:/ and sometimes for /i/ (although it is more common for this scribe to use <ı> and <í> than the opposite), normalized with <y>, <ý> and <i>. A <y> without the dot (probably without it because it is a *littera notabilior*), is also used once for /j/. Some examples are:

<ý>	ýrkır (1r, 19)	/y/	<i>yrkir</i>
	b2ýtr (2v, 8)	/y:/	<i>brýtr</i>
	mýkıt (1v, 14)	/i/	<i>mikit</i>
	yarll (1r, 12)	/j/	<i>jarl</i>

The grapheme <o> is used for different phonemes: /o/, /o:/, /ɔ/, and in a few cases for /ø:/, which are, respectively, normalized with <o>, <ó>, <ɔ> and <ø>. Some examples are:

<o>	kono2 (3v, 14)	/o/	<i>konur</i>
	fkılla ðome (3r, 9)	/o:/	<i>skiljadómi</i>
	mo2k (2v, 3)	/ɔ/	<i>mɔrk</i>
	bond2 (3v, 18)	/ø:/	<i>bøndr</i>

The grapheme, <œ>, in the allographic form |ð|, is used only for one grapheme, /ø:/, which is normalized with <ø>. One example is:

<œ>	bðta (6v, 16)	/ø:/	<i>bøta</i>
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The graphemes used for the diphthongs of Old Norwegian are the ones seen until now. They will be treated separately as it was done before:

The graphemes <ei>, with its allographs |eı|, |æı| and |æí| are used all four with no specific difference for the diphthong /æi/. In two cases, the diphthong is rendered with a single vowel, and the reason for this will be in the linguistic analysis. The opposite also happens, with one word that should have a single grapheme but instead has this one. This will also be explained in the linguistic analysis. An example for each allograph is:

<ei>	eig1 (3v, 12)	/æi/	eigi
	æið (3r, 1)		eið

The diphthong /øy/, normalized with the graphemes <ey> is written only and constantly throughout the fragment as <æý>, which makes this fragment different from the other ones seen before. One example is:

<æý>	kæýpɾɾɪ (3r, 10)	/øy/	keypti
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The diphthong /ou/, normalized with the graphemes <au> is written only with the graphemes /au/. One example is:

<au>	þirir bauð (5r, 12)	/ou/	fyrirbaud
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Concerning the consonants, there are of course the classic problems seen earlier, like the doubling of graphemes where there is no long consonant, and the opposite as well. Moreover, there are a few cases the semiconsonant /j/, which is present in the text generally as <ɪ> or <í>, dropped before another vowel. One example is:

biozgvinar (3v, 15)	björgvinjar
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There is one single case of the digraph, <gh>. This digraph was sometimes used for the fricative allophone of /g/, [ɣ], which is always found in Old Norwegian between two vowels. However, the case in which we find it here, is not between vowels:

nozæghs (1r, 9)	noregs
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As for the previous fragments, the grapheme <z> is the one with most variation. Differently from the previous two fragments, this grapheme is used only once for the reflexive forms (see 3.16.3) In general, the grapheme is used for the ending <s> of the normalized forms. However, it is never preceded by a vowel, but only when bordering another consonant. It is preceded by <ð> and <n>, once by <l>, and

in the case of the reflexive form is preceded by <g>. All these graphemes are used for phonemes which are all voiced consonants. It could therefore mean that the use of <z> is to denote the presence of the voiced alveolar fricative [z], a possible allophone of <s>. However, this is only a hypothesis. In some of these cases, including the reflexive form already given, it is followed by the grapheme <s>. The examples are:

<z>	nauðz (2r, 4)	[z]?	<i>nauðs</i>
	mannzf (2v, 9)	/s/	<i>manns</i>
	gullz (6r, 5)	/s/	<i>gulls</i>

2.4 The orthography of NRA 13

The orthography of NRA 13 presents the same problems and solutions as the other three, especially NRA 5 and 6. As usual, the orthographic analysis will start with the vowels, both normal and diphthongs, and then the consonants.

The phoneme <a> is used for the phonemes /a/, /ɔ:/, as usual, and also in a few important examples related to the back mutation that will be seen later, with the vowel /ɔ/. The normalized graphemes for these three phonemes are: <a>, <á> and <ɔ>. There are some cases of <a> where the normalized spelling has <a>, for the phoneme /e/. The examples are:

<a>	lagha ðomí (1r, 29)	/a/	<i>lagadðmi</i>
	mall (1v, 24)	/ɔ:/	<i>mál</i>
	matannungar (2r, 8)	/ɔ/	<i>matɔnnungar</i>
	batr (4v, 21)	/e/	<i>betr</i>

The grapheme <æ> is used for the phonemes /æ:/ and /e/, normalized as <é> and <e>. It must be noted that this fragment features an extremely high number of <æ> instead of <e>, and this will be of importance in the linguistic analysis. Even short monosyllabic words as *ef* and *er* are many times turned into <æp> and <ær>. Furthermore, there is a case where this phoneme is used for /ø:/, normalized as <ø> and one case where is used for /e:/, normalized as <é>. The examples are:

<æ>	hælgða (2v, 22)	/e/	<i>helga</i>
	mægðum (4r, 6)	/æ:/	<i>mægðum</i>
	gomgæfi (2v, 6)	/ø:/	<i>gaumgófi</i>
	hær (3r, 28)	/e:/	<i>hér</i>

The grapheme <e> is used very rarely for the phoneme /e/ and its normalized form <e>, almost always for the phoneme /e:/ and its normalized form <é> and never in this fragment for /æ:/ and its normalized form <æ>. As mentioned, the grapheme is generally rare in this fragment. Some examples are:

<e>	nema (1v, 31)	/e/	<i>nema</i>
	logreǫ (3v, 8)	/e:/	<i>logréttu</i>

The grapheme <i> and <j>, which in this fragment uses the allographs <ı>, <í> and <J>, is used for the phonemes /i/, /i:/ and /j/ and their normalized forms <i>, <í> and <j>. <J> is only used in capitals and, except in one word, always for names of people. The examples are:

<i> and <j>	lıfır (1v, 4)	/i/ and /i:/	<i>lıfır</i>
	Jamnan (2v, 24)	/j/	<i>jafnan</i>
	riufa (3v, 2)	/j/	<i>rjúfa</i>

The grapheme <y> is used only for the phonemes /y/ and /y:/, which have as their respective normalized forms <y> and <ý>. The examples are:

<y>	fýrniz (1v, 15)	/y/	<i>fyrnisk</i>
	fýflu mæn (3r, 21)	/y:/	<i>sýslumenn</i>

The grapheme <o> is used for the phonemes /o/, /o:/, /ɔ/ with their respective normalized forms <o>, <ó> and <ɔ> but also in rarely for the phoneme /ɔ:/, which is generally normalized as <á>. Moreover, in many cases it also used for the phoneme /ø:/, normalized with <ø>. The examples are:

<o>	umboz menn (2r, 4)	/o/	<i>umboðsmenn</i>
	bokina (2r, 22)	/o:/	<i>bókina</i>
	nokot (3r, 7)	/ɔ/	<i>nókkut</i>
	uozo (3v, 13)	/ɔ:/	<i>váru</i>
	ðome (1r, 23)	/ø:/	<i>dømi</i>

The grapheme <œ>, in its allographic form |ð| is used in the fragment for the phonemes /ø/ and /ø:/, with the normalized forms <ø> and <þ>. The examples are:

<œ>	kómr (3v, 20)	/ø/	<i>kømr</i>
	fómð (2r, 27)	/ø:/	<i>sþmd</i>

The graphemes for the diphthong /æi/, which is normalized with <ei>, are only <æi> and <æí> throughout the fragment. As such, the examples are:

<ei>	eigandi (1r, 11)	/æi/	<i>eigandi</i>
	þæím (2v, 15)		<i>þeim</i>

The graphemes for the diphthong /øy/, normalized with <ey>, is only <ðý>. One example is:

<ðý>	lðýfa (1r, 23)	/øy/	<i>leysa</i>
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The graphemes <au> are used throughout the fragment for the diphthong /ɔu/, also normalized as <au>. In one case we find <au> for the phoneme /ɔ/ and once we have the opposite, the use of <o> for /ɔu/. Both these last two cases will be seen in the linguistic analysis. The examples are:

<au>	dauða (4v, 26)	/ɔu/	<i>dauða</i>
	laugum (2r, 9)	/ɔ/	<i>lɔgum</i>

The consonants of the fragment feature the same issues that we have seen in the other fragments.

As usual, there is the use of <v> and <u> instead of <f> for the allophone [v] of the phoneme /f/. A couple of examples are:

<u>	æruíngia (1v, 25)	/f/	<i>erfíngia</i>
<v>	Ovan (1r, 25)	/f/	<i>ofan</i>

The fragment features an higher amount of the digraph <gh> than the others, and except in two cases where it is preceded by a vowel but not followed by one, the other uses are all for the allophone [ɣ] of the phoneme /g/. Two examples are:

<gh>	Jonf uaku ðagh (2v, 7)	/g/	<i>jónsvokudag</i>
	lagha ðomi (1r, 29)	[ɣ]	<i>lagadómi</i>

As usual, the consonant that has more varied uses is <z>. It is used both for the reflexive forms, which will be seen later in the analysis, and for other uses. Additionally, the grapheme is used both alone and in combination with other graphemes. Among those graphemes there is the <s>. In combination with this grapheme, the <z> precedes the <s> in three cases. In other cases, it is used simply instead of <s>, indicating maybe, as I stated for NRA 6, a possible allophone of /s/, [z], since the sound preceding the <z> is almost always voiced (there is as a matter of fact two instances of <z> preceded by graphemes that are used for voiceless phonemes). In one case, it simply stands for the affricate /ts/, while in two cases it is used instead of the clusters <ðs> and <ds>. Some examples are:

<z>	líma laz (4v, 27)	/ts/	<i>limaláts</i>
	gæzflo (1r, 18)	[z]	<i>gázflu</i>
	lanzflinf (2r, 18)	/ds/ and /ðs/	<i>landsins</i>
	Noregs þingz (3v, 22)	/s/	<i>Noregsþings</i>

This analysis will be very useful for a better understanding of the examples taken in the following chapter, and as such, it stands as a middle ground between the palaeographic analysis and what will follow. It will make more understandable the explanation on many of the linguistic developments which will be explained later.

This chapter also showed how free were the scribes of this period were in writing the different phonemes of their own language. As mentioned in the introduction, there was no set of rules on how to represent the sound of any language during the middle ages in Europe, but rather, conventions. These conventions could be followed, and they mostly were, but could also not be followed. Moreover, it shows how the different scribes reacted when a new linguistic evolution appeared in their spoken language, and how, in different ways, they decided to render them in the written language. Many times, they went for the old conservative transcription, as it was done by the scribes of NRA 3 especially, but also by the others. Other times, they dared to transcribe differently, as it can be seen in relation to the grapheme /ɔ:/ or /ø(:)/, where each went for their way, which was still based on convention, but different ones.

With these orthographic conventions in mind, it is now time to see the main and most interesting part of this analysis: the linguistic analysis

CHAPTER 3: LINGUISTIC ANALYSIS

The linguistic analysis is the major and longest part of this master's thesis. As stated in the introduction, its main purpose is to discover which dialects the different scribes of these documents wrote/spoke in. However, the list here shows that many of these traits happened long before the time of writing, which is suggested by Rindal, Spørck and Storm. Nevertheless, they are still useful, since there are relatively few fragments kept in Norway in Old Norwegian. The more is known about them, the better, as they can therefore be used for future research on those linguistic evolutions, among other things.

While Storm never mentions the possible dialects of the fragments, Rindal and Spørck wrote short descriptions of NRA 3, 5 and 13 (2018, 32-33). NRA 6 has no other description other than the one by Storm (1885, 766). As far as the author of this thesis is aware of, this analysis will be the first that tries to investigate the origin of the fragment.

Rindal and Spørck, in their descriptions, point towards some features that are also part of the analysis, and will be treated in their respective paragraphs:

- NRA 3: “Språket er tradisjonelt norsk, men eit par eksempel på *ou* for /au/ kan peike mot søraustlandsk²”.
- NRA 5: “Språket er truleg søraustlandsk, for det har eksempel på *a* som svarabhaktivokal (*brennar*) og på *æi* for *e* framfor *i* i neste staving (*gæirir, hæifir*)³”.
- ... NRA 13: “Språket er norsk, vi finn former som *døme, faður, løypr, ræzslø*, og det finst ingen særlandske former. Det er vanskeleg å bestemme språket nærmare⁴”.

The descriptions, as it can be seen, are not particularly detailed. However, since they give some indications on what to look for, we can therefore divide the four fragments into two major groups: Those that need confirmation of what Rindal and Spørck stated, namely NRA 3 and 5, and those where the analysis will try to find more in detail whether they can be ascribed to at least one area of the Norwegian Kingdom of their time. As far as dating goes, there are already two suggestions of possible dating for NRA 3, 5 and 13, both the one by Storm and the more recent ones by Rindal and

2 The language is traditional Norwegian, but a couple of examples of *ou* for /au/ can point towards South-eastern Norwegian. Translation by Valerio Nazario Rossetti

3 The language is truly South-eastern Norwegian, since there are examples of *a* as a svarabhakti vowel (*brennar*), and of *æ* for *e* in front of *i* in the next syllable (*gæirir, hæifir*). Translation by Valerio Nazario Rossetti.

4 The language is Norwegian, we find forms such as *døme, faður, løypr, ræzslø*, and there are no specific Icelandic forms. It is hard to detail it further. Translation by Valerio Nazario Rossetti.

Spørck, while for NRA 6 there is only the analysis by Storm. These dating will be, just like the dialects suggested earlier for NRA 3 and 5, taken into consideration and either proved or disproved (to the extent that this is possible). Furthermore, the dating processed through this analysis will combine with the ones done for the palaeographic analysis in the first chapter.

The traits that will be taken into consideration are among the ones discussed in Haugen's chapter on Old Norwegian (2018). These are, for the most part, the traits that divide Old Norwegian from Old Icelandic. Some of them are very helpful for specific dialects, others mostly for the dating, while others are old enough to give technically no help for either but are still of importance as they are Norwegian rather than Icelandic. In the 13th and 14th century Norway, there was a relatively high number of Icelandic scribes. The contact between Norway and Iceland was at its peak throughout the late Middle Ages, as attested both by historians and literary critics (Jakobsson, 2000, p. 73). In addition, they might save time during further research on both linguistic and philological matters.

The traits chosen are the one that can be attested in the texts. For instance, the phonological trait, the loss of /w/, written by medieval scribes as <v> or <u>, before /r/ is not present in the present analysis because none of the four fragments feature any word that might or might not have this trait like e.g. *vrangr*, *vreiðr*, or *vreka*. The same fate is shared with many of the morphological traits, of which only two have been chosen for this chapter. The other ones are unfortunately not present in the fragment.

The traits chosen for this analysis, which will be explained in each section below, are:

- Vowel harmony
- Back mutation
- Epenthetic vowel
- Monophthongisation
- Diphthongisation
- Labialisation
- Delabialisation
- Progressive front mutation
- Merger of /e/ and /æ/
- Merger of /a:/ og /ɔ:/
- Reduction of unstressed /a/ into /ə/
- Loss of /h/ in front of /l/, /n/ and /r/
- Palatalisation of /g/ and /k/

- Assimilations and losses within consonant clusters
- Negation particles *ú-* and *ó-*
- Evolution of the reflexive endings of the verb

These traits are not the only possible linguistic phenomena that can be analysed in the four fragments selected for the present thesis, but they are a good foundation to begin with.

The recognised dialects of Old Norwegian are the following (with approximate, modern regions):

- Trøndsk, which means the dialect present in modern Trøndelag and even further east into Jämtland, modern day Sweden;
- South-eastern Norwegian, meaning the area of Viken, Oslo, Telemark and Vestfold;
- North-eastern Norwegian, meaning the area of modern day Innlandet;
- South-western Norwegian, meaning the area of Hordaland, Rogaland, and Agder.
- North-western Norwegian, meaning the area of Sognfjord and Møre og Romsdal.

3.1 Vowel harmony (vokalharmoni)

Vowel harmony is one of the most complex and important traits of Old Norwegian. It has been analysed in an abundance of works, from runic inscription to manuscripts. It can be considered one of the most common and visible differences between any type of Old Norwegian manuscript and the normalized counterparts. It is also one of the major differences between Old Norwegian and Old Icelandic, since this feature does not appear in Icelandic texts from the same period. Although originally discovered by Marius Hægstad, one of the first and major linguists of Old Norwegian, it has been expanded and discussed by later scholars as well. Hægstad recognised it in Trøndsk, where he found it in charters and other documents produced there, and even as far as some areas now in Sweden (Hægstad, 1899, p. 23). Since then, several scholars and linguists have expanded on the discovery made by Hægstad. While he believed the phenomenon was present all over Norway except in the South-west, several scholars have argued that the evolution was present there as well. Rindal studied the phenomenon with particular interest in North-eastern dialects. He focused particularly on the charters from Oppland (Rindal, 1981). Hægstad found it present also in North Vestland, and in the whole Eastern Norway.

The most discussed findings by Hægstad are around the presence or lack of Vowel Harmony in Outer South-west and Inner South-west Norway. He believed it was not present in either of those places but was criticised for his opinion and proved partly wrong. Rindal (1984) and Housken (1954)

critiqued the findings by Hægstad and showed the presence of vowel harmony in these parts of Norway, so it is now considered a generally Norwegian trait of Old Norse.

Alexander K. Lykke did a thorough analysis of the presence of the trait in virtually all the runic inscription from Norway. It was found virtually everywhere in Norway, except in Oppland (the old region of *Upplond*), where it was however present in later charters and manuscript (Knudsen, 1967; Kristoffersen Lykke, 2012), proving that the trait was present even before the Latin script became common after Christianisation.

The vowel harmony in Old Norwegian is essentially a progressive assimilation, where the stressed vowel influences the following unstressed vowel. In general, the two unstressed vowels /i/ and /u/ will be realised either with the allophones [i] and [u], or with the allophones [e] and [o]. If the stressed vowels are the high, the following vowel will also be high, with the allophones [i] and [u]. If the stressed vowels are not high, the unstressed ones will be the allophones [e] and [o]. If they are however the low and short vowels /æ/ and /ɔ/, the unstressed vowels will be [i] and [u] (Haugen, 2018, p. 272). This last one might not appear to make sense, but Klaus Johann Myrvoll has offered an explanation: as these two vowels were too short in comparison with the other non-high ones, they did not have strength enough to influence the unstressed vowels (Myrvoll, 2014, p. 17).

V O W E L H A R M O N Y		
	stressed position	unstressed
high vowels & diphthongs	/i/ /i:/ /y/ /y:/ /u/ /u:/ /æi/ /øy/ /ɔu/	[i] – [u]
mid & low vowels	/e/ /e:/ /ø/ /ø:/ /o/ /o:/ /æ:/ /a/ /a:/	[e] – [o]
low vowels	/æ/ /ɔ/	[i] – [u]

Table 6. Vowel harmony in Old Norwegian (based on Haugen 2018, 274).

3.1.1 Vowel harmony in NRA 3

Vowel harmony is present in this fragment. Since vowel harmony has been noted already as present in Runic inscriptions and manuscripts all over Norway, it does not help neither for the dating nor for

the identification of the dialect, but the presence of it is perhaps a strong indication of a Norwegian scribe.

Stressed vowels	Examples from the diplomatic edition	Examples from the normalized edition
High vowels and diphthongs	fkɪpɾɪ (2v, 27) unðɪr (1r, 22) óýrɪ (2r, 2), reiðɪr (1r, 1), haufɾɪɾ (1v, 1), minum (1r, 2), ɪaɾnɾfullu (2v, 6), fýnu (1r,8), nautum (1r, 22-23), hólgu (2v, 3), utbeizlu (2v, 11)	<i>skipti, undir, eyri, reiðir, haustit, minum, jafnfullu, sýnu, nautum, helgu, utbeizlu.</i>
Mid and low vowels	gere (1r, 4), lokeɾ (1v, 2), bæðe (1v, 8), fokɪandɛ (1v, 14), ðome (1v, 21), andez (2v, 19) þeffoz (1r,1), kono (2r, 19) uatɾo (1v,2)	<i>geri, lokit, bæði, sókjandi, dómi, andisk, þessur, konu, vatta.</i>
Short low /æ/ and /ɔ/	oðzu (1v, 7), onnur (1r, 9), eɾɾɪr (2r, 4), gerði (1r, 13).	<i>oðru, onnur, eftir, gerði.</i>

Although present in the majority of cases, there are some examples of words not following the rules of vowel harmony:

allɪr (1r,1) fegɪr (1v,8), fɾemnu (1r, 13), landzozɪnn (2v, 11), aura uɪð toku (2r,4)	<i>allir, segir, stefnu, landróttinn, auraviðtóku.</i>
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3.1.2 Vowel harmony in NRA 5.

NRA 5 also features this typically Norwegian trait, albeit just like in the former fragment, there are exceptions, although in this fragment only one was found.

High vowels and diphthongs	krifcín (1r, 2), þurúi (1v, 6), óýrí (2r, 8) nauðíg (3v, 20), hæiðim (1v, 1), fkipaðu (1r, 10), fkulu (1v, 5), þioðlæiðum (1r, 10), aurum (1v, 16).	<i>kristinn, þurfi, eyri, nauðig, heiðinn, skipuðu, skulu, þjóðleiðum, aurum.</i>
Mid and low vowels	fkaðe (1v, 28), raðe (1r, 5), bæðe (3r, 4), bóte (2v, 23), boðe (1r, 17), bonðe (2r, 15), ero (1r, 24), fcorrom (1v, 12), þrenkono2 (3v, 4), bonðom (1v, 4).	<i>skaði, ráði, báði, bóti, boði, bóndi, eru, stórrum, frændkonur, bóndum.</i>
Short low /æ/ and /ɔ/	þællði (1r, 2), huærfu (3v, 5), þioðgotur (1r, 9)	<i>veldi, hversu, þjóðgotur</i>

There is one case in which vowel harmony does not seem to be present:

hærþó2ir (1v, 9)	<i>herfórir</i>
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3.1.3 Vowel harmony in NRA 6

The fragment features the vowel harmony, and it is somewhat regular in differentiating between the two couples of allophones [e]-[i] and [o]-[u]. Some cases in the examples are lacking because there are no forms without abbreviation or in general in the text of that form (for example, there is no cases of /øy/ with the [u] ending). There are a few cases where the trait has not been noted in the realisation of the text.

High vowels and diphthongs	virðifc (1r, 20), hínur (1v, 11), óýrí (2r, 1), gjallkýri (2v, 1), þýþsku (6v, 17), kaupr (3r, 9), aurum (3v, 1), þurþcra (6v, 19), tungu (1r, 17).	<i>virðisk, hinum, eyri, gjallkyri, þýfsku, kaupr, aurum, þurfti, tungu</i>
Mid and low vowels	fkýnfamer (1v, 16), male (1v, 7), varo (2r, 11), fcolen (6v, 1), kono (1v, 17), moce (1v, 10), undan þó2flo (1v, 18), fðke (3r, 19)	<i>skynsamir, máli, váru, stolinn, konu, móti, undanfórslu, sóki</i>
Short low /æ/ and /ɔ/	mozkum (1v, 10), fællði (3r, 13), miþþællum (4v, 5)	<i>mozkum, seldi, misfellum</i>

3.1.4 Vowel harmony in NRA 13

The fragment is the most interesting one regarding this trait. While the vowel harmony is indeed present, it does feature a particularly high amount of words that do not respect the rule. The ending [e] and [o] are indeed quite rare in general, and the examples here make up more than half of the total words which feature those endings:

High vowels and diphthongs	uífí (1v, 11), fýrniz (1v, 15), lífir (1v, 4), fýflu mæn (3r, 21), íkulu (2r, 3-4), undir (2v, 2), hæimtir (1r, 11), lóýfi (1r, 21)	<i>vissi, fyrnisk, lífir, sýslumenn, skulu, undir, heimtir, leysi</i>
Mid and low vowels	falce (1v, 18), acce (1v, 3), þote (2r, 18), recom (2r, 28), æro (2r, 3), uozo (1r, 17), goðom (4v, 19)	<i>salti, átti, þótti, réttum, eru, váru, góðum</i>
Short low /æ/ and /ɔ/	hælgu (1v, 26), uætrum (1v, 14), fcaðum (3r, 2)	<i>helgu, vetrum, stqðum</i>

Among those words that do not respect the vowel harmony, some examples can be:

lagha ðomi (1r, 29), frændum (1r, 20), Latí (2v, 24), latir (1r, 7), ræfing (1r, 28).	<i>lagadómi, frændum, láti, látit, refsing</i>
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3.1.5 Final Remarks on vowel harmony

The four fragments all present vowel harmony. However, while the first three seem to respect it in most instances, NRA 13 behaves slightly differently, preferring to leave the classic unstressed /i/ and /u/ in almost all cases. This does not mean however, that the scribe of this fragment did not use it in his/her speech, but rather that he/she preferred to not write it. It is hard to understand why he/she wrote it in some instances and did not in other, yet, so it was done. The fact that it is however present in all four fragments confirms that the four scribes were all of Norwegian origins, or at least learned to write following the Norwegian conventions of orthography of their time. It does not however help in localising further, as all dialect had the evolution, nor in the dating, since even runic inscription from the 11th century featured this phenomenon.

3.2 Back mutation (u-omlyd)

Back mutation is the second trait that will be discussed. In general, the short /a/ in the root syllable is influenced by a /u/ in the following syllable and turned into /ɔ/. It also originally happened for the long /a:/, which turned into /ɔ:/. However, since there is a merger of these two phonemes in the 12th century, it will not be considered. There have been two back mutation, the older and the younger. The first one happened before the Latin script arrived in Norway and can therefore be seen from the declension of some words, such as in the word *barn*, which has the plural nom. and acc. *børn*. There was originally an ending of *-u* which was dropped. The younger back mutation happened during the 13th century and can or cannot be written down in the different manuscripts and fragment, albeit it was most probably present even when not noticed in the texts. There can also be a difference whether the word has more than two syllables, with a possible (or not) evolution also on the second vowel (Seip, 1955, p. 156). Generally, Trøndsk and North-eastern Norwegian lacked it, and have forms such as *qllum monnum* written as *allum mannum*. Western dialects and South-eastern Norwegian have different ways to spell the back mutation: <o>, <ao> and <au> or <ou> (these last two common in south eastern texts). South-eastern scribes are however not as duly as western scribes, and quite often prefer not to write down the effect of back mutation (Haugen, 2018, pp. 276-77).

3.2.1 Back mutation in NRA 3

The younger back mutation was duly noted by the scribe, who used either the grapheme <o> or, in one case, the grapheme <au>, typical of the South-eastern dialect:

karlmonnum (1r,24), onnur (1r,9) foður (1v, 17), logmonum (1v, 20), haulfu (2v,21).	<i>karlmønnum, ønnur, foður, logmønnum, hølfulu</i>
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3.2.2 Back mutation in NRA 5

The fragment does not write down the trait at all when it concerns the younger back mutation, while the /ɔ/ that resulted from the older back mutation is written down with the grapheme <o>. The first line of the column is for the younger back mutation, the second one for the older back mutation:

allum mannum (1r, 2), lagum (2r, 6), allðung (2v, 16), þaður (3r, 14), fialþum (3r, 18)	<i>øllum mǫnnum, lǫgum, ølðung, fǫður, sjølfum</i>
logmann (3r, 2), honð (3r, 9), hogguít (2v, 23), vīta vožd (1v, 8), mozk (1v, 25)	<i>lǫgmann honð, hǫggvit, vitavǫrð, mǫrk</i>

The only case among those that is dubious is ‹lagum› for the younger back mutation, but it can be easily explained: while nom. and acc. plural had the older back mutation, the dat. plural had on the other hand only the younger one. That is why ‹logmann› features <o> and ‹lagum› does not.

3.2.3 Back mutation in NRA 6

The fragment tends to write the back mutations, both the younger and the older. While the older one is more regularly written, the younger one is written slightly less regularly. Henceforth, there are, examples with <o> and <a> for the younger back mutation, while always <o> for the older one. The first line of examples is for the younger back mutation, the second line is for the older:

gozðum (2v, 5), oðzum (4v, 5), mannum (4v, 2), gǫngu (5r, 14), gango (6r, 10),	<i>gǫrðum, øðrum, mǫnnum, gǫngu, gǫngu</i>
mozk (2v, 3), logmale (5v, 19-20), fok (6r, 15), gozva (6r, 19), giollð (6v, 18)	<i>mǫrk lǫgmáli, sǫk, gǫrva, gǫld</i>

3.2.3 Back mutation in NRA 13

The fragment once again is quite mixed, since it has both forms that show the younger back mutation, and forms that do not. Forms which were changed during the older back mutation are always written down with <o>. Some examples are:

oðrum (1r, 9), ifallum (1r, 10), monnum (2r, 13), laugum (2r, 9), þaður (2v, 18).	<i>øðrum, isfollum, mǫnnum, lǫgum, fǫður</i>
told (1r, 17), fok (1v, 17) fallo hǫlp (2v, 1), uoxt (3v, 15), mozk (4r, 3)	<i>tøld, sǫk, sáluhjǫlp vǫxt, mǫrk</i>

3.2.5. Final remarks on Back Mutation

Since this phenomenon is very important for the localisation of Old Norwegian texts, this phenomenon can start to give some ideas on the origin of the four fragments. For NRA 3, it helps that it is not only present, but that in one case is written with the digraph <au> instead of the more common <o>. This, together with the orthography for the diphthong /ɔu/ as <ou> instead of <au>, can pinpoint towards a South-eastern origin. For NRA 5, the fact that the younger back mutation is not written down in the text could be of either the eastern area, or the Trøndsk area. Rindal and Spørck are sure it is a South-eastern dialect (Rindal & Spørck, 2018, s. 32) and the fact that the front back mutation not present does not contradict their hypothesis, as the South-eastern dialect is the most unstable when it comes to writing the phenomenon. The fact that NRA 6 writes the evolution down points towards a Western or South-eastern origin. NRA 13 features the evolution, and the fact that once it appears written with <au> could point towards a South-eastern origin.

3.3 Epenthetic vowel (svarabhaktivokal)

The epenthetic vowel appeared in Norway around the 12th century. It appears in connection with the classic ending *-r* of the nominative singular of nouns and adjectives, in the few plurals with the same ending, as in *hendr*, and in the present 1st and 2nd person of verbs, as in *tekr*. Different areas of the Old Norse speaking area, including Iceland, develop various epenthetic vowels, which is a vowel inserted between the stem and the ending *-r*. The possible epenthetic vowel changes between the different areas: /u/ in Inner South-west Norway and Iceland, /a/ in the South-east and /e/ and /æ/ in the rest of the country (Haugen, 2018, pp. 278-79), albeit present sometimes in South-eastern fragments, especially in later and manuscripts, because of the reduction of unstressed /a/ (see 3.10) (Seip, 1955, p. 172).

3.3.1 Epenthetic vowel in NRA 3

This fragment does not feature any epenthetic vowel at all. The description by Rindal and Spørck as a conservative scribe is indeed fitting in this case. As such, some words that do not feature any epenthetic vowels are:

værðz (1r,2) vetr (1r, 6) fremðz (1v,12), gælðz (2r,12), fialfr (2v,7)	verðr, vetr, frándr, geldr, sjalfr
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3.3.2 Epenthetic vowel in NRA 5

This fragment features two different epenthetic vowels: <a>, which is present three times, is very common in South-eastern Norwegian, whilst the /e/ present in the other two cases was used in a geographically larger area, which includes most of Norway. In the remaining case, there is an abbreviation which could be either /e/ or /a/. As such, there is finally a stronger argument in this case for a possible South-eastern dialect.

bʒennaʒ (1v, 14), ʒʒepaʒ (3r, 14), ʒærdʒar (3v, 16)	<i>brennr, drepr, verðr</i>
þrimer (1v, 16), þóter (2v, 19).	<i>þrimr, fóttr</i>

3.3.3 Epenthetic vowel in NRA 6

The epenthetic vowel is present once in the fragment: there is a case of <e>. It is the following:

læter (2v, 9)	<i>léttr</i>
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3.3.4 Epenthetic vowel in NRA 13

The fragment does not feature any epenthetic vowels. Some examples are:

aðʒ (4v, 27), fækr (4r, 3), ʒuardʒ (3v,3), hældʒ (3v, 18), lóypr (1r, 28)	<i>áðr, sekr, dauðr, heldr, hleypr</i>
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3.3.5 Final remarks on epenthetic vowel

The epenthetic vowel is also one of the most important traits in regards to localisation of a text of Norwegian origin. However, in all but one case, NRA 5, it is either missing or the most general one in Old Norwegian. The fact that NRA 5 uses <a>, the epenthetic vowel peculiar of South-eastern dialects, confirms what Rindal and Spørck said (Rindal & Spørck, 2018, s. 32). In the other three examples there is little that can be of help. In NRA 6 however, it might negate a South-western origin, as the one mostly used in that area was <u>.

3.4 Monophthongisation

This evolution happened in the early 13th century, mostly in the areas of Bergen and in eastern Norwegian dialect, while in Trøndsk and Western Norwegian is rarer, although sporadically present (Haugen 2018, 277). The Old Norwegian language had three diphthongs /æi/, /ou/ and /øy/, which are turned into: /æi/ > /æ/; /ou/ > /o/ and finally /øy/ > /ø/. The process is caused originally by a double consonant as in *leiddi* > *leddi*, but many times it also happened with a single consonant *eigi* > *egi* (Haugen, 2018, p. 277).

3.4.1 Monophthongisation in NRA 3

The fragment features four instances of monophthongisation. The diphthong /æi/ > /æ/ is the one with most cases, while /øy/ > /ø/ has only one appearance. The third diphthong has no cases of monophthongisation. However, there are two cases of this diphthong written as <ou> instead of <au>. This was particularly common in South-eastern old Norwegian, as both Rindal and Spørck suggest (Rindal & Spørck, 2018, p. 32).

/æi/ > /æ/	þer1 (1v,26), uer1 (2r, 14), fler1 (2v,25)	<i>þeiri, veiri, fleiri</i>
/øy/ > /ø/	kópt1 (1r, 19; 2r, 10)	<i>keypti</i>
/au/ written as <ou>	ourum (1v, 5), nouzum (1v, 9)	<i>aurum, nautum</i>

3.4.2 Monophthongisation in NRA 5

This phenomenon is present only twice in the manuscript, both for /æi/ > /æ/, while the rest of the document keeps the three diphthong every other time. The cases in which it appears are the following:

þema (2r, 3), hæðní (3r, 28).	<i>þeima, heiðni</i>
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3.4.3 Monophthongisation in NRA 6

There is very little monophthongisation in the fragment, with only one case for the phonemes /æi/ > /æ/:

lýr1kkcar æði (3v, 2)	<i>lýritareiði</i>
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3.4.4 Monophthongisation in NRA 13

There is only one case of monophthongisation in NRA 13, with the diphthong /au/ written as <o>.

gomgæfı (2v, 6)	gaumgøfi
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3.4.5 Final remarks on monophthongisation

This trait was quite recent, compared to the others seen earlier. It can finally therefore be of help in the dating of the fragments. For all of them it might confirm a 13th or early 14th century origin, which has already been partly confirmed for all of them through the palaeographic analysis. For NRA 3, its presence in a text that is quite conservative, can confirm that the trait must have felt normal and natural by the time it was written. Moreover, it is an eastern trait, confirming once more the hypothesis that it was written in that area. For NRA 5, the quite little presence is still helpful, as it confirms once more a possible Eastern origin. For NRA 6, the very little presence can point towards a Western dialect, which combined with the fact that it does not feature <u> as an epenthetic vowel, could mean that the fragment was written in North-western area of Norway. For NRA 13, since there is one single case of this phenomenon in the fragment, it could point towards a western dialect, but it is still very hard to find an origin of this fragment.

3.5 Diphthongisation (diftongering)

This is the opposite phenomenon of the former one shown, from the same period, the 13th century, but spread throughout the whole country with no area connected to it. The process is attested in examples such as *leggja* > *laiggia* which can be found in some manuscripts, although it is present also in other cases, such as in *setja* > *saitia* and *hefir* > *heivir* or (Haugen, 2018, p. 277).

3.5.1 Diphthongisation in NRA 3

Only two words are diphthongised in the fragment, albeit one three times:

høylygu (1v, 3; 2r, 3; 2r, 23)	<i>helgu</i>
haulfu (2v, 21)	<i>hølfu</i>

3.5.2 Diphthongisation in NRA 5

This phenomenon is present in the text, 14 times, with the only present form being /æ/ > /æi/. It is always followed by short consonants:

gæírír (2v, 3), mæígín (1r, 20), hæípír (2v, 5), ðzæípír (3r, 23), fæígír (3r, 24)	<i>gerír, megin, hefír, dráþír, segír</i>
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3.5.3 Diphthongisation in NRA 6

There is one case of the diphthongisation in NRA 6, all of them creating the diphthong /æi/:

gæírír (1v, 14)	<i>gerír</i>
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3.5.4 Diphthongisation in NRA 13

There is a possible example in the fragment of diphthongisation, where the phoneme /e/ becomes the diphthong /æi/:

fríðhæilagír (4r, 8)	<i>fríðhelgír</i>
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Note, however, that *heilagír* can be analysed as the expected plural form av *heilagr* adj., rather than the monophthongised *helgír*, so this example is rather weak. For this reason it is difficult to give much weight to it.

3.5.5 Final remarks on diphthongisation

The diphthongisation is a phenomenon that is only helpful in the dating of the fragments. However, since all these fragments have a general dating at this point, its presence or lack is of little use. What is peculiar and interesting in this case is not the fact that it appears at least once in all the fragments except NRA 13, but rather how little there is of it in each of them. It must be remembered that, however, these are fragments, not full texts. If the full text were existing, they might give a different picture, but as they are, it is quite strange that so little of it is present in general, considering the evolution was almost or already a century old for all the fragments. As usual, NRA 13 is the one that creates the most problems. Even considering that dubious single case, it is quite strange to not find more cases.

3.6 Labialisation (labialisering, runding)

This phenomenon is quite common in sources from the 12th century, throughout the whole area, but starting in South-eastern old Norwegian. It is mostly caused by a labial consonant, either preceding the vowel or sometimes even following it. This can be either in direct contact with the vowel, or it could also not be in direct contact. It happens with two vowels generally, /e/ and /æ/ become /ø/, and /i(:)/ into /y(:)/ as in *messu* > *móssu*, *silfr* > *sylfr* or *skírn* > *skýrn*. A consequence of labialisation is the *jamning*, when the first labialised vowel labialises the following one, as in *fyrir* > *fyrir* or *mikil* > *mykil* > *mykyl* (Haugen, 2018, p. 278).

3.6.1 Labialisation in NRA 3

The manuscript has very little of this phenomenon, only of /e/ > /ø/, and there is no *jamning*. The examples are:

lagastómnu (1r, 4), ftónu (1r, 3), ftómnu (1r, 14), ðngu (2r, 18)	<i>lagastefnu, stefnu, engu</i>
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3.6.2 Labialisation in NRA 5

The manuscript has no case of labialisation. Every time a vowel is followed by a labial consonant, the writing keeps consistently the un-labialised vowel. Some examples of non-labialised cases are:

almenning (1r, 4), meðan (1v, 27), fpengz (2r, 4), mikilf (1r, 5), mílkun (1r, 24)	<i>almenning, meðan, spengr, mikils, miskunn</i>
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3.6.3 Labialisation in NRA 6

The fragment features labialisation of /i/ to /y/ in a couple of cases, although only two words seem to be affected at all by the trait:

mýk1τ (1v, 14; 4r, 6), fylþrf (2r, 10, 6r, 11)	<i>mikit, silfrs.</i>
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3.6.4 Labialisation in NRA 13

There is only one case of labialisation in NRA 13, with the phoneme /i/ turning into /y/, but not because of the presence of a labial consonant beside it. The case is:

lýðkýndum (3v, 19)	líkindum.
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3.6.5 Final remarks on labialisation

This trait, just like diphthongisation, can be quite important for both the localisation and dating of the fragment. However, there is very little in all the fragments, except for NRA 3, which, even though it is quite conservative, presents the most appearance of this trait. In this case therefore, it helps, as it confirms that the writer wrote in South-eastern Old Norwegian. The heavier presence is easily explained: since the trait first appeared in this area, the conservative scribe did not think of it as a new form, but rather, as a part of the conservative ways of writing. In the case of NRA 5, the total lack of it is quite strange, as it was to be expected from a fragment that now could quite safely be considered of South-eastern origin. As far as NRA 6 and 13 are concerned, the very little presence can still help in the dating. However, since both fragments most likely are from the 14th century, it was to be expected more than it appears in the examples.

3.7 Delabialisation (delabialisering, avrunding)

This phenomenon is the opposite phenomenon of the previous one, and has also been called *regressive jamning*, where the non-labialised consonant influences the labialised, turning it into an unrounded vowel, generally with the high front vowels /y/ > /i/. Some classic examples of this are *fyrir* > *firir* or *yfir* > *ifir*. It is a generally Old Norwegian evolution, rather than one that can be localised to a single dialect (Haugen, 2018, p. 278). In some sources, especially runic inscription, it is even possible to find the delabialisation in the diphthong <ey>, which becomes <ei> (Seip, 1955, p. 151).

3.7.1 Delabialisation in NRA 3

The fragment features only two instances of this linguistic trait:

líktingar (1r, 4), firi (1v, 1; 2r, 6)	<i>lyktingar, fyrir</i>
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Most of the time the rounded vowel is kept even when the following vowel is not labialised, as in:

lýfing (2r, 14) > τολτρυγγίρ (2v, 19).	<i>lýsing, tortryggir</i>
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3.7.2 Delabialisation in NRA 5

This trait is present in the text, especially for the two preposition *yfir* and *fyrir*, always delabialised, but there is also another case. It seems to be present only for the vowel /y/ > /i/ and not for the long equivalents.

þírír (3v, 11), íþír (2r, 4), íkíllði (2r, 17).	<i>fyrir, yfir, skyldi</i>
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3.7.3 Delabialisation in NRA 6

This trait has also very few examples, including the one that was present in the other two cases, involving the preposition *fyrir*. In all cases, it was probably caused by the subsequent unstressed /i/:

íkíllði (3v, 4-5), þíkkír (4v, 20)	<i>skyldi, þykkir</i>
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3.7.4 Delabialisation in NRA 13

This trait is present in one single case in the fragment. The number could have been higher if the preposition *fyrir* was not always written abbreviated, making it impossible to know how the scribe would have written the full word. The single case is:

íþír líτ (3v, 16)	<i>yfirlít</i>
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3.7.5 Final remarks on Delabialisation

This evolution is quite peculiar, as it mostly appears in the case of *fyrir* and *yfir*. Fortunately, it does appear in the first three fragments on at least another word. It is important because, if it were only for those two words, it could have meant that the scribes had learned them written this way without knowing that the same evolution could have been applied to other words. At this point, it seems that all four scribes were quite conservative, as they avoided newer forms as much as possible. The trait has little use in the localisation and dating of the fragments, as it was spread throughout the country and it appeared over a century before the writing of each of these fragments.

3.8 Progressive front mutation (progressiv j-omlyd)

The earliest appearances of this phenomenon are present in a few sources from the early 13th century, between the Trøndelag area and the eastern Norwegian variants, but by the 14th century it was present everywhere except in the west of Norway (Seip, 1955, s. 122).

It's a progressive assimilation by contact, where the palatal semivowel in /ja/ influences the vowel palatalising it into /jæ/ (Haugen, 2018). An example could be *gjaldr* > *gjældr* (Haugen, 2018, p. 279).

3.8.1 Progressive front mutation in NRA 3

This trait is only present within the fragment once, while any other case where the trait could have been possible keeps the more conservative orthography /ia/. Here is the single case of this trait, and then others without:

giellði (2v, 27)	<i>gjaldi</i>
Oðalf iarðer (1r, 25), fókianðe (1v, 10), fialþr (2v, 7)	<i>oðalsjarðir, sþokjandi, sjalfr.</i>

3.8.2 Progressive front mutation in NRA 5

This trait is totally absent from the fragment. Some examples without it are:

fialþr (1r, 15); þrialfir (1v, 9) and gialldí (2v, 3).	<i>sjalfr, frjalsir, gjaldi.</i>
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3.8.3 Progressive front mutation in NRA 6

This trait is completely absent from the fragment. Some examples without the trait are:

giallðe (6v, 2), iamþullτ (5v, 19), þiær τak (4r, 10), fialþr (4r, 11), jarðer (3v, 14)	<i>gjaldi, jafnfullt, fjártak, sjalfr, jarðir.</i>
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3.8.4 Progressive front mutation in NRA 13

This trait is absent from the fragment. Some examples without it are:

gialða (1v, 3), fokianð1 (1v, 18), fki1iaz (2v, 25).	<i>gjalda, sókjandi, skiljask</i>
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3.8.5 Final remarks on progressive front mutation

The presence or lack of this phenomenon both creates problems and solves some others. On the one hand, its total lack in NRA 6 helps in the hypothesis that the fragment has western origin, while its lack in NRA 5 could create problems for the hypothesis first given by Rindal and Spørck (Rindal & Spørck, 2018, s. 32). For NRA 3, there is only one single case. However, considering it is the shortest fragment in this *corpus*, one example could be enough to confirm the origin as South-eastern. As usual NRA 13 is the most problematic, although an origin from Western Norway is still possible.

3.9 Merger of /e/ og /æ/

This phenomenon, which happened during the second half of the 13th century, is one of the most discussed, since the orthography hardly ever recorded this event, writing both sounds as <e> or <æ> interchangeably (Haugen, 2018). It happened originally in the 12th century in Iceland while it happened later in Norway, especially in Trøndsk. The two sounds have different origin. /e/ was present from the older stages of the Proto-Norse language, while /æ/ was a result of the palatal front mutation (Seip, 1955, s. 45) from /a/, which in normalized orthography was simply written as /e/, as in *ferð* from *fara*.

Seip did not find any pattern for the spelling of /e/ and /æ/ (Seip, 1955, p. 147), and although this merger seemed to happen only within the short vowels, there are many instances of /e:/ and /æ:/ also

written interchangeably, adding even a stronger confusion to this particular trait (Haugen, 2018, pp. 279-80).

3.9.1 Merger of /e/ and /æ/ in NRA 3

The fragment has several cases where the two graphemes are interchangeably used, even for the same word: we do find both <æigr> (1r, 18) and <eigr> (1r, 13) within the same page. However, there are many instances where the older vowel are used correctly by the scribe, as if he/she knew the spelling pre-merger. For the examples, the first row includes word that etymologically before the merger had /e/, while the second one had /æ/, a product of the front mutation that happened before the coming of the latin script in Old Norse (Seip 1955, 45).

fem (1r, 23), meta (1v, 24), fælr (2r, 29), nema (2v, 23), uetra (1r, 7)	<i>sem, meta, selr, nema, vetra</i>
laga ftæmna (1r, 5), eptir (1v, 4), tækna (2v, 28-29), fegia (1v, 2), ærfa (1r, 26)	<i>lagastefna, eftir, teknar, segja, erfa</i>

3.9.2 Merger of /e/ and /æ/ in NRA 5

The consequences of this merger are present in this fragment, with a strong variation in the presence of the two traits. It must be mentioned that, however, this scribe prefers to use <æ> over <e> in stressed syllables. The first row of the table will feature word with etymological /e/, and the second one will feature words with the /æ/ resulting from front mutation of /a/.

uæll (1r, 22), nozeg (2r, 12), værkmaðr (2r, 5), uegz (3r, 2), værdar (3v, 16)	<i>vel, Noreg, verkmaðr, vegr, verðar</i>
herr (1r, 1), vællði (1r, 2), þremia (3r, 28), hæpta (2v, 12), ræpla (3v, 2)	<i>herr, veldi, fremja, hefta, refla</i>

3.9.3 Merger of /e/ and /æ/ in NRA 6

Just like all the fragments in this thesis, NRA 6 also features an incredibly high amount of confusion between the two graphemes /e/ and /æ/. There are only a few words that feature the grapheme <e> for both the etymological /e/ and even less for the /æ/ resulting from front mutation.

præftar (2v, 3), næma (4r, 1), bæra (5r, 10), hellðz (5v, 7), værdz (6v, 17)	<i>prestar, nema, bera, heldr, verðr</i>
æþtir (1r, 3), mænn (2v, 4), fækkr (4r, 16), kræþia (5v, 6), huer (6r, 10)	<i>eftir, men, sekr, krefja, hverr</i>

3.9.4 Merger of /e/ and /æ/ in NRA 13

This is the fragment that most frequently features the variation resulting from this merger. While the former fragments did not feature the merger for words that were short monosyllabic words or clitics, this one does feature it. Some examples are:

nema (1v, 31), æf (1v, 2), Noregsþingi (3r, 8), uærða (4v, 7), præft (4v, 25)	<i>nema, ef, Noregsþingi, verða, prest</i>
Eftir (2r, 11), ræfing (1r, 28), huærfu (3v, 12), næfdir (4r, 26), ælfka (4v, 30)	<i>eftir, refsing, hversu, nefndir elska</i>

3.9.5 Final remarks on merger of /e/ and /æ/

While other traits that are much older than this one are lacking in almost all the four fragments, this quite recent merger, for the scribes, is present over all of the fragments. Furthermore, the presence of it increases through the four fragments, from NRA 3, that has less cases of <e> and <æ> used for the opposite use to NRA 13, which barely has any <e> in stressed position in the fragment. If the hypothesis of Storm, Rindal and Spørck are correct, it seems that NRA 3 has less of it because it is the older fragments, perhaps a few decades after the first appearance of the phenomenon, while NRA 13, which seems to be the younger. The other two fragments are, it could be said, in the middle between these two, with the scribe of NRA 5 preferring <æ> in stressed positions, but still using the grapheme <e> in a number of cases for both the pre-merger /e/ and /æ/. The scribe NRA 6 already preferred

more the use of <æ> in all stressed position, both for the older /e/ and /æ/, and as such there are very few instances in general with /e/ written as <e> in stressed positions. Even less with <e> used where /æ/ was originally present. However, the use of <æ> is not as extreme as it appears in NRA 13. This merger is very useful for the dating of the fragments, as it appeared around the middle of the 13th century, confirming for all the fragment the dating by the three aforementioned scholars.

3.10 Merger of /a:/ og /ɔ:/

In the older phase of Old Norse, there was still a difference between the two phonemes that go back to /a/ and /a:/ due to back mutation (u-omlyd), i.e., /ɔ/ and /ɔ:/. From the middle of the 13th century, the long phonemes /a:/ and /ɔ:/ merged into the second sound, a back, low rounded vowel, [ɔ:]. The word on which the change is easiest to distinguish, is the personal pronoun *várr*. In older sources, like the *Norsk Homiliebok* (AM 619 4to), the difference is still noticeable, since, using the normalized orthography, the pronoun was in the nominative singular *várr* and in the dative singular *vórum*. In later text, the copyists would generally just use <a> for /ɔ:/, and it can be more easily spotted in the words that feature the endings *-u* and *-um* (Hagland, 2013, s. 625).

3.10.1 Merger of /a:/ and /ɔ:/ in NRA 3

There are many instances featuring the merger in the text, written as <a> in the text. The first two examples feature a back vowel as an unstressed vowel, showing that the sound was unrecognizable by the scribe:

uarom (1r, 21), uaro (1v, 18; 2r, 11), uat̃ta (2r, 23), iat̃e (2r, 18), fra fall (2v, 19)	<i>várum, váru, vátta, játti, fráfall</i>
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3.10.2 Merger of /a:/ and /ɔ:/ in NRA 5

The fragment here is not fully consistent since there are six examples where the grapheme <o> was preferred. However, the vast majority of cases feature the grapheme <a>, which indicates that the merger had taken place in the language of the scribe (or, for that matter, in the exemplar from which the manuscript was copied).

varum (1r, 12), varum (1r, 22), varnum (1r, 4), uapna þing (2r, 11), late (3r, 12)	<i>váttum, várum, vápnum, vápnaþing, láti</i>
von (1r, 26), vopn (2r, 10; 2r, 21; 2r, 23), þolk vopn (2r,7; 2r, 23)	<i>ván, vápn, folkvápn</i>

3.10.3 Merger of /a:/ and /ɔ:/ in NRA 6

The two sounds are written consistently with <a>, as it was shown in the orthographic analysis. Some examples are:

varo (2r, 11), varom (2v, 1), ran (3r, 18), varom (3v, 17), atte (5v, 2)	<i>váru, váttum, rán, várum, átti.</i>
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3.10.4 Merger of /a:/ and /ɔ:/ in NRA 13

This merger is present in the text, as most words which would be normalized with /a:/ do indeed feature the grapheme <a>. There is one exception, repeated three times, where the phoneme is written in the older way with <o>. The examples are:

uo2o (1r, 17), uapnatak (3v, 7) raði (2r, 18), atte (1v, 3), uattar (4r, 19)	<i>váru, vápnatak, ráði, átti, váttar</i>
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3.10.5 Final remarks on merger of /a:/ and /ɔ:/

This merger is quite important for the dating of each fragment. Co-existence of both forms was practiced until the end of the first half of the 13th century, while after that it becomes increasingly less common. Therefore, the presence of conservative forms in NRA 5 and 13 comes as quite a surprise. In the case of both, one must remember that manuscript culture in the middle ages was based on the copying of older exemplars. As such, those conservative forms we find could have been mistakes made by the scribes. Instead of updating with the forms more natural to them, they might have copied the older forms. In any case, especially for NRA 5, the fact that the forms with older spelling are six, in the case of this fragment it might be considered not a mistake. It is indeed

possible that the fragment is slightly older than expected, not from the early 14th century, but from the second half of the 13th century. For NRA 3 and 6, the complete lack of older forms helps in the localisation of both. For NRA 13, the one case (twice repeated however), is dubious.

3.11 Reduction of unstressed /a/ into /ə/.

From the end of the 13th century, it becomes common to find the unstressed ending /a/ written with either <æ> or <e>. The sound produced was, probably, not anymore /a/, nor /æ/ or /e/, but the mid, unstressed vowel [ə], called *schwa*. The evolution into the *schwa* started in the eastern dialects, and spread slowly everywhere, except South-western dialects. Therefore, words like *kallar* would begin to appear as either *kallar* or *kaller* (Haugen, 2018, pp. 281-82).

3.11.1 Reduction of unstressed /a/ into /ə/ in NRA 3.

The fragment does not feature this trait, and the /a/ is consistently written as <a>. A few examples of it are:

kallazt (1r, 8), arðar (1r, 26), allmargar (1v, 29), tvegia (2r, 5), fiðan (2v, 18).	<i>kallask, arðar, allmargar, tveggja, síðan.</i>
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3.11.2 Reduction of unstressed /a/ into /ə/ in NRA 5

Since this phenomenon appeared first a few decades before this fragment presumably was written (Rindal & Spørck, 2018, s. 32), in the eastern area, it is no surprise that it is not present at all in this source. As such, the ending /a/ is kept always, as in the following examples:

ræiða (1v, 1), faman (2r, 12), þattar (2v, 5), ubota mal (3v, 18) and þærðar (3v, 16)	<i>reiða, saman, vátta, óbótamál, verðar</i>
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3.11.3 Reduction of unstressed /a/ into /ə/ in NRA 6

There are no cases of this phenomenon in this fragment. As such, the vowel is always /a/:

fýnða (1r, 1), uarðaz (2r, 8), annan (2v, 21), ræþfa (3r, 12), þeffara (3v, 6)	<i>synda, varðar, annan, refsar, þessara</i>
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3.11.4 Reduction of unstressed /a/ into /ə/ in NRA 13

This trait is completely lacking from the fragment, which always writes the unstressed /a/ as <a>:

ðomar (4v, 7), rækna (4v, 17), þætta (3r, 23), mæðan (2r, 7)	<i>dómar, reknar, þetta, meðan</i>
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3.11.5 Final remarks on reduction of unstressed /a/ into /ə/

The presence of this trait in any of the fragments would have been quite helpful for any of the fragment. Not only it would have been helpful in the localisation, but it would have been most helpful when it comes to the dating of the four fragments, as they are either from the period the phenomenon first appeared, or a few decades later. However, it is lacking everywhere.

3.12 Loss of /h/ in front of /l/, /n/ and /r/

This phenomenon happened in Old Norwegian already in the ending of the older period of Old Norse, almost surely already around 1050. This is one of the traits that distanced the most Old Norwegian from Old Icelandic, where it was kept, and it gives the first strong criterion for the difference between the two variants (Haugen 2018).

3.12.1 Loss of /h/ in front of /l/, /n/ and /r/ in NRA 3

The fragment does not feature any word that would have been written in older sources with /hr/ or /hn/, but it does feature two words that, in the normalized editions are written with /hl/:

lunnende (1r, 19), lýða (1v, 4).	<i>hlunnendi, hlýða</i>
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3.12.2 Loss of /h/ in front of /l/, /n/ and /r/ in NRA 5

This phenomenon is indeed present in the fragment, and the /h/ is never present in front of these consonants:

løypr (1r, 6), ulyðní (2v,4), laupa (3r, 22).	<i>hleypr, óhlýðni, hlaupa.</i>
noðet (1v, 2-3)	<i>hnoðit</i>
landzræínfanar (3v, 2)	<i>landðhreinsanar</i>

3.12.3 Loss of /h/ in front of /l/, /n/ and /r/ in NRA 6

As usual this trait is present in the fragment. However, there is no case of /hn/ in the fragment. The examples are:

garðz lið (2v, 9), lut (3v, 8), læypr (4v,1), læypir (5r, 11).	<i>garðshlið, hlut, hleypr, hleypir</i>
nóyxla (1v, 5)	<i>hneyksla</i>

3.12.4 Loss of /h/ in front of /l/, /n/ and /r/ in NRA 13

This trait is present in the fragment. Just like with NRA 6, there are no words with /hn/ in the fragment. The examples are:

løypr (1r, 28), lutı (1v, 21), lut (3v, 30)	<i>hleypr, luti, lut.</i>
ræzflo (4v, 8).	<i>hrázlu.</i>

3.12.5 Final Remarks on loss of /h/ in front of /l/, /n/ and /r/

This trait was already common in Norway long before the four fragments were written, and as such is not particularly helpful. Moreover, it is probably the trait that is the most consistent within the *corpus*, as all the words in each fragment that could drop the /h/ in front of the three consonants, drop it. Since the scribes of NRA 3, 5 and 13 tend to be quite conservative, the lack of this sound in front of the three consonants must have felt normal to all of them.

3.13 Loss of /h/ in front of vowels (*b* dropping, halvemål)

This phenomenon is common to many languages, and it happened, although not always and mostly in certain areas, in Old Norwegian. The areas where the phenomenon is written the most are western dialects, especially those around the region of Møre and Romsdal. It's sporadic throughout the whole high middle ages in Norway and before, where we do find it as early as in the runic period (Haugen, 2018, pp. 282-83).

3.13.1 Loss of /h/ in front of vowels in NRA 3

The manuscript writes the h consistently before vowel, as it can be seen in the following examples:

handhaue (2v, 2), heur (1v, 16), hōyǫgu (2r, 3), hendē (1v, 11) and hoyri (1r, 1).	<i>handhafi, hefir, helgu, hendi, heyri.</i>
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3.13.2 Loss of /h/ in front of vowels in NRA 5

This phenomenon is missing from the fragment, where every single /h/ before a vowel is kept. Some examples are:

hæp̄z̄t (1r, 7), hæiðin (1r, 1), hallða (1v, 11), her (2v, 5), hoþði (3r, 10).	<i>hefsk, heiðinn, halda, hér, hoþði.</i>
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3.13.3 Loss of /h/ in front of vowels in NRA 6

This Norwegian trait, which is quite sporadic, is not present at all in the text, which conserves the /h/ in front of all vowels. Some examples are:

hanom (6v, 12), hellðz (5v, 7), hæyrði (4v, 19), hunang (3v, 6), huf (2v, 9)	<i>honum, heldr, heyrði, hunang, hús</i>
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3.13.4 Fall of /h/ in front of vowels in NRA 13

This trait is missing, as usual, from the fragment. Since it is a quite sporadic trait, it does not come as a surprise. Some examples without the h-dropping are:

hozbannum (4v, 15), haɕtum (4v, 7), hæilagf (2v, 19), hæðan (2r, 24), hæimɕa (1v, 4)	<i>hórbɔrnum, háttum, heilags, heðan, heimta</i>
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3.13.5 Final remarks on fall of /h/ in front of vowels

This trait is quite hard to find in general in the whole Old Norwegian literature, even though there are some appearances in some runic inscriptions. As such, the fact that it is missing from all the fragments could have been expected. The presence of it could have been quite helpful, especially in the case of NRA 13 and 6, yet their lack of it does not preclude the possibility of western dialects, especially for NRA 6.

3.14 Palatalisation of /g/ and /k/

This phenomenon, which happened as early as the 13th century, within the whole area of Old Norwegian evolved the consonant plosives /g/ and /k/ into the two consonant clusters /kj/ and /gj/ in front of a palatal vowel, generally written as <ki> and <gi>. Some examples for it could be *kemr* > *kiemr* and *gengr* > *giangr* (Haugen, 2018, pp. 283-84).

3.14.1 Palatalisation of /g/ and /k/ in NRA 3

This trait is present only once in the manuscript:

g ₁ æld ₂ (2r, 12)	<i>geldr</i>
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Other than this single case, the text does not add the palatal semivowel in any other words:

gerð ₁ (1r, 14), kóypt (1r, 18), gefe (2v, 27) kóm ₁ r (2r,22)	<i>gerð₁, keypt, gefi, kóm₁r.</i>
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3.14.2 Palatalisation of /g/ and /k/ in NRA 5

There are three instances in NRA 5 of palatalisation of /g/. The only examples of it are:

næigilðir (2r, 5), huggiu (2v, 18; 2v, 24)	<i>negldir, hjuggu.</i>
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3.14.3 Palatalisation of /g/ and /k/ in NRA 6

The fragment has one single case of palatalisation of /g/. Any other case with both phonemes lacks the palatalisation, which must have been in place at the time of writing. The one example is:

læigia (2v, 6)	<i>leiga</i>
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Other forms which feature the classic orthography are:

föker (6v, 13), uclægan (3r, 20), kenner (1v, 6), gællðz (4r, 7) kændr (4v, 8)	<i>sókir, útlágan, kennir, geldr, kenndr</i>
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3.14.4 Palatalisation of /g/ and /k/ in NRA 13

There are no cases of palatalisation of either consonant in those fragments. Other cases where the /g/ and /k/ are not fully palatalised are:

Gæfe (2v, 11), rikif (2v, 10), gærarz (3r, 8), kændir (3v, 18), fkiłgætnu (4v, 16)	<i>gefi, rikis, gerask, kenndir, skilgetnu.</i>
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3.14.5 Final Remarks on palatalisation of /g/ and /k/

This trait, which became common in the 13th century, should have been more common than the few instances in which we found it. The presence at least once in each fragment, except NRA 13, can be used as confirmation once more that the scribes are Norwegian, and that the trait was, albeit not as common as it might appear in longer works, still common enough. Once again NRA 13 is the one that

creates most problems. However, this trait was too widespread to have been a helpful for the localisation of the fragment.

3.15 Assimilations and losses within consonant clusters

Some consonant clusters evolve into newer forms already by the end of the Proto Norse Language, during the period called Early Old Norwegian, and these are in general kept in Old Norwegian. In the Old Norwegian period, some dialects have the assimilations /fn/ > /mn/ ((Seip, 1955, s. 169), /pt/ > /ft/ (Seip, 1955, s. 173) and /ps/ > /fs/ (Seip, 1955, s. 285), such as *nafn* > *namn*, *eptir* > *eftir*, and *gløfska* > *gløfska*. These changes started first in Trøndsk and Eastern Norwegian, while Western Norwegian (apart from North-western Norwegian) prefers the older ones to a higher degree. The first two were common already during the 13th century, while the third one becomes more common after the beginning of the 14th century (Seip, 1955, s. 285) When the clusters are composed of three or more consonants, it is quite common for the middle one to fall, as in *margt* > *mart* (Haugen, 2018, p. 284).

3.15.1 Assimilations and losses within consonant clusters in NRA 3

The fragment has many cases of evolutions of /fn/: there is /fn/ in one case, /mn/ in twelve cases, /mmn/ once, /mfn/ twice, /m/ in 5 few cases and /n/ twice as well. Examples are:

<p>iafnfullu (2v, 6), ftemna (1v, 20), nammn (1r, 1), ftõnu (1r, 3), ftæmτ (1v, 23), ftemfna (1v, 3)</p>	<p><i>jafnfullu, stefna, nafn,</i> <i>stefnu, stefnt, stefna</i></p>
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The consonant cluster /pt/ is not evolved in the fragment, as it can be seen in these examples (the normalised forms follow the orthography of *Ordbok over det norrøne prosasprog*):

<p>eptir (1r, 23), aptir (1v, 28)</p>	<p><i>eftir, aftr</i></p>
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The third cluster, /ps/, does not appear in the fragment, and its evolution or lack thereof is unknown.

3.15.2 Assimilations and losses within consonant clusters in NRA 5

This phenomenon was already quite common at the time, so it is quite surprising to find the conservative spellings. The two major clusters involved in this are always written down in the most conservative way in the text, as it can be seen in:

ftæpnu (1r, 13), foþna (1v, 14),	<i>stefnu, sofna</i>
epτar (2v, 17), fkæpτar (2r, 1)	<i>eftir, skeftar</i>

There is no instance of /ps/ either in the conservative or assimilated version in the text. Also, another common fall, /rn/ > /n:/ is kept in the conservative form in the text:

huærn (1v, 26).	<i>hvern</i>
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3.15.3 Assimilations and losses within consonant clusters in NRA 6

The fragment shows evolutions only for the cluster /fn/, while any of the other three is kept with the older spellings, <pt>, <ps> and <rn>. The cluster /fn/ has three possible evolution, <mf>, <mn> and <m>, this last one only in word-final position when attached to another word. The examples are:

næmpndum (1v, 12), laga fæmnu (2v, 2), fæmno (3r, 16), jamgoτ (3v, 9), næmpní (4r, 8), iamfækkr (5r, 20)	<i>nefndum, lagastefnu, stefnu, jafngott, nefni, jafnsekr.</i>
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3.15.4 Assimilations and losses within consonant clusters in NRA 13

The fragment vacillates between conservative forms and progressive forms. The cluster /fn/ is in the majority of examples kept as such, except once where it turns into <mn> and twice where the /fnd/ cluster has a drop of the middle consonant <d>, becoming <fd>. The cluster /pt/ is always turned into /ft/, but it appears only in the classic example *eftir*. The cluster /rn/ is always kept as such.

Jamnan (2v, 24), næfðar (2v, 5), æfni (1r, 13), fæfna (1v, 29), næfna (1v, 32)	<i>jafnan, nefndar, efni, stefna, nefna</i>
æftir (2r, 3)	<i>eftir</i>
fegirnd (4v, 11), fegirni (4v, 13)	<i>fégirnd, fégirni</i>

3.15.5 Final remarks on assimilations and losses within consonant clusters

These evolutions are very important for the localisation of the fragments. For NRA 3, since it was most common in Eastern Norwegian, it seems even more plausible the hypothesis of Rindal and Spørck (2018, 32). The scribe of NRA 5 however behaves in a rather peculiar way, avoiding the new evolutions and writing down the older forms. If the epenthetic vowel /a/ was not present in this fragment, this could have created even more issues. The fact that NRA 6 presents the evolution only in the most common of the 4 evolutions, while leaving the older graphemes for the other evolutions, is very interesting. There were already traits that could have showed a Western origin for this fragment. At this point, the main possibility is that the fragment was written in North-western Norwegian. For NRA 13 this trait is present also in a mixed way. It could have been therefore also from the North-western area, but it still is too hard to tell.

3.16 Negation particles *ú-* and *ó-*

The more conservative form of the particle used in Old Norwegian used to turn a word into his negative counterpart was originally /u:/, but already in the early period of Old Norse writing, it evolved to /o:/. The general division in dialect shows that Northern areas, which means Trøndsk, North-eastern and North-western, preferred the evolution, while Southern areas left the phoneme as the high velar vowel (Haugen 2018, 285). Rindal, however, showed that it is common to find both form in most documents, with a majority of *ó-* in the North and a majority of *ú-* in the South (Rindal, 1981, s. 66).

3.16.1 Negation particles *ú-* and *ó-* in NRA 3

In the fragment we have only one case of the negative particle:

oeteknu (2v, 13)	<i>óteknu</i>
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3.16.2 Negation particles *ú-* and *ó-* in NRA 5

The negation particle used in the text is, *ú-*, as it shown in these examples (in which we follow the normalised orthography *ó-* of the Dictionary of Old Norse Prose (Ordbog over det norrøna prosasprog)).

γμείδδα (1r, 23), υπριði (1r, 25), uboτα maðz (3r, 15), uboτα mal (3r, 18), ugillðir (3v, 9)	<i>ómeidda, ófriði, óbotamaðr,</i> <i>óbótamál, ógildir</i>
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3.16.3 Negation particles *ú-* and *ó-* in NRA 6

The negation particle used in this text is *ó-*, as it can be seen in the only three cases where it appears:

oþokka (1r, 15), ohæþo verk (1v, 14), ofakaðz (6r, 16)	<i>óþokka, óháfuverk,</i> <i>ósakaðr</i>
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3.16.4 Negation particles *ú-* and *ó-* in NRA 13

The negation particle used in the fragment is the older form *ú-*, as can be seen from the examples:

ufkíl (1r, 14), umægð (2r, 3), ufkaððzí (2r, 26)	<i>óskil, ómegð, óskaddri</i>
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3.16.5 Final Remarks on negation particles

This phenomenon must be taken in a delicate way. As both forms were common in all areas but with a certain preference of either in the North or the South, it should be taken more as a confirmation of pre-existing hypothesis rather than used as a strong argument for a certain dialect. For NRA 3 and 6 we have the evolved forms. In the case of NRA 6, it could be therefore taken as yet another argument for a North-western dialect. In the case of NRA 3 however, it should have been more common the other form, but the fact that the evolution is used cannot be taken as an argument for a possible northern dialect, considering there are much stronger cases to be made for a South-eastern dialect (the spelling <ou> for the diphthong /ou/, for example). For NRA 5 the conservative forms are to be

expected from a South-eastern dialect. For NRA 13, the presence of the conservative form could be taken as indication of a Southern dialect, but as explained, it cannot be used a strong argument for any dialect.

3.17 Evolution of the reflexive endings of the verbs

This is another morphological evolution. The older form *-sk* starts having two different forms which are both spread in all 5 dialect areas, but with a majority of one preferred form over the other. They appear to be simply preferences rather than actual new allomorphs since we can find both forms in all 5 dialectal areas. Generally, the eastern area and Trøndsk prefer the form with <s>, while the western dialect have a stronger presence of <st> (Haugen, 2018, p. 287). The more doubtful evolution is the one that uses *-z* or *-zt*. Rindal believes that they are just allographs of <s> and <st> (Rindal, 1988).

3.17.1 Evolution of the reflexive endings of the verbs in NRA 3

NRA 3 has both forms, but always with <z> instead of <s>. However, the form most common in eastern dialects, without the <t> is present more than double the time of the form with it. As such, the forms present are:

<p>uirðizt (1v, 5), berzt (2r, 6), kallazt (2v, 8), fýnizt (1v, 21), ettaizt (1v, 19)</p>	<p><i>virðisk, bersk, kallask, sýnisk, etjask</i></p>
<p>ábyrgiaz (1r, 6), fýllaz (1v, 18), fulnaz (2r, 14), halðez (2r, 15), andaz (2r, 17)</p>	<p><i>ábyrgjask, fullask, fullnask, haldisk, andisk</i></p>

3.17.2 Evolution of the reflexive endings of the verbs in NRA 5

NRA 5 also has both forms. However, there is one single case of <z> and four with <zt>:

<p>hæpzt (1r, 7), fækkiaz (1v, 7), býzt (2r, 15), gerízt (3v, 5).</p>	<p><i>hefsk, sekjask, býsk, gerisk.</i></p>
<p>hýgðz (3r, 17)</p>	<p><i>hyggðisk.</i></p>

3.17.3 Evolution of the reflexive endings of the verbs in NRA 6

The evolution of the reflexive forms that are to be found in the text are two, <fτ> and once <zfτ>:

virðifτ (1r, 20), þózeft (1v, 2) lægzfτ (1v, 15), bærfτ (2r, 1), bærafτ (6r, 4).	<i>virdisk, fǫrisk, leggsk,</i> <i>bersk, berask</i>
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3.17.4 Evolution of the reflexive endings of the verbs in NRA 13

The evolution is present almost equally in both forms, the one with <s>, in its |z| allograph, and with <st>, with the two allographs |zτ| and |fτ|. The examples are:

uirðiz (1r, 29), fýrniz (1v, 15), uínz (2r, 11), fínniz (2v, 3), fkliaz (2v, 25), gæraz (3r, 8)	<i>virðisk, fyrnisk, vinnsk,</i> <i>finnisk, skiljask, gerask</i>
fkaerfτ (3r, 7), græiðizτ (3r, 29), uarizτ (4v, 3), uirðizτ (4v, 19).	<i>skarsk, greidisk, varisk,</i> <i>virðisk</i>

3.17.5 Final remarks on the evolution of the reflexive endings of verbs

This evolution is also one of the most important, as it carries a strong difference between dialects and because it first appeared during the second half of the 13th century. The scribe of NRA 3 used both forms, but the fact that he/she preferred the forms without <t> might be taken as indication that he was from Eastern Norway. The scribe of NRA 5, as it happened in other cases, prefers the form that was not particularly common in South-eastern Norway. It might be possible to argue that, at this point, the scribe of NRA 5 either was from the South-eastern area but learned to write somewhere else or that he copied the fragment from texts not from that area, and, while he followed the older ones, he would sometimes show his origin, either consciously or subconsciously. The scribe of NRA 6 preferred the form that was common in the western areas, another sign of a possible western origin. The scribe of NRA 13 creates the most problems, as he used both forms equally. At this point, the remarks by Rindal and Spørck (Rindal & Spørck, 2018, s. 33) are confirmed: the scribe was surely Norwegian, but from which part of the Norwegian Kingdom was he from is yet to be discovered.

CONCLUSION

Out of all these evolutions, only a handful of them are important for the localisation of fragments. These few evolutions have, in three out of four fragments, given highly possible localisation, while the datings have only been confirmed. Those given by Rindal, Spørck (2018) and even Storm (1885) seem to be correct. They are corroborated both by the linguistic analysis and the palaeographical one.

NRA 3 is most probably from the end of the 13th century, as it was proven by both linguistical features, such as the total lack of the more conservative forms of the reflexive verbs, those with the ending *-sk*, the presence of the graphemes <o> and <au> for the younger back mutation, which also happened around half of the 13th century. All those phenomena are noted in the text, even though the scribe is generally quite conservative. Moreover, the palaeography is also quite useful in this, as it adds supports to the idea that the fragment was from this period: the use of <f> in word-final position, plus the use of <τ> with the vertical line crossing the horizontal line but not creating an ascender can only corroborate the possibility of a late 13th century dating. For the localisation, the stronger arguments for a South-eastern dialect are the presence of <au> for the younger back mutation, a truly South-eastern trait, and the use of <ou> for the diphthong <ɔu>, also a trait which is only to be found in that area.

NRA 5 is most probably from the beginning of the 14th century. The main problem with this fragment is the fact that it features both extremely conservative forms and innovative ones. While it features the newer forms of the reflexive verbs, as well as, in the palaeography, the use of <ε> in the ending position, it also features conservative forms such as the consonant clusters before their assimilations and/or losses and the coexistence of both the younger and older spelling of /ɔ:/. There is in general a discrepancy between the language, which seems more conservative and could point towards an earlier date, and the palaeography, which, except for the use of insular <ɣ>, points towards a dating from circa 1310-1330. For the localisation, this fragment also proved quite challenging. However, the greatest indication that Rindal and Spørck were right in their localisation is indeed the epenthetic vowel /a/, a truly South-eastern trait (Rindal & Spørck, 2018, s. 32). Other traits also corroborated their hypothesis, such as the use of the negation particle /u:/ instead of /o:/, which was more common in southern dialects, and the use of <a> instead of <o> for the younger back mutation. However, the aforementioned conservative forms for the consonant clusters are quite strange, as they were most common in Eastern Norway.

NRA 6 is the fragment that had, before this thesis, no assigned dialect by former scholars. Therefore, it was one of the greatest challenges of this master to give an geographic origin to this text. As far as it can be discerned from these seventeen linguistic phenomena, the dialect of this fragment

is most probably North-western Old Norwegian. The fragments present a mixed form of evolved and conservative forms of the consonant clusters. Moreover, it has the expected forms of a North-western scribe in both the negation particles and the reflexive endings of the verbs and in the very little use of monophthongisation. The dating of this fragment seems to be the one given by Storm in its work (Storm 1885, 766). The palaeographic analysis showed traits that are both common at the turn of the century, but even a bit later, especially the use of <ð> with a very short ascender. Linguistically, the fragment features some traits that appeared first in the middle of the 13th century, such as the evolved reflexive forms, the phoneme /ɔ:/ is exclusively written as <a>, which might show that the period of co-existence was over by the time this fragment was written. Furthermore, we do find some forms without the younger back mutation written with the newer spelling, giving a co-existence of the forms that in this case shows that the fragment might be younger. As such, since there both conservative forms that would be more common before 1300 and other that are more common after it, the dating by Storm could be taken as correct.

NRA 13 is by far the most problematic of the fragments when it comes to localisation. Both Eastern and Western dialects are possible candidates, but there is not a generic pattern to it. Possibly, in this case the content of the fragment can indeed be helpful, as it features some laws and prohibition that were made by Hákon Magnússon during his reign in the area of Oslo or Viken. Furthermore, the fragments have been assembled from different areas of Telemark. Unfortunately, this does not fully mean that the scribe is from there, as scribes moved as much as modern people do. Moreover, even looking at the history of the early 14th century, it makes everything more dubious: Hákon V was the king that moved, albeit unofficially, the capital from Bergen to Oslo, where the court and the bureaucratic machine of the kingdom moved as well (Norseng, 2020).

To conclude, this thesis fulfilled both the goals that were given in the Autumn of 2019: it gives a thorough electronic edition of the fragments, expanding the *corpus* of the MENOTA archive, which soon will be enriched even in its more public form of these four fragments, in all three types of edition available. This way, those looking for the use of abbreviations and the graphemes used in the text can look at both the facsimile and the diplomatic editions, while those interested, that can understand Old Norse in its reconstructed and normalized form, can read and study the normalized editions and look for differences and/or similarities between this fragments and others that reproduce similar parts of both the *Landsloven* and *Bergens bylov*. Since the number of fragments and text reproducing those extremely important text (especially important for Norway) is not that extensive, it should be a priority of those in the field to reproduce and edit all the fragments and manuscripts present for those bodies of work to better understand the legal culture that was present in Norway at the time.

Moreover, it discovered both the dating of all four fragments and the localisation of three out of four. It would have been even better if it were possible, using these seventeen phenomena, to decipher properly NRA 13 and understand where its scribe was from. Although this was not possible for the moment, it is fulfilling to know that at least NRA 6 now has a (possible) origin.

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