The (Re)construction of music for bowed stringed instruments in Norway in the Middle Ages

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Foreword

This hovedfag thesis has its roots in two theater productions I took part in with the medieval ensemble Sequentia, presenting stories from the Poetic Edda.[1] The Edda texts were performed in medieval Icelandic, sometimes with instrumental accompaniment. In order to find melodic motives that could be used to present the Edda texts, Benjamin Bagby turned to the Icelandic *rimur* tradition and distilled several modes with characteristic motives from hundreds of rimur examples. I constructed pieces for medieval fiddle, as well as song accompaniments, using some of these modes and motives and incorporating elements of the Norwegian folk tradition. I was especially interested in the way hardingfele*slåtter* were constructed from small motives that could be repeated and varied, and I used this type of construction in some of my own pieces.

While working on these two Edda projects with Sequentia, I became interested in exploring some possible elements of Norwegian medieval fiddle traditions more thoroughly. This hovedfag thesis represents one phase in the exploration.

The first part of this thesis is the search for evidence of bowed stringed instruments in medieval Norway. Literary references, archæological finds, and iconographical representations will be consulted in order to speculate about what instruments could have been played and some of the musical contexts. Ethnological evidence and the question of whether an unbroken tradition of bowed instrument playing exists in Norway are addressed.

The second part of this thesis is concerned with the search for some elements of the music that could have been played on medieval fiddles in Norway as well as some aspects of the playing techniques that could have been used. I have postulated that if similarites are found in musical elements or playing techniques, between the European medieval musical tradition and the Norwegian folk tradition, these similarities could be used in the reconstruction processs of a musical tradition in medieval Norway.

The goal of this thesis is not to present a collection of newly reconstructed pieces, but to discuss elements that could be used in the process of reconstruction. The topics discussed include tunings, tonality and intonation, construction and form, melodic material, and bowing techniques.

I have used the word (Re)construction" in the title of this thesis to acknowledge that this process involves both reconstruction, the

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[1] (Sequentia '99; '02).

attempt and desire to draw nearer to the musical tradition of long ago, and construction, making something new out of presumably older elements that will be played and heard in the context of a multi-faceted musical life today. In the text I will use the less cumbersome word, ”reconstruction”.

I would like to thank my advisor, Gisela Attinger, for the encouraging guidance she provided along with many insightful discussions. I also thank Hedvig Vollsnes and Gjermund Kolltveit for help with source materials and inspiring conversations. Last, I thank Hans-Hinrich and Mattias for their unwavering support and patience.

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Part One: Evidence of Bowed Stringed Instruments in Norway in the Middle Ages

Introduction

In the search for information about bowed stringed instruments in medieval Norway, four types of evidence will be used; literary, archæological, iconographical, and ethnological. The literary evidence cited is taken from Hedvig Vollsnes' hovedfag thesis,"Musikk som en del av kulturhistorien i norsk middelalder", and, as explained below, uses sources written in Iceland as well as Norway. Because the archæological and iconographical sources of information are limited in Norway, additional evidence from countries that had contact with Norway in the Middle Ages will also be discussed. The ethnological evidence used will be limited primarily to Norwegian traditional music practice.

In deciding the chronological and geographical boundaries of this thesis, works of Norwegian music history were consulted in order to compare how the authors defined the Middle Ages in Norway.

The second chapter of Nils Grinde's A History of Norwegian Music is titled "The Viking Expeditions and the High Middle Ages (ca. 800-1350)". Grinde writes that the Viking period in Norway extends from shortly before 800 until shortly after 1000, and that at the end of this time, Christianity "officially had triumphed over the old Norse religion." He considers the death of Olav Haraldsson at the battle of Stiklestad in 1030 to be an important event in the process of establishing Christianity in Norway at the end of the Viking period. Grinde does not explicitly state when he considers the High Middle Ages to begin, noting that it took many years to establish both the Church and the government of the new Norwegian kingdom. (op.cit.:7) This chapter extends until 1350, the time of the Black Death plague. Grinde writes that before then, the cultural life blossomed, but that the plague curtailed the cultural impulses until the sixteenth century. Chapter 3 of Grinde's A History of Norwegian Music is titled "The Music of the Roman Catholic Church (ca. 1000-1536). In this chapter as well, Grinde notes the devastating effect of the plague, with little evidence of cultural activity afterwards until the early 16th century.(Grinde:28) In the sixth chapter, titled "Folk Music", Grinde refers to the Middle Ages again in his discussion of possible origins of some aspects of Norwegian folk music.

Norges Musikkhistorie follows a similar division of chapters. The second chapter is titled "Fra lurblåst til klokkeklang" and again states that the Viking period extends from ca. 800 to the battle of Stiklestad in 1030. Ola Kai Ledang writes that the transition from the Viking period to the High Middle Ages is marked by the change from the old Norse religion to Christianity. He adds that although Christianity made a

breakthrough in Norway in 1030, and continued to become more established throughout the next two centuries, elements of the Viking culture lived on especially in the musical practice until the middle of the 13th century, and that, therefore, this chapter is limited to the years ca. 800-ca.1250. He adds that the end of the Viking period and the beginning of the establishment of the Church marked the beginning of both musical notation and of written literature. The next chapter of Norges Musikkhistorie is titled "Kirkens musikk før reformasjonen", and covers the time from the first inroads of Christianity in Norway until the Reformation in 1536. Secular music in the Middle Ages is discussed further in the beginning of the chapter titled "Stadsmusikantene". A section of this chapter, dealing with secular music in the 16th century has the title, "Renessansen" and seems to imply that the Middle Ages come to an end with the Reformation. Medieval secular music is also discussed in the following chapter, Folkemusikk.(Edwards et al.)

Hedvig Vollsnes, in her *hovedfag* thesis, "Musikk som en del av kulturhistorien i norsk middelalder" discusses the process of determining both chronological and geographical boundaries for her thesis. She writes that it is usual to define the Middle Ages in Norway as the five hundred years of from the establishment of Christianity in the 11th century until the Reformation in 1536. Vollsnes explains that it is actually the available source material that sets the boundaries of her thesis, limiting her primarily to the period from 1200 to the Reformation. She adds that from the 14th century until the Reformation, continental Europe went through the transition from the Middle Ages to the Renaissance but that the political and economic aspects of life in Norway were still tied to the Middle Ages.

Vollsnes also discusses the geographical boundaries of her thesis, choosing the boundaries of present-day Norway.(Vollsnes:6f.) She uses literary sources from Iceland, however, defending this decision with several points. She explains that not only are the languages in Norway and Iceland almost the same at the time the sagas were written, but that they had similar cultural traits and abilities to absorb new cultural elements from the south and west. She adds that travel between Norway, Iceland and the Orkney Islands meant that contact between the countries was maintained, and that the Icelandic sagas described aspects of the *norrøne*, or "old Norse", culture[2].

The chronological boundaries for this hovedfag thesis are the early 11th century to the Reformation. Although the first references to bowed

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[2] Vollsnes defines *norrøne* , or "old Norse" as Iceland, Norway, the Faro, Shetland, and Orkney Islands, and Greenland. She defines *nordisk,* or, "nordic" as Norway, Iceland, Sweden, and Denmark.

stringed instruments in Norway are from the 12th century, the bow first began to be used in Europe in the 11th century which defines the earliest boundary for bowed instruments in Norway. (Bachmann:38)

The geographical boundaries of this thesis are limited primarily to present-day Norway geographically, while considering the contact Norway had with other countries during the Middle Ages.

1. Literary Evidence

References to bowed stringed instruments in literary works of the Middle Ages can provide insight into different aspects of the musical world of the medieval fiddle player. The sources provide some information about what instruments were known and played, the context of the music-making, and the status of the players.

Hedvig Vollsnes' hovedfag thesis, Musikk som en del av kulturhistorien i norsk middelalder, is an invaluable resource for the discussion of literary evidence of stringed instruments in the Middle Ages in Norway. In her thesis, Vollsnes has compiled the known literary references to music making in Norway in the Middle Ages. The written sources that refer to music are primarily works of fiction from the 13th and 14th centuries, and music, for the most part, plays a peripheral role in the storytelling.(Vollsnes:14f.) There are few sources before or after this time, and Vollsnes explains that, not only was there most interest in music during the high Middle Ages, but that this was the most prolific period of writing.

In her interpretation of the many references, Vollsnes stresses the importance of differentiating between the time the source was written and the historical time described in the source. Many of the sagas were written centuries after the events they describe. The musical instruments cited were likely known by the manuscript scribe and his contemporaries, but one can't assume that they were necessarily in use during the time periods described in the source. (op.cit.:11, entire paragraph) [3]

1.1 fiðla and gigja

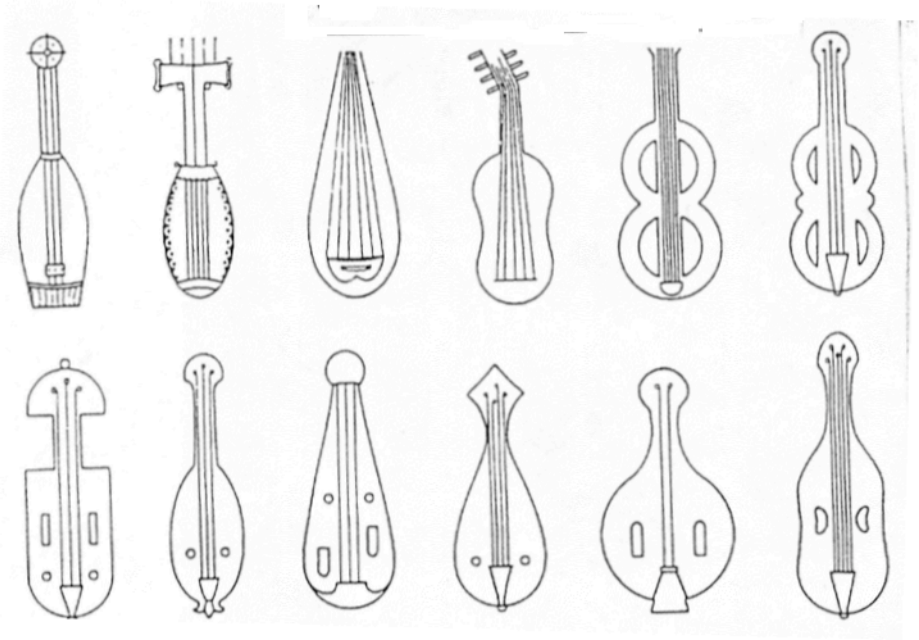
Vollsnes finds six names of stringed instruments in the sources: harpa, fiðla, gigja, psalterium, simfón and organistrum, and she notes that two other general terms, strengleikar and strengleikatól are found as well. (op.cit.:51) Fiðla and gigja are bowed stringed instruments with the

[3] Op cit.:11f. In Norwegian, the terms used by Vollsnes to describe two different types of evidence are *levning* and *beretning*. She writes that all the sources can be interpreted as *levning* or description of the time the source was actually written. Vollsnes points out that one must be very careful in using source material as *beretning* or evidence from the time of the events described in a source. In order to use a source as a *beretning*, one should find several independent sources of the same evidence. In the case of information about musical life in the Middle Ages, the evidence is for the most part too sparse. Vollsnes writes that she has generally used *islendingsagaene, riddersagaene* and *fornaldersagaene* as *levninger* and that *kongesagaene*, *samtidssagaene* and *biskopsagaene* are all *levninger* from their own time but can also sometimes be used as *beretninger* of the earlier described times.

playing technique described by the verb å drage or 'to draw'. The verb å slå or 'to hit' can be used to mean either pluck or bow.[4]

Hortense Panum explains that the name gigja is probably of German or Nordic origin from the verb geiga, geigen, meaning to move back and forth, which refers to the motion of the bow. She writes that the derivation of the name fiðla is not clear. German etymology traces the word from the old-German fidula to Latin fides and fidicula, meaning "string" and "stringed instrument". The old-French viole and vièle can be traced back to the Latin vivus, meaning "living" and "lively". She adds that these terms could be traced back to a common Latin root, vitulus, from vitulor which means "to praise" or "to sing a song of praise". The word derivations of both gigja and fiðla do not provide any description of the instruments meant by these names.(Panum '31:56, entire paragraph)

Panum notes that instruments of these names (German gîge and fidula, videl; French gigue and viole, vièle) are found in Europe in the Middle Ages. Because the sagas describe the musicians playing gigja and fiðla as being traveling musicians from foreign lands, or leikare, Panum concludes that these are imported instruments, the most common European bowed instruments, fidel and rebec.(op.cit.:68f.)



ill. fiddle types according to shape, from (Bachmann:74)

[4] (Vollsnes:61) cites (Panum '15:58)

Although Panum writes that gigja and fiðla must have originally described two different instruments, she adds that this only holds true for a short period in the Middle Ages.(loc.cit.) Vollsnes has found that the terms fiðla and gigja do not always appear together.(Vollsnes:63) Because use of the term fiðla becomes much less frequent in the later sources while the use of the term gigja continues, Vollsnes concludes that the term gigja is used for both fiddle and rebec in the later Middle Ages.(loc.cit.) Bachmann finds it pointless to try to associate names of bowed instruments found in texts with particular instrument types and notes that the same name was often given to different instruments if they shared the same function and method of performance. Sometimes different names are given to the same instrument in one text source. Bachmann:74) I will refer to the fidel and rebec as "medieval fiddle", or "fiddle".

The basic construction method for medieval fiddles is the same, regardless of shape. First the body, neck, and pegbox are carved out of one block of wood, and then the body is hollowed out and covered by wooden soundboard.(op.cit.:72) The medieval fiddle is seen in a variety of shapes that Bachmann organizes in two categories; those where the neck and body merge together, and those with a definite neck.[5] Bachmann finds that most early fiddles of the 11th and 12th centuries had three strings, while instruments of the 13th century often had five.(op.cit.:139)

1.2 Earliest Literary references, from 1184

Two of the earliest references to the medieval fiddle describe humorous moments of confrontation between leikare and poets. They are found in two of the Kings' Sagas, sources that Vollsnes would interpret not only as representative of the time of the sagas' authors, but also as accurate descriptions of the time of the story being told.(Vollsnes:12)

The first reference is found in *Sverris saga* from ca. 1200.[6] King Magnus and some of his men were being entertained by two leikare when the poet Mani enters:

> "The King was on the frontier of the land, in the east, when Mani came to him, just returned from Rome in the condition of a beggar. The King was in the sitting-room with his train when he entered. Mani was not a handsome man at the time, for he had a

[5] (Bachmann:73f.) has illustrated several fiddle shapes. He writes that it is also possible to categorize fiddles according to method of string attachment and position of the tuning pegs.

[6] (Kristjánsson:151f.) Sverri was a priestling from the Faro Islands who defeated King Magnús, and became king of Norway in 1184. Sverris saga was written by the Icelandic abbot, Karl Jónsson, the opening chapters dictated by Sverri himself. The saga was probably completed shortly after Sverri's death in 1202.

shaven crown and was almost naked, yet he knew how to greet the King courteously. The King asked who he was. “My name is Mani,” he answered, “And I am an Icelander just come from Rome, in the south. And the King said, “You must surely be acquainted with old-time stories, Tungli; sit down and recite one.” So Mani recited the Utfarar- drapa, which Halldor Skvaldri composed in Honour of King Sigur Jorsals-Fari, grandfather of King Magnus on the mother's side. The poem, was received with great applause, and seemed to afford great pleasure. Now, there were two jugglers in the sitting-room. They had some little dogs, trained to jump over a stick when in the presence of men of rank, and the nobler the spectator the higher the jump the dogs would make. “Do you see, Tungli,” said the King, “what little account the jugglers make of you? Compose a verse on them, you may possibly be rather a gainer by it.” then Mani recited:

> “With fiddle and pipe the cunning fellow fares,
> The juggler brings his scurrilous gestures
> Over the rail he makes the red dog leap
> To amuse the men. A merry show indeed!
> Pray stop his horrid should not listen.”

And again he recited:-

> “The fiddle sounds, they strut, they grip the pipe,
> The chalk-faced fellows their foolish antics play;
> 'Tis wonderful to watch the rolling eyes
> Of him that sounds the trump, and then to see
> The rascal's puckered chops and cheeks blown out!”

This produced great laughter, and the Guardsmen formed a ring round the jugglers, reciting the verse, ever repeating oftenest of all the words, “chops and cheeks blown out.” The jugglers felt much like being roasted, and escaped from the sitting-room. But the King took Mani to himself, and afterwards had him in his company until they reached Bergen.”(Sephton '94)

The instruments named in the saga are *gígju* and *pípu*. Because this is a saga describing recent events, it seems probable that these instruments were actually played by leikare entertaining the king.(Vollsnes:12)

Vollsnes interprets this story as a sign that the leikare have a lower social status than the poet Måne. Audiences may enjoy their entertainment but have a derogatory opinion of them as well. Vollsnes concludes that in Nordic intellectual circles recitation and invention of poetry and epic stories was more highly valued than music. The poet Måne is indignant that the king should have to watch the nonsense of the leikare.

The second reference involving a leikar and a poet is from *Ingasaga ok bræðr hans.*

The fiddle player, Jarlmann, who is a leikar in Bergen has stolen a young goat from a farmer and has eaten it during Lent. King Sigurd Munn was in Bergen, and determined that Jarlmann should be whipped as punishment. The poet Einar took pity on Jarlmann, so the king agreed that Jarlmann should only be whipped for as long as it took Einar to invent a verse. Luckily for Jarlmann, he was finished after only five blows. The verse describes Jarlmann as a bad Christian who is bound to the wagon while the whip sings a *prima,* or morning prayer, to him[7].

Vollsnes interprets the interaction between Jarlmann, Einar and King Sigurd.(op.cit.:120) In an earlier episode recorded in *Knytlinga saga*, Einar writes a poem describing the indignation he felt when King Svein didn't pay him for a poem, but rather listened to *fiðlur* and *pípur*.

> The noble Svend did not
> pay Einar for the kvad.
> Otherwise the fearless nobleman
> is called generous;
> Rather the dancers lord
> Listens to fiddles and flutes,
> Bad!—but Ribe-Ulf governs the
> Wealth of the count.[8]

This verse illustrates the competition Einar faced with leikare, but in the episode with Jarlmann, Einar shows sympathy towards him, referring to him as a "companion". The king agrees to allow Einar to determine the punishment, and Einar demonstrates both his poetic skills and empathy by creating his poem so quickly. At the same time,

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[7] Austr tóc illa cristinn
jarlmapr frá búcarli
(grópr var kjöts á kaupa)
kipling, hinn er slær fiðlu
vöndr hröcc, vámr lá bundinn
velmáll á scip pillar
song leikara lengi
limi barpan prima

From "Fornmanna Sægur" VII p.356; cited in Vollsnes.

[8] Ekki haut af ítrum
Einarr gjafa Sveini
(öld lofar öðlings mildi
æðru styggs) fyr kvæði;
danskr harri metr dyrra
(dugir miðlung pat) fiðlur,
ræðyr fyr ræsis auði
Rípa-Ulfr, ok pípur

From "Den Norsk-Islandske skjaldigtning. Finnur Jónsson, København and Christiania 1912; cited in Vollsnes.

he expresses his opinion of Jarlmann, calling him a bad Christian.(op.cit.:65)

These episodes from *Sverris saga* and *Ingasaga ok brædra hans* are taken from the Kings' Sagas and could indicate that both the gigja and fiðla were played by leikare in Norway in the 12th century.(op.cit.:12) In addition, both episodes illustrate a disparaging opinion of leikare. Although they were often welcome by royalty to provide music and entertainment, they were viewed with suspicion because they were travelers who were considered lawless. The Church disliked leikare because their music and antics could lead to wild behavior.

It is possible that the author of *Sverris saga*, Abbot Karl Jónsson, used the story of Måne and the leikare to illustrate the church's opinion of leikare. The poet, Einar, in the story with Jarlmann, is Einar Sturlasson, a priest, and the most well-known poet of the 12th century.(Kristjánsson:109) He is known for his religious poem *Geisli* written about St. Olav and his miracles and delivered at the time of the consecration of the Nidaros Dom, 1153.(loc.cit.) His two poems cited above describe his disgust for King Svein who prefers leikare over poetry, and for the leikar Jarlmann who both steals and breaks the fast of Lent.

The story of King Herod, retold in the *Gammel Norsk Homiliebog* of the 12th century places the fiddle in a different context. In the Latin Bible, King Herod is entertained by his stepdaughter who sings and dances. The Norwegian author has altered the passage so that she sings and plays the fiddle, which could be taken as evidence that the fiddle was known in Norway at the time.[9]

This passage shows that, while the leikare were viewed with skepticism, the instruments themselves, and some of the music played, were acceptable in other contexts, including religious ones.

1.3 Chivalry in Norway

As Jónas Kristjánsson writes, the man responsible for the literary richness of the high Middle Ages in Norway was King Håkon Håkonsson. Håkon Håkonsson was elected king in 1217 and ruled until his death in 1263. Kristjánsson writes that he was a cautious ruler, establishing lasting peace in Iceland and Norway. He built churches and monasteries and the stone hall still standing in Bergen. He

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[9] (Vollsnes:62)n mær æin ung scemti mønnum væl, su var stiupdotter konongsens, í song oc i fiðluslætte, oc licaðe mønnum væl scemtan hennar.
The iconography from 14th century Europe often depicts Salome accompanied by a single fiddle player as she dances. Howard Mayer Brown concludes that the artists painted what they experienced, and that fiddles often played at banquets in the 14th century. He notes that the instrument combinations change from century to century, and in the 15th century, shawm bands are protrayed as accompaniment. (Brown)

strengthened Norway, bringing Iceland and Greenland peacefully under his rule. King Håkon wanted to model his kingdom after European countries and introduced the ideals of knighthood and chivalry to Norway. He was a literary and learned man, and part of his efforts to establish his court in the European manner, was to commission translations of contemporary European literature.(Kristjánsson:314f.)

Many works were translated by Brother Robert, and Kristjánsson believes that later sagas written in Iceland could have been modeled after his translationsAlthough the French originals were in verse, Robert translated them into prose, using a "courtly style" of language. Kristjánsson describes this decorated prose style as successful, but adds that Brother Robert sometimes changed the stories, which was less successful. Kristjánsson writes that Robert tries to turn the French romances into Norse sagas, perhaps because he thought the Norwegian audience wouldn't appreciate other literary genres. The French poets included extensive descriptions of the thoughts and feelings of their characters which was not customary in Norse storytelling. Robert omitted almost all the psychological description, thought processes and monologues, and reduced the long dialogues. Kristjánsson finds that this process destroyed the essence of the poems, making them inferior both to the original French poems and the Icelandic sagas he used as models.(op.cit.:321f., entire paragraph)

The later sagas written in Iceland and Norway between 1250-1350 were inspired by the translated sagas of chivalry. The "heroic sagas" relate stories set in Scandinavia long ago, before Iceland was colonized in the ninth century while the Icelandic "sagas of chivalry" are often set in foreign lands. Both types incorporate elements of fantasy, fairy tale, and the supernatural.(Kristjánsson:337f.)

1.3.1. Translated sagas

Tristrams saga dates from 1226 and is thought to be the first saga Brother Robert translated for King Håkon.(Kristjánsson '92:319) A brief episode in the story illustrates the assumption that someone with a gigja must be a traveling musician, or leikar. When Tristan wanted to disguise himself as a *leikar* in order to annoy and make fun of the Irishman who had kidnapped Isond, he only had to carry a gigja, and didn't find it necessary to change clothing or add any other disguise.(Vollsnes:56f.)

In *Saga Þiðriks konungs af Bern*, a performer, Isung, is asked by King Osantrix what he is able to do. Isung, who has the title, *hafuðloddari*, or head entertainer, first replies modestly that he isn't better than most of the others. He then lists his accomplishments;[10]

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[10] *Saga Þiðriks konungs af Bern* was constructed in Norway in the late 13th century

> "I can sing/recite. I can pluck the harp and bow the fiðla and gigja and all sorts of stringed instruments."[11]

Afterwards, Isung, playing the harp, and his dancing bear entertain the king and his followers. Isung is a talented performer, proud of his abilities. As Vollsnes notes, *Saga Diðriks konungs af Bern* is originally German and does not describe court life in Norway, but she finds it possible that this episode could provide an illustration of one possible European attitude towards leikare.(op.cit.:121) In this example, a traveling leikar is not portrayed in a derogatory manner, but as an accomplished professional.

Duggals leiðzsla, from the mid 13th century, is an early translation of the *Visio Tnugdali*. In this story, an Irish nobleman who has lived an ungodly life, repents and visits heaven in a vision. An angel shows him tents of the souls of monks and men and women who have lived in obedience to God.

> "And then they went nearer and saw in the tents both men and women, monks and nuns, in the likeness of angels. But their voices were to hear surpassing all the stringed instruments which they had seen and heard...All the instruments worked without the touch of human hand, and yet the voices of the souls sang without effort, so that their mouths did not move with the sound of their voices, but everything went according to their will. And the tents over their heads shone with great brightness, and there hung from the roof chains made of gold, with the most skillfully fashioned silver thread in between, and from them hung goblets, fiddles, harps, and all kinds of stringed instruments, with lilies woven of gold and golden balls."[12]

The list of instruments in the Icelandic translation of the original Latin text includes, "strengleikum horpur gigiur sinphonia organa sallterium pijpur" [13] The angels' song is described as being sweeter than the sounds from the instruments, but it appears that instruments were considered appropriate for a religious vision.

Kristjánsson writes that the most memorable translation commissioned by King Hákon is the *Strengleikar eða Lioðabók*, a collection of *lais* translated by Marie de France[14]. The poems have themes of love in a

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and is based on German poetry about ancient heroes. (Kristjánsson:331)

[11]. *Saga Þiðriks konungs af Bern*, published by C.R. Unger, Christiania 1853: cited in Vollsnes. ec kann qveða. ec cann sla harpv oc draga fiðlv oc gigiv oc allzkonar strengleica

[12] *Duggals Leiðsla*, Peter Cahill (ed.) Reykjavik 1983 (138f.); cited in Vollsnes.

[13] Op.cit, p.100

[14] *Strengleikar eða Lioðabók*. Published by R. Keyser og C.R. Unger, Christiania 1850; cited in Vollsnes.

romantic dream world and the prose translations are close to the originals, relating not only the events but also thoughts and feelings of the characters. (Kristjánsson:327) The poems were originally sung, and the translator adds an introduction that describes how the lais are performed in Brittany, with instruments.[15]

This could indicate that the performance of poetic song with instrumental accompaniment was unknown at the Norwegian court at this time and that the translator wanted to describe the European performance practice.(Vollsnes:68) At the end of several of the original poems, the poet Marie de France adds a verse explaining that a lai was composed based on the story of the poem. In the case of the lai of Guigemar, she adds that it was recited with instruments.

> "From this story that you have heard
> the lai of Guigemar was composed
> which is now recited to the harp and rote;
> the music is a pleasure to hear."[16]

Stjórn is a medieval Norwegian translation or paraphrase of the beginning of the Old Testament to the Second Book of Kings dating from the 13th century.(Kristjánsson:143) In six passages listing instruments, gigja is included, indicating the author's wish to include instruments that were currently known in his translation. The gigja and its player were apparently considered acceptable in the context of these passages, performances in the praise of God.[17]

The reference to a man named Mörður Gígja in the opening words of *Njåls saga*, written in the 13th century[18], illustrates that the *gigja* is not only associated with leikare, but in this case, with someone of higher social status.

> There was a man named Mord whose surname was Fiddle; he was the son of Sigvat the Red, and he dwelt at the "Vale" in the

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[15] (Kristjánsson:327) It is not certain who the translator is, but Kristjánsson refers to him as a "stylist of genius who had learnt much from Brother Robert." The instruments listed in the introduction are *horpum, gigiom, simphanom, organom, timpanom, sallterium oc corom oc allzkonar oðrum strænglæikum.*

[16] (Lais of Marie de France:54) *Strengleikar eða Lioðabók* En af þessare asgu er nu have þer høyrt. Þa gærðu Brættar i horpum oc i gigium, symphoniis oc organis hin fægrstu strænglæiks lioð. Oc hæitir þætta Gviamars lioð með hinum fægrstum notum er a Brætlande funnuse. En yðr se fræðe ok friðr oc fagnaðr er hœyrt haveð.

[17] 1.Mosebog 31: gigium. horpum ok audrum saungfærum; 1. Samuels Bog 10: læika oc skemtan. simphon oc psalterivm, gigior oc horpvr oc aðrir strenglæikar; 1.Samuels Bog 18: Svmar slogv horpvr oc gigivr. svmar svngv i pipvr æða með eigenligri ravst; p.504: horpor oc gigior, symphon oc psallteria. oc allz hattar songfæri; 1. Kongernes Bog 10: horpvr oc gigivr oc onnvr savngfæri. *Stjórn.* Gammelnorsk bibeloversettelse. Utgitt av C.R. Unger, Christiania 1850; cited in Vollsnes.

[18] *Brennu-Njáls saga.* Published by Einar Ól. Sveinsson. Reykjavik 1954; cited in Vollsnes

> Rangrivervales. He was a mighty chief, and a great taker up of suits, and so great a lawyer that no judgments were thought lawful unless he had a hand in them. He had an only daughter, named Unna. She was a fair, courteous, and gifted woman, and that was thought the best match in all the Rangrivervales.[19]

In two other sources from the time of Njåls saga, as well as one later source, he is referred to as Marðar gigju.[20]

As Vollsnes describes, this reference has caused some controversy among music scholars because the name Gigja is given to someone living in the tenth century while it is generally acknowledged that the bow first appears in Europe in the eleventh century. Vollsnes concludes that Mörður was a man known for his musical abilities and that either it was part of the oral tradition of the 13th century to refer to him as Mörður Gigja, or that the authors of the sagas chose this name.(Vollsnes:66) She finds it surprising that a man of high social status would be given the name Gigja, an instrument usually associated with leikare, rather than Harpa.(loc.cit.)

1.4. lists of instruments:

There are several references from the sagas that are lists of instruments played either in a procession to greet a king or other important person, or to provide entertainment at the castle. Some of these lists include fiðla, gigja, and the more general term, *allskyns streingleikar*, which can be translated as, "all sorts of stringed instruments." There is no indication how many musicians are actually present in these groups, and it is possible that there were several types of stringed instruments played. From these references listing instruments, one could conclude that the authors found it plausible that the instruments named could play together, if not all of them together constantly, possibly in different groups in alternation. It was also thought possible to play the instruments listed outdoors. These

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[19] Translation by Sir George W. DaSent (London, 1861). Electronic edition produced, edited, and prepared by Douglas B. Killings (DeTroyes@AOL.COM), July 1995.
"Mörður hét maður, er kallaður var gígja....

[20] *Laxdøla saga* Published by Njørdur P.Njardvik, Reykjavik 1970, cited in Vollsnes:
Hrútur kvongaðist of fékk konu þeirrar er Unnur hét, dóttir Marðar gígju.
Landnámabók Íslands Published by Det Kongelige Nordiske Oldskriftselskab, Copenhagen 1925, cited in Vollsnes: "horpum, gigiom, simphanom, organom, timpanom, sallterium oc corom oc allzkonar oðrum strænglæikum"
Flóamanna Saga Published by Finnur Jónsson, Kopenhagen 1830, cited in Vollsnes:
Qnundr bíldr hét maðr ok var landnámsmaðr; hann nam land fyrir austan Hróarslæk ok bjó í Qnundarholti. Hann átti þorgerði dóttur Sigmundar Sighvatssonar rauða. Sigmunðr var faðir Marðar gigju.
Hans son Sigmundr, faðir Marðar Gígju, ok Sigfuss í Hlið ok Lambi ok Rannveig, er átti Hámundr Gunarsson, ok þorgeðr, er átti Onundr bildr í Fióa.

instruments and the music performed were considered appropriate to welcome a visiting king and to provide entertainment at court.

Heimskringla of Snorri Sturlason (1179-1241) is a chronicle of kings up to Sverri, and musical life is mentioned only briefly.[21] The first part, *Ynglinga Saga,* written ca. 1230 describes the court of the Swedish king, Hugleik, although Vollsnes finds this should be interpreted as a description of Snorri's time.(op.cit.:112)

> "Hugleik was the name of King Alf's son, who succeeded the two brothers in the kingdom of the Swedes, the sons of Yngve being still children. King Hugleik was no warrior, but sat quietly at home in his country. He was very rich, but had still more the reputation of being very greedy. He had at his court all sorts of players, who played on harps, fiddles, and viols; and had with him magicians, and all sorts of witches".[22]

Another description of music at a royal court is found in *Saga Olafs konungs ens helga*, also from Heimkringla.

> "Then the king said: "Go and fetch him, he shall be my guest today." Then the food came in and then came leikarar with harps and gigjers and play, and then they commenced to serve drink." [23]

The instruments referred to in *Ynglinga Saga* are *harpa*, *gigja*, and *fiðla*, and the instruments from *Saga Olafs konungs ens helga* are *horpu* and *gigju*. This could be interpreted as evidence that these instruments were played in these combinations in Snorri's time.(op.cit.:112)

The *Karlamagnus saga* is a translation of several *chansons de geste* joined together, including the *Chanson de Roland.*[24] The royal feast

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[21] *Heimskringla*, Nóregs konunga sögur. Published by C.R. Unger. Christiania 1864; cited in Vollsnes.

[22] *Heimskringla* or The Chronicle of the Kings of Norway By Snorri Sturluson (c. 1179-1241) Online Medieval and Classical Library Release #15b Originally written in Old Norse, app. 1225 A.D., by the poet and historian Snorri Sturluson. English translation by Samuel Laing (London, 1844). This electronic edition was edited, proofed, and prepared by Douglas B. Killings DeTroyes@AOL.COM, April 1996. Some corrections and "Ynglinga Saga" added courtesy of Ms. Diane Brendan, May 1996.
... hann hafði mjok i hirð sinni allz konar leikara, harpara og gigjara og fiðlara; hann hafði ok með sér seiðmenn ok allz konar fjolkunnigt fólk.

[23] Saga Olafs konungs ens helga . published by P.A.Munch and C.R.Unger. Christiania 1853 (86)Þvi næst komú inn sendingar, ok þar eptir fóru inn leikarar með horpur ok gigjur ok songtól. Ok þar næst skenkingar.

[24] Karlamagnus saga ok kappa hans. Published by C.R. Unger. Christiania 1860; cited in Vollsnes. "sinfonie ok hörpur, fiðlur ok gígjur ok allskonar strengleikr". Kristjánsson writes about the section *af Runzivals bardaga,* based on the *Chanson de Roland*: "The Norse version-here Rolland appears as Rollant-is a good deal altered in comparison with the original and a good deal for the worse too- important parts are omitted and a number of wildly fantastic episodes added." (Kristjánsson:330)

given when King Karlamagnus visits King Hugon includes musical entertainment.

> "There were all sorts of delicate dishes of meat and fowl on the table- dishes of venison and wild boar, crane and geese, hens and peafowl in pepper sauce, duck and swan and all sorts of wild fowl. To drink there was mead and wine, piment and clary, strong liquor and mulberry wine and all kinds of good drinks. There were all sorts of entertainments, symphony and harps, violins and fiddles and all kinds of stringed instruments."[25]

The instruments described are sinfonia, harp, fiðla, gigja and all sorts of stringed instruments.

Lists of instruments appear in several later sagas inspired by the translated sagas of chivalry. In *Bærings saga*, a list appears including harp, gigja, fiðla, and psaltery.[26] In *Konraðs Saga* a list of instruments includes harp, gigja, sinfonia, psaltery, and timpanum.[27] A list of instruments in *Mírmans Saga* includes harp and gigja, and all sorts of stringed instruments.[28] In the saga, *Saulus saga ok Nikanors*, there is a description of a procession sent to greet Emperor Timoteus and King Heliseus.[29]

> "Emperor Timoteus and King Heliseus, with many other powerful rulers, arrive in Bár. Saulus and Nikanor send many mighty men out on horseback to meet them, accompanied by jugglers and players with all kinds of instruments. The host passes through the gates into the city, where all the streets are covered with

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[25] Allskonar krásir váru þar á borði af dyrum ok af fuglum, þar váru hirtir ok villigeltir, trönur ok gæss, hoens ok páfuglar pípraðir, eindr ok elptr ok allskyns villifygli. Þar var at drekka mjöðr ok vín ok piment, klare, buzar ok allskyns góðr drykkr. Allskonar skemtan var þar: Sinfonie ok hörpur, fiðlur ok gígjur ok allskonar strengleikr.

[26] Fornsogür Suðrlanda. Published by Gustaf Cederschiöld. Lund 1884 (97): Þar matti þa heyra allz kyns skemtan ok stringleika, horpvr ok gigivr, fidlvr oik psalterivm; ok mikil dyrd ok gledi var vm alla Paris fyrir sakir keisarans.

[27] Fornsogür Suðrlanda. Published by Gustaf Cederschiöld. Lund 1884 (83). En er sia skravtliga ferþ er sén, þa letr keisari alla hirðina ganga amot þeim af borgini. [Með konvngi foro leicarar ok leica amarga vega fimliga ok mivkliga. Songmenn foro syngianði með morgvm lyð; svmir sla horpvr eða gigior, svmir simphon eða psallterivm ok timpanvm, ok oll in dyrligstv hlioð. Þeir þeyta organ, er i borgar tvrnvnvm erv, en svmir hringia; ein þar með gengr allr lyðr til strandar með brenondvm kertvm ok dyrligvm lofsongvm. Ok með þessi ini dyrligri processio voro þeir leiddir þar ikonvngs havll. Meþ ollvm hetti var þeim vegsemþar lęitat ok skemtanar.

[28] Mirmans saga i Riddarsögur. Published by Dr. Eugen Kölbing. Strassburg 1872 (175f.). Er þeir höfdu litla hríd setít, sjá þeir ferd konungsdottur, þviat henni fylgdi mikill flokkr kvenna ok karla, of fjöldi leikara fóru fyrir henni bædi hörpur ok gigjur ok allskyns streingleikar.

[29] *Saulus saga ok Nikanors*. Published by Editiones Arnamagnæanæ, Copenhagen 1963

costly materials; music is heard from every tower, bells ring throughout the city..."[30]

The stringed instruments named in the original version of the saga are harp, gigja, *sinfonia*, psaltery, *timphanium* and *organum*. In addition several wind instruments are played. In *Sigurðar saga Þögla*, the entertainment at a feast includes "musicians, entertainers, players and magicians" as well as music played on flutes, gigja, sinfonia, psaltery, harp, and all sorts of stringed instruments.[31]

Three processions associated with royalty are described in *Remundar saga keisarasonar*. The first list includes flutes, sinfonia, psaltery, harp, gigja, timpanistria, and organ. The next includes harp, gigja, sinfonia, psaltery, and bumbum. The third list includes harp, gigja, sinfonia, psaltery, and wind instruments.[32] As Vollsnes points out, they are almost identical and illustrate the formulaic use of instrument lists.(op.cit.:72)

In *Gaungu-Hrólfs saga* there is a description of the feast for the wedding of Göngu-Hrólfr, or Rollo, to Ingigerd as well as the marriages of Stefnir to Alfhild, and Harald to Thora.[33]

> "all kinds of dishes were served there, spiced with the most precious herbs, and every sort of game and wild fowl, venison from deer and reindeer, pork from the best wild boars, geese, ptarmigans, and peppered peacocks. There was no shortage of glorious drink, ale and English mead, and the best of wines, both spiced and claret. And once the wedding and the banquet had begun, all kinds of stringed instruments, harps and fiddles, pipes

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[30] '...hier med fara lodarar og leikarar med allra handa hliodfærum. horpum og gijgium. sinphonum og salterium timphanium og organum. sumer bordu bumbr. sumer blesu j trumbr. adrer bosunudu. sumer foru med skiallpipur..."(57)

[31] *Sigurðar saga Þögla* Published by Editiones Arnamagnæanæ, Copenhagen 1963: "komu jnn allra handa leikarar. sumir med pijpur gijiur simfon sallterium og haurpur med allz kynns streingleika. sijdan komu jnn loddarar leikarar og þuersyningarmenn" (237)

[32] *Remunda saga keisarasonar*. Published by Sven Gren Broberg, Copenhagen 1912: Þar næst sér Rémundr, at upp lukuz dyrr kastalans. Þar gekk ut margt fólk, fyrst leikarar, pá piparar; ok allra handa hljóðfæri váru par leikin: simfón ok saltérium, horpur ok gigjur ok timpanistria ok organ. (15f.); Ok þar gekk út margt fólk með allra handa songfærum, horpum ok gígjum, simfón ok saltérium ok bumbum. (122); Váru nú allra handa songfæri borin ut i móti Rémundi, horpur, gigjur, simfón, saltérium. sumir borðu bumbur, sumir léku i trumbur, aðrir lofuðu, aðrir foru med skaldpipur. Sumir léku organum, aðrir timpanistria. Ok með pvílíkri pryði var junkeri Rémundr í borgina leiddr ok svá til kirkju. (339)

[33] Fornadarsögur Norðlanda. Published by C.C: Rafn. Copenhagen 1830. Göngu-Hrólfr, who was also called Rollo, became a count of the king of France in 911. At this time Rouen was controlled by the Vikings and Göngu-Hrólfr was the leader of Normandy. His descendant, William the Duke of Normandy beat England at the battle of Hastings in 1066.(Kristjánsson '92:11)

> and psalter, were to be heard. There was a beating of drums and a blowing of horns, with every variety of pleasant play to cheer the body of man.

The list of instruments in *Kirialax Saga* from the mid 14th century includes flutes, bumbur, gigja, psaltery, and harp. The king's daughter comes in and plays the harp so well, that all stopped to listen.[34] Vollsnes notes that because this saga is a fictional story, one can't assume that it was actually normal or even acceptable that a girl would play an instrument but adds that was not impossible that a king's daughter could have learned to play the harp however.(Vollsnes:134f.)

1.5. Harp

The study of literary references to bowed stringed instruments could also include discussion of some of the references to the harp. Although the term "harp" is generally thought to refer to the plucked instruments harp and lyre, some scholars believe it could have the broader meaning of "stringed instrument" including those played with a bow. Jan Ling, in writing about European medieval music, warns that one should be careful in assigning specific instruments to names and writes that harp can simply mean stringed instrument and refer as well to psaltery, fiddle or lute.[35]

Two references to harp playing found in sagas from the 14th century include the names of specific pieces, or slåtter, one of which is still known in the Norwegian folk music tradition. Perhaps the pieces in these two stories could have been played on the medieval fiddle as well as harp.

In the *Paatt af Nornagesti* in *Olafs Saga Tryggvasonar*, a stranger from Denmark visits King Olav Tryggvason in Nidaros in 998 during Christmas.(Edwards et al.:44) The stranger says that his name is Gest and that he can tell stories and play the harp. Gest entertains the king and his men one evening:

> "They stopped their discussion. Gest took his harp and played it well, and long into the evening, so that everyone was delighted to hear it, and he played the Gunnarsslag best. At the end he played

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[34] Kirialax saga. Utgitt for Samfund til Utgivelse av gammel nordisk Litteratur ved Kr. Kålund. Copenhagen 1917: Þar kvomu framm loddarar margir ok leikarar, fremiandi margskonar gledi, sumir blesu i pipur, adrir haufdu bumbur, gigiur edr sallterium edr haurpur. Dætr kongsins fiorar kvomu ser vid þessa gledi i haulluni, þviat hin ellzta leck haurpu svo vel, at allir lofudu henar list, en binar leku fyri svo miukliga, at menn skildu varla, po at þeir hyrfdi upp á. (72)

[35] ("...försiktig bör man vara med att koppla de medeltida källornas instrumentbenänmingar med bestämda instrumenttyper: *Harpa* kan betyda *stränginstrument* och därmed syfta på både psalterier, fiddlor, lutor etc." (Ling 1983:159, quoted in Vollsnes 04:53)

the ancient Gudrunarbrogd. No one had heard that before. And after that, they went to sleep for the night."[36]

The two pieces that Gest has played reflect the story of Gunnar who was thrown into the snake pit with his hands bound. His sister, Gudrun, brings him a harp which he plays with his toes, lulling to sleep all the snakes but one. (loc.cit.)Perhaps the idea of constructing instrumental pieces based on a story is inspired by the Strengleikar. In the original Lais of Marie de France, the poet often concludes by adding that a lai, sometimes with instruments, was composed about the preceding story. *Gunnarsslag* and *Gudrunarbrogd* could be considered to be early examples of *lydarlåtter* or listening tunes based on a known story.

The *Saga Herrauds ok Bosa* is one of the Fornaldarsögur of the 14th century and has many scenes of fantasy and exaggeration.[37] The description of the powerful harp-playing at the wedding feast is one of the most well-known.

> King Godmund sat in the high seat and the bridegroom next to him. Hraerek served the bridegroom. It is not recorded how the chieftains were divided, but it is known that "Sigurd" played the harp for the bridal party. When the toasts were brought in, "Sigurd" played so, that people said that his equal was not to be had. But he said that this just marked the beginning. The king bade him not to spare his effort. And when the memorial cup, dedicated to Thor, was brought in, "Sigurd" changed the tune. Everything that was loose began to move, knives and table dishes and everything that was not held onto, and the mass of people rose up from their seats and waved to and fro on the floor. This went on for a long time. Next came the toast, which was dedicated to all the gods. "Sigurd" once again changed the tune, and played so loud that there was an echo in the hall. Everyone who was inside stood up, except the bridegroom and bride and the king, and everyone was moving around inside the hall. This went on for a long time.
>
> The king then asked if he knew any more tunes, but he said that there were a few small ones and suggested that everyone take a rest first. Then people settled down to drink. He played the "Ogress tune" and "Dreamshop" and "Plundering-song." Next there was a toast to

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[36] Flateyjarbok published by C.R.Unger and Guðbrandr Vigfússon. Christiania 1860-68: Hann quaz læika horpu edr segia sogur sua at gaman þætti at. (346)
tekr Gesti horpu sina ok slærr uel ok læingi um kuelldit sua at ollum þikir unat j a at heyra ok slærr þo Gunnarsslag bezst ok at lyktum slærr hann Gudrunarbrogd hinu fornnu.(348)
Gestr tok nu kerti sitt or horpustokki sinum. (358)
English translation by George L. Hardman

[37] Fornadarsögur Norðlanda. Published by C.C: Rafn. Copenhagen 1830 (220ff.), cited in Vollsnes.

> Odinn. Then "Sigurd" opened the harp. It was so big that a man could stand upright in its belly, and it was all set with gold. He then took up a white glove, embroidered in gold. He then struck the tune, which is called "Coif-Tosser", and then all the coifs were raised off the women, and danced around up above on the crossbeams. The women and all the men jumped up, and nothing at all remained in its place.
>
> When that toast was finished, the toast was brought in which was dedicated to Freyja, and that was the last to be drunk. "Sigurd" then took that string, which lies crosswise on the other strings, and bade the king prepare for the tune called "Powerful Blow." But the king was so startled that he jumped up and so did the bridegroom and bride, and no one danced more heartily than they did."[38]

Although this story is full of fantasy and supernatural effects, it provides a glimpse of a style of performance that could have been used on various instruments and of the power that this type of music had over the listeners. Sigurd retunes his harp several times in the course of the evening which implies that the tunes could have been constructed in different modes, possibly of particular melodic motives associated with each mode. The listeners were affected by these pieces, first beginning to dance, and then becoming calm again after Sigurd played the tunes *Gygjarslag, Draumbút* and *Hjarrandahljód*. When Sigurd took up his largest harp and played *Faldafeykir*, the mood became wilder again, the men and women began to dance and nothing in the room was still. The culmination of the evening was when Sigurd played the *ramme slag* and the king and bridal pair began to dance.

The pronounced effect of these tunes on the listeners may seem exaggerated today, but the powerful effect of the different musical modes was documented by both the Greek and later Medieval music theorists. In many cases there were warnings about the dangers of particular modes and the strong effects on the emotions and even actions of the listeners.

Several of the tunes that Sigurd played were named in the saga and are still played on the hardingfele in the Setesdal district today. Vollsnes believes that in this case, the term *harp* could have referred to one of the bowed instruments, noting that they can play longer, usually louder tones with more variation than the harp.(op.cit.:61)

Ledang writes that this source has an fairy tale character, but that the use of specific titles of the pieces played is indication that a familiar repertoire for the harp must have existed at the time. He finds it particularly noteworthy that the name "Rammeslåtten" has lived on in

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[38] The Saga of Bosi and Herraud Translated by George L. Hardman

the Norwegian folk tradition, and interprets this as evidence of a continuity in the slåtter tradition with roots extending back to the Viking times.(Edwards et al.:44)

1.6. Late Middle Ages

The 14th century saw a decrease in the number of literary sources in Norway.(Vollsnes:147) In 1319, Norway came into a union with Sweden and the royal court left Norway. Although new cultural impulses could no longer enter Norway through life at the royal court, there was contact with other countries through trade. In 1280, Bergen had become a member of the Hanseatic League which provided trade relationships with many other cities including Visby, Novgorod, London, and Brugge along with the north German cities Hamburg and Lübeck.

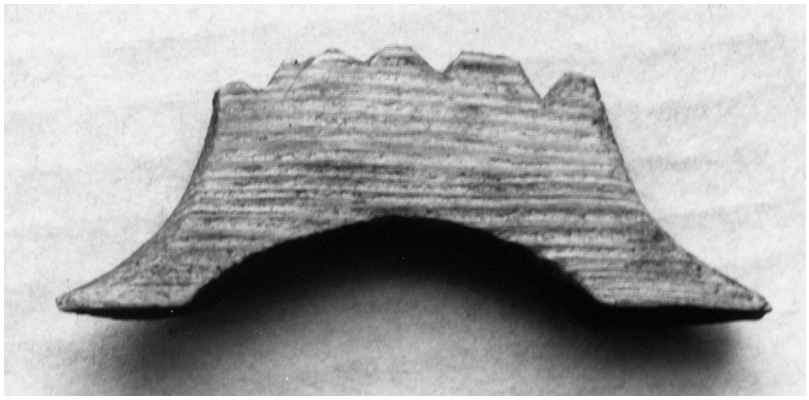
The Black Death plague of 1349-50 left the population of 300,000 reduced by half. Vollsnes writes that although the court left Norway and the number of literary sources was reduced, the cultural life could have continued in other contexts. She finds that the musical instruments that had arrived in Norway in the 12th and 13th centuries and the music played on them could have been adopted by the common people, and that some aspects of the musical life could have been carried on in later folk music traditions.(Vollsnes:148)

2. Archæological Evidence

There are several important medieval archæological finds that provide information about bowed stringed instruments both in Norway and in countries that had contact with Norway in the Middle Ages. Fragments of instruments can often reveal something of the construction of the instruments, what type of music could have been played, and the cultural context of the instrument.

2.1. Five-string bridge, Oslo

Gjermund Kolltveit has written about two bridges found in Gamlebyen, Oslo in 1971 and 1988.(Kolltveit '98) They are both made of pine and are relatively well preserved. The largest bridge, found in 1971 and dating from the middle of the 13th century, is flat and has notches for seven strings. Kolltveit concludes that this is a bridge for a plucked lyre of the sort found in Germany and Scandinavia. The second bridge was found in Oslogate 6 during excavation in 1988. It dates from the second quarter of the 13th century. It is 74 mm long, 29 mm high and 14 mm thick. The notches for the strings are clear and large, but not all the same size. There are notches for five strings, and an important characteristic of this bridge is that it is clearly curved along the top.



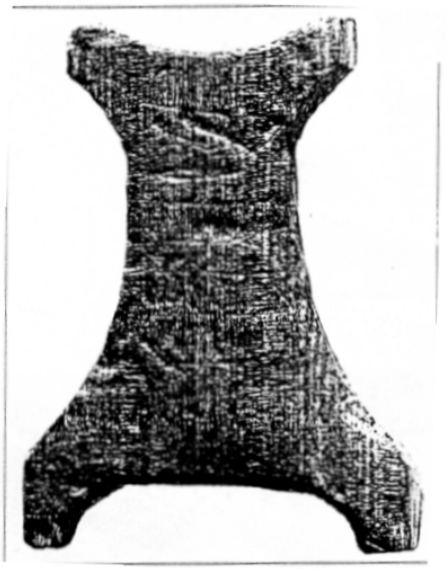
ill. five-string bridge, photograph from Kolltveit

Kolltveit writes that this bridge must have been from a bowed stringed instrument, because both the harp and lyra must have flat bridges. He adds that although the bowed lyre was possibly found in Norway in the Middle Ages, it usually had three or four strings, while the usual number of strings for a fiddle was either three or five. Kolltveit therefore concludes that the bridge probably belonged to some sort of medieval fiddle.

2.2. Bowed lyre bridge (?), Trondheim

Another interesting archæological find from Norway is a small wooden item with uncertain identity and function. It was found during an excavation in 1985 in Trondheim and is referred to as a bridge or model

for a bridge by Bjørn Aksdal and Jan Ragnar Hagland.(Aksdal and Hagland '87)[39] The archæological context dates this item from the first quarter of the 13th century, but the authors note that it could be somewhat older. It is made of pine and is inscribed on one side with runes reading RUHTA. Aksdal and Hagland are certain that this is the name of the stringed instrument, *rotta* or *rotte*, and that ruhta is a Latinized form of the continental European name of the instrument. They write that it is uncertain where the name rotta originates, but that it could have a Celtic origin in the form *krotta* or an origin in the old Frankish form *hrota*.(op.cit.:4) It is unclear exactly which instrument was called rotta in the Middle Ages. According to Aksdal, in the Middle Ages, several forms of the word rotta were used to describe lyre instruments in the British Isles, while in Europe, it was used to describe several different types of instruments, mainly psalteries.(op.cit.:4f.)



ill. Trondheim rotta bridge (?), from Kolltveit unpublished page of illustrations

Examining the Trondheim find in detail does not result in certainty about the instrument it came from. The feet of a bridge are normally concave and can indicate the arching of the instrument body and possibly give some indication of the instrument's design. In this case, the feet are convex, which Aksdal considers to be probably the result of erosion, and they slant to one side, so they can provide no information about the instrument it could belong to.

The upper surface of the find is also enigmatic, being concave and with no grooves indicating the number of strings or where they sat. Aksdal notes that this is strange because it is made of a soft wood, and strings should have left a mark or groove. He postulates that it could have belonged to an instrument with strings that fan out from a narrow

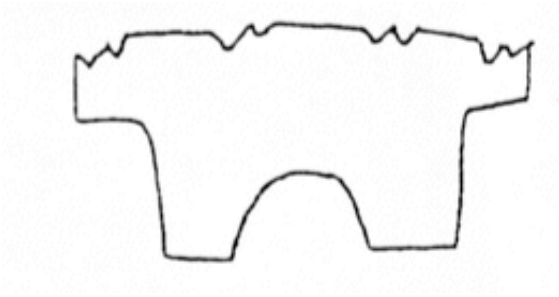
[39] Citations from an unpublished English translation.

bridge at one end. Because one sees this sort of design in medieval lyres, he concludes with relative certainty that the instrument this item is a bridge belonging to a lyre instrument called rotta.(op.cit.:6) He also speculates that this item could actually be a model for a bridge rather than a bridge itself.

Gjermund Kolltveit has also referred to this archæological find, first in an unpublished work(Kolltveit '95) and later in private conversation. In 1995, Kolltveit refers to the enigmatic shape of this item, and concludes that without the inscription, RUHTA, it probably wouldn't have been considered to be part of an instrument. Kolltveit points out that there is no need to write the name of the instrument on the bridge, and that RUHTA could actually be a personal name. Rut is a name with biblical origins and was used as a man's name in the Middle Ages. Kolltveit speculated that this find could be a bridge for a hurdy gurdy , noting that because Trondheim had a central position as a pilgrim's town in the Middle Ages, it would not have been impossible that the hurdy-gurdy could have been played there.(Kolltveit '95:16) In email exchanges and private conversation in 2005, however, Kolltveit communicated his conclusion that he definitely would not refer to this archæological find as a bridge today.

2.3. Eight-string bridge from Glimmingehus, Skåne, Sweden

A rounded bridge was found in Glimmingehus in Skåne, dating from ca. 1500.(Kolltveit '98:57), (Krongaard Kristensen and Vellev:229)[40] It is made of bone and has grooves for eight strings in pairs. Although this dates from the very end of the Medieval period in Scandinavia, there is evidence of bowed instruments with double course strings from the Middle Ages in Europe. Kolltveit mentions a bridge from 15th century Paris with notches for six strings arranged in three pairs.(op.cit.:57)



ill. eignt-string bridge, from Kolltveit unpublished page of illustrations

2.4. Three-stringed fiddles from Novgorod

The medieval fiddles found in Novgorod are very interesting because it is unusual to find such well-preserved examples of wooden instruments

[40] The bridge is in the Statens Historika Museum, Stockholm. It is 1.7 cm. high. The top surface is 4 cm. wide, and the bottom width is 2.5 cm.

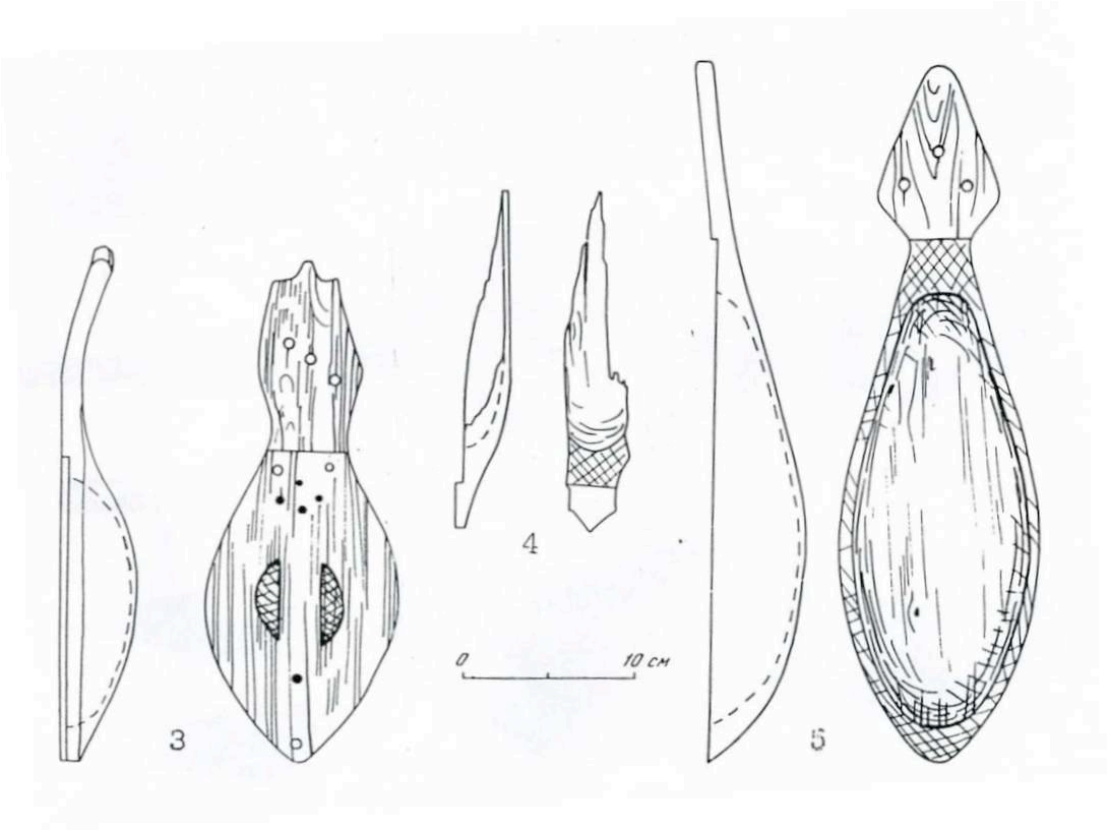
from the Middle Ages.(Kolchin '89: 142-44 and 385-87) Fragments of two fiddles, a fiddle sound-chest, or body, and an almost intact fiddle were found in the Novgorod excavation. The fiddle sound-chest, carved from a block of spruce, was found in the late 12th century level of the excavation. The almost intact fiddle was found in the ruins of a house that was destroyed by fire in May 1386. It was also hollowed out of a solid block of spruce with a spruce top. Kolchin writes that one of the fiddle fragments was found in the level of the second half of the 14th century and that the other was found in the 23rd horizon.[41]

There were significant connections between Novgorod and Scandinavia during the Viking period and the Middle Ages. During the Viking period, the Swedes traveled the Eastern Way invading countries south and east of the Baltic Sea. In the 9th century, the Slavs called in the Swedish Vikings to help them resist the invasions of the Mongolian tribes. The first Russian state was founded by the Swedish Viking ruler, Rurik (ca.830-879) with Hólmgarðr (Novgorod) as its capital. (Kristjánsson:11)

In the 12th century Novgorod was a powerful republic and a center for the fur trade where Scandinavians and German merchants traded.(Sawyer:66) By the end of the 12th century, the fur trade was flourishing, and Russian and Norwegian furs could be bought in London (op.cit.184) A German colony was established in Lübeck in the 12th century, where Danish, Norwegian, Swedish and Russian merchants traded. By the end of the 12th century Germans had begun traveling to Novgorod and in the 13th century many German towns were established along the Baltic coast for trade. (op.cit.:155f.)

Perhaps instruments such as the Novgorod fiddles could have been known in Norway, either played by foreign musicians or imported from another country along these trade routes. Perhaps fiddles such as these could have been built in Norway, modeled after instruments seen in the other trade cities. As B.A. Kolchin notes, similar instruments are seen in many West European frescos and miniatures.

[41] (Kolchin:143) A date is not given for the 23rd horizon.



ill. Novgorod fiddles, from (Kolchin:385)

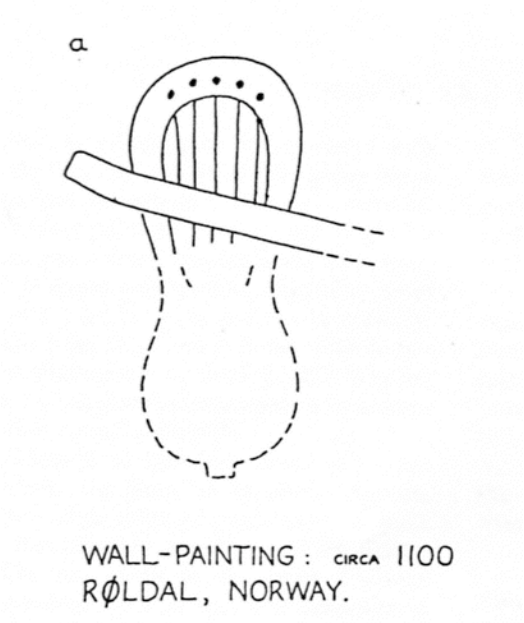
ill. musician, manuscript Canterbury c. 1100, from Bachmann: plate 32

3. Iconographical Evidence

The two iconographical references to bowed stringed instruments in medieval Norway, depict similar instruments that have been known as "bowed lyre" or "bowed harp".[42]

3.1. Bowed round-lyre, Røldal

Fragments of pictorial wall paintings found on four wooden panels from the Røldal stave church, Hordaland, dating from ca. 1100 portray several standing figures, including two that seem to be part of a musical scene.(Lawson:140) One performer is holding a five-string round-lyre and a light green bar that could be a bow. Only the top part, or superstructure, of the instrument is shown, the curved arch with five black dots representing the tuning pegs for the strings that are shown. Lawson explains the significance of this image, writing that the form of the superstructure is the usual inverted pear-shape, but that it is unusual in its simplicity.(op.cit.:143) Most other lyres of this type from northern Scandinavia are more decorated. He adds that this is the first image of a musical scene with a stringed instrument that is not associated with the story of *Gunnar i Ormegården,* or, Gunnar in the Snake Pit. He proposes that this simple form of the lyre could be the common lyre in Norway, similar to the usual European round-lyre with five or six strings, sometimes played with a bow.(loc.cit.)[43] Perhaps this depiction of the undecorated bowed lyre represents a tradition of music-making among the common people, similar to the Gamlebyen bridges.



ill. bowed lyre, from (Lawson:141)

[42] This term was first used by Otto Andersson in his English publications.

[43] (Bachmann:114) writes that the bowed lyre, or rote, generally had no more than three or fout strings during the 11th and 12th centuries.

3.2. Bowed harp, Trondheim

The second depiction of the "bowed harp" is a sculpture found in the Trondheim Cathedral, dating from 1325-1350.(Andersson) It represents a musician playing a stringed instrument and perhaps singing as well.[44] The section of the Trondheim Cathedral that was damaged by the fire of 1328 was rebuilt in an English Decorated Style.(op.cit.:5) Fischer notes that sculptures similar to this musician are found in other English churches, including the Beverly Minster.(loc.cit.) Andersson points out, however, that although the sculptor might have been English, the instrument itself might not be, and that the sculptor might have chosen to represent a local instrument.(op.cit.:6) He adds that there are no similar instruments represented in the Beverly Minster.

The instrument has been enigmatic, and at the beginning of the 20th century, the scholars Harry Fett and Hortense Panum were not able to determine its identity.(op.cit.:4) After research trips to Estonia, Finland, and Sweden, Otto Andersson published his findings in 1923, and the Trondheim sculpture was seen to be a type of bowed harp, related to the instruments Andersson had documented, the *talharpa* of Ormsö in Swedish Estonia, and the Finnish *jouhikantele*.

Construction and playing technique of the bowed harp

Bachmann gives this instrument the name bowed rote and considers it to be the last stage in the history of the European lyre.(Bachmann:112) He writes that the rote was carved out of one block of oak, and that the

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[44] Otto Andersson cites architect Gerhard Fischer (op.cit.:5)

hollowed out resonator and pillars of the yoke were covered with a thin top of maple that was nailed into place.(op.cit.:113) The tuning pegs were usually inserted into the front or the back of the upper part of the yoke and a tuning key was used to tune the strings.(loc.cit.)

The playing technique used on the bowed harp in the Middle Ages has to be determined by examining additional European iconography and by observing performers on the instrument in places where the bowed harp tradition continues. Bachmann writes that the bowing technique is relatively easy to reconstruct because the pictorial representations reveal that when an instrument had a bridge, it was flat, and that therefore all the strings would have been bowed at once.[45] He adds that the ethnological parallels from the Swedish talharpa and the Finnish jouhikantele support this theory.(op.cit.:114) The melody string was stopped either with the fingernails or with the fingertip or inside of the finger without touching the string to a fingerboard.[46]

4. Conclusion: Literary, Archæological and Iconographical evidence

Literary, archæological, and iconographical evidence of bowed stringed instruments in the Middle Ages can together provide some insight into the musical world of the medieval fiddle player. From the literary sources, it seems probable that medieval fiddles of the sort known in Europe were brought to Norway by the traveling leikare as early as the twelfth century. The bridge found in Gamlebyen, Oslo, suggests that the five-string fiddle was known, and from the Novgorod excavations, one finds three-string fiddles that could perhaps have been found in Norway as well. Iconographical evidence suggests that the bowed lyre, or bowed harp, was found in Norway in the Middle Ages, but it is not referred to by name in the literary references. Several lists of instruments include *fiðla*, *gigja*, and *allzkonar strænglæikum* or *allskyns streingleikar* which could include the bowed lyre, or bowed harp. European iconography as well as the Danish church paintings provide many images of the various types of fiddles that could have been brought to Norway by the leikare.

Medieval fiddles are found in many different contexts in the literary sources and the attitudes expressed towards the instruments and their players are varied. Two of the earliest literary references portray the fiddle-playing leikare in a derogatory manner, which is perhaps not surprising when the context of the sagas is considered. *Sverris saga* is written by an abbot, and the poet in the story of Jarlmann from *Ingasaga* is the priest Einar Sturlason. The church viewed the traveling leikare with skepticism because their music and performances could influence people to become unruly.

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[45] Bachmann reproduces several images of players with the rote.

[46] Bachmann cites Otto Andersson. (114)

Fiddles were also found in religious contexts, however. Six passages in the Bible translation Stjórn include gigja in the lists of instruments. Herod's stepdaughter is portrayed as playing the fiðla and singing, and in *Duggals leiðsal*, the heavenly vision includes the gigja and other instruments hanging from golden threads. The music they made was not considered as sweet as angels' song, but apparently beautiful enough for this heavenly vision.

King Håkon greatly influenced the cultural life of Norway in the thirteenth century with his interest in European courtly life and his love of literature. Not only did he commission translations of many literary works, he brought elements of European courtly life and chivalry to his own court in Norway. Music was an element of the courtly life and there are several references to musicians in the translated works. However, there is no indication that he had the same deep interest in European music that he had in literature. No translated works about music survive, and there are no references to the new musical genres that were blossoming in other cultural centers. It has been noted that, in his literary translations, Brother Robert altered the original works, changing poetry into prose, omitting some descriptive passages while adding other passages with fanciful exaggerations. (Kristjánsson:323) Many French literary works were translated, but there is no record of troubadour or trouvére song performance at the Norwegian court. The prose translation of the Lais of Marie de France, *Strengleikar,* has been described as not just a translation but a work of art in itself. The added introduction explaining that these stories originally were sung, sometimes with instrumental accompaniment, seems to have been added in order to clarify an unknown performance practice.

It is not clear from the literary sources, or the archæological and iconographical evidence how widespread a medieval fiddle tradition could have been in Norway. The medieval fiddle player was expected to make and repair his own instrument, which is one reason why the instruments seen in European iconography have such varied shapes and sizes.(Bachmann:71) It seems likely that the traveling leikare would bring fiddles with them, but perhaps they made repairs or built new instruments in Norway as well. The elaborate wood carvings on the medieval stave churches are evidence of a high level of workmanship in Norway, and perhaps some local woodworkers and musicians could have learned techniques of fiddle building from the foreign leikare. In addition, the medieval fiddle players usually made their own strings, most often from sheep gut.(op.cit.:81f.) The many literary references with lists of instruments do not reveal anything about their players, but perhaps some of them could have been local musicians. Ledang writes that it is unknown whether fiddles could have been played by local musicians, but he finds it not unnatural that leikare could have been

recruited from the local community.(Edwards et al.:46) He adds that it is possible that the leikare could have performed in contexts other than those described in the sagas, perhaps in local markets and among the common people.(op.cit.)

The literary sources deal almost exclusively with royalty or people of the upper classes, and therefore do not provide a view of the musical life of the common people in the cities or countryside.(Kolltveit '98:64) Studying the fragments of bowed stringed instruments found in Norway and Novgorod and the context of where they were found could provide hints about the instruments themselves and their place in medieval society.

The fiddle and lyre bridges excavated in Gamlebyen were both found in normal houses, and Kolltveit explains that there is nothing in the context of where they are found that would suggest a connection to the city's upper classes.(op.cit.:63) He considers these bridges to be evidence of a flourishing musical life among the inhabitants of medieval Oslo, and that also in the realm of music, Oslo was a part of the European cultural path.(loc.cit.)

The most complete fiddle from the Novgorod excavation was found in a house destroyed by fire in 1368. Novgorod was described as being in its heights during the fourteenth century with hundreds of churches, markets, and trade centers and known for its artwork and decor. Perhaps fiddles such as these were easily available and music-making was an activity for the general population. Archæological finds of four separate instruments from the late 13th to the end of the 14th centuries could suggest that fiddles were well-known and accessible in Novgorod at this time. Perhaps fiddles such as these were also as well-known in the other Hansa cities and their surroundings. The contexts of both the Gamlebyen bridge and the Novgorod fiddle would suggest that string playing was not only known in the royal courts and the milieu of the traveling leikare, but that it could have been found among city residents as well. The painted image of a bowed lyre from the Røldal church is simpler than other portrayals of medieval lyres and could also be evidence of the musical life of the common people. The references to the Icelandic nobleman, Marður Gigja suggests that in the 13th century, the gigja was thought to be an appropriate instrument for a member of the upper class to play.

There is very little indication from the literary sources what the actual music played on medieval fiddles in Norway could have been. It is likely that the leikare who came to Norway were professional performers, jongleurs, or minstrels, from continental Europe.(Vollsnes:109) Bachmann cites several European medieval sources that list the accomplishments expected of a jongleur or minstrel. He was often expected to play several instruments, sing, dance, perform card tricks

and stunts such as throwing little apples and catching them on knives.(Bachmann:119) The two leikare in *Sverris saga* performed tricks with their dogs in addition to playing gigja and pípu, and the German performer, Isung, performed with a dancing bear.

In Europe in the Middle Ages, the fiddle was considered to be a very versatile instrument, able to play every type of music.[47] Descriptions of fiddle players' repertoire found in medieval European literature indicate that different types of vocal music and variations of vocal repertoire could have been played on the fiddle along with several different types of dance tunes.(op.cit.124f.)

Just as the poets Måne and Einar demonstrated the ability to invent poetry spontaneously, it was expected that a fiddle player could improvise and invent new pieces. Bachmann writes that "the music of the medieval minstrel was spontaneous, impromptu, and ephemeral."[48] Perhaps the traveling leikare invented some of their music in Norway as well as playing tunes they brought with them from other countries.

Two of the later literary references to music played on the harp include the names of pieces played. The pieces played by Norna-Gest are descriptive of events in the story of Gunnar from the Poetic Edda, while the names of the pieces played by Bose include the Ramme Slått, still known in Setesdal. Ledang finds these pieces to be affirmation of a known repertoire for the harp.(Edwards et al.:44) The titles seem to imply that this is a local repertoire, not imported with the leikare from Europe. Morten Levy, in his discussion of the ramme slått, suggests that it could have been played on medieval fiddle as well as harp.(Levy '74:70) He finds that the scene in *Boses saga* could be a description of 12th century performance where the fiddle is traded for the more magical harp.(op.cit.:71) In the Middle Ages, music was generally not composed for specific instruments, and the performers chose whatever instrument was suitable and available at the time.[49] Perhaps all the pieces named in the Norna-Gest and Bose episodes are representative of a local musical style and could have been played on fiddle, harp, and other instruments as well.

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[47] (Bachmann:123) quotes Grocheio

[48] (Bachmann:125) cites W.Salmen

[49] (The New Groves Dictionary of Music and Musicians '01)—Fiddle

5. Ethnological evidence

Many aspects of the fiddle tradition in medieval Norway have been partially revealed by examining archæological, iconographical, and literary sources both from Norway and other areas with connections to the Norwegian medieval tradition. Some types of instruments that could have been played, the status of their players, and various musical contexts are elements of medieval musical life that can be discussed with the help of the sources.

The use of ethnological evidence, or the study of living folk music traditions, could provide additional insights about the medieval tradition in Norway. Bachmann writes that the study of folk traditions in music adds material necessary for the interpretation of the medieval source material. He believes that by observing traditional practices in cultures that have survived almost unchanged for hundreds of years, it is possible to draw inferences about the performance techniques of fiddle in the Middle Ages.(Bachmann:4) Bachmann cites both hardingfele and vanlig fele in the context of using ethnological evidence.[50] Apparently he considers the use of the Norwegian folk tradition in searching for elements of medieval performance practice to be valid. Because of a lack of source material, it has not been possible to determine whether an unbroken tradition of bowed stringed instruments exists in Norway. Researchers in the fields of medieval music and folk music have approached this question from opposite sides of the time span.

5.1. Medieval perspective

In the field of medieval music research, one can only speculate about the aspects of musical life in medieval Norway not revealed by the sources from the Middle Ages. The written sources do not discuss the life of the common people in cities or the countryside, and the musical life in these contexts becomes a matter of speculation. Perhaps the image of the undecorated bowed round lyre and the fiddle bridge found in a house in Gamlebyen are indications of a musical life outside the royal court that could have continued when the court left Norway. It has been noted that the written sources dwindle after the union of Norway and Sweden, and that the cultural life in Norway was severely affected by the plague of 1349-50. Both Ledang and Vollsnes seem to believe that some elements of medieval musical life could have been adopted by the common people, entering the folk tradition that has continued until modern times.[51] Ledang has interpreted the named

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[50] Bachmann refers to the tuning c'g'c''e'' (95); later he refers to a transcription by O.M.Sandvik showing the use of arpeggio open strings in a pols-dans from Osterdal. (99)

[51] Ledang (Edwards et al.:44); (Vollsnes:148)

slåtter of Norna-Gest and Bose as evidence of a local musical tradition, and several researchers have found the *ramme slått* in particular to be a link between the Middle Ages and the living folk music tradition.(Levy '74; Hannaas)

5.2. Folk music perspective

Folk music researchers have considered the history of bowed instruments in Norway with differing aims and perspectives. The history of particular instruments and their playing styles as well as the possibility of an unbroken bowed instrument tradition from the Middle Ages are topics that have been addressed.

A central question in this research has been the age and origin of the *hardingfele*.[52] The oldest hardingfeler that can be dated with certainty are made by Isak Nielsen Botnen (or Skaar) who was born in 1663 in Hardanger.(Sevåg '06:139) Four of his instruments have been registered, and three of these have signatures and dates of 1750, 1751, and 1753. His son, Trond Isaksen Flatebø also built many hardingfeler and played an important role in the spread of the hardingfele from Hardanger to Hordaland, Sogn, Valdres, Telemark, Numedal and Hallingdal.(op.cit.:142) In addition to these early hardingfele*r*, there is a hardingfele, the "Jaastad-fele" with the date 1651, which can not be confirmed with certainty, and much of the discussion about the history of the hardingfele is focussed on the accuracy of this date.

Reidar Sevåg: the bordun style of playing

Reidar Sevåg has observed that a fundamental characteristic in hardingfele playing style is the use of bordun and adds that, although in the most recent folk music tradition, music played on the *vanlig fele* has been mainly melody without bordun, research has shown that an older style of playing on vanlig fele also used bordun.[53] In his search for the origin of this bordun style of playing, he first discusses the possible influence of the professional *stadmusikanter* during the 18th century. He writes that it might seem natural to look to the trained musicians from the cities as sources of instruments and playing instruction for people in the countryside, but he notes that it would be unlikely that they would teach a bordun playing style, or even that they would have

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[52] This highly decorated folk violin has traditionally only been built in Norway. In its modern form, it has typically four resonant strings, the fingerboard and neck are shorter, and the fingerboard and bridge are flatter than those of the modern violin. The f-holes are cut at an angle and are often longer than on the modern violin. The older hardingfele has elements of construction that are similar to the baroque violin, among them that the body is narrower with more pronounced angles, and the neck is set straight out from the body rather than sloping back.

[53] The following section is taken from the article Fela (Sevåg '06), written ca. 1970. A German version was published in (Sevåg '75) Vanlig fele is the term used for the violin in the context of Norwegian folk music.

time to travel around to distant areas teaching new players.(op.cit.:147) He finds it more likely that a playing tradition existed in the rural areas and that the stadmusikanter could pass on some elements of the modern style to the best spelemenn, or rural musicians. Sevåg then considers the possibility that the bordun style could have its roots in the Middle Ages with music played on the fiðla and gigje.

Traces of pre-violin bowed instruments

Although there is no direct evidence that the fiðla and gigje were a part of the musical life of the common people, Sevåg finds indications that some types of fiddles derivative of the medieval instruments could have been played before the introduction of the violin to Norway.

He writes of a story that is told in Hardanger that Isak Botnen built instruments that looked like a dipper before he began to build hardingfeler. An instrument carved out of a block of wood, especially the pear-shaped rebec, could look like a dipper, and this saying could imply that Isak was making some sort of fiddle. Sevåg adds that this story comes from a man who says he heard it from people born in the 17th century.[54]

He also cites a riddle from Sunnfjord that was written down in 1849:

> On the stomach there lie three lines
> In the intestines there is a good crunch
> In the middle of the hole is the greatest joy.[55]

It was common to find three strings on medieval fiddles and Sevåg concludes that there must have been some sort of three string fiddle in this region before the violin appeared.(op.cit.:149)

Another reference to a three-stringed fiddle in the 17th century is cited by Bjørn Aksdal.(Aksdal & Nyhus:17) He refers to an interview conducted in 1971 of the spelemann Johan Hårberg who describes a wake at the Hovde gård near Brekstad in Sør-Trøndelag that took place in the 17th century. According to this description, the spelemann sat on a wooden chest playing a violin with three strings while young people

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[54] (Sevåg '06:148) This incident is cited in Aksdal 2005 (Aksdal '05:69) as well, and is taken from Audun Galtung 1995: In a letter from Mons M. Botnen to Arne Bjørndal, Botnen writes that he was visited by "stortingsmann" Nils N. Skaar. "Skaar fortalte at isak rundt 1680 skal ha fått iak i ei "fiðla", et strykeinstrument fra middelalderen. Instrumentet likna på ei auso eller ein tresko. For å få lyd vart det brukt ein liten stokk til å slå på stringene med. Då Isak seinare fekk sjå flatfela til Austlands-Pål fekk han ideen on å laga ein mellomting mellom desse to".

[55] På Bukja dar ligge try Streek, I Tarmene vanka godt Knek, Midte paa Hola æ bedste Glæa

danced around the casket.[56] Aksdal interprets this citation as an indication that medieval instruments could have been in use as late as the 17th century.

The entry in the dictionary, "Den Norske Dictionarium eller Glosebog" printed in Copenhagen in 1646 in which the Sunnfjord priest, Christen Jensøn writes "*Haar-Gie kaldis en Bonde feyle*" has been discussed and interpreted by many scholars. Torleiv Hanaas interprets Haar as a version of "Hord" meaning from Hordaland, and uses this citation as evidence of an early hardingfele tradition.(Hannaas:98) Otto Andersson interprets Haar as hair, and concludes that the Haar-Gie is the "bowed harp", an instrument with horsehair strings.(Andersson:19) Sevåg finds the most important conclusion from this citation is that it is evidence for a fiddle tradition in Sunnfjord in the 17th century.(Sevåg '06:149)[57]

Sevåg then asks how late this "impulse of medieval character" could have appeared in the countryside milieu and at what point the violin could have taken over as the dance instrument in the urban life.(op.cit.:150) He finds several references to musicians in Bergen from the second half of the 16th century and the 17th century. Two citations from 1564 and 1571 name players of the "feyle" or "fedle".(loc.cit.) A register from Bergen lists 20 professional musicians between 1586 and 1629. Fifteen of these are given the title "spillemann" and Sevåg believes that many of them could have played bowed instruments. Bergen was the largest city in Scandinavia in 1600 and had extensive contact through trade with North Sea region, especially northern Germany.(loc.cit.) Sevåg finds it likely that the musicians named in the Bergen register, some of whom were immigrants, could have played dance music in the city and that the transition from earlier fiddles to the violin could have occurred during this time.(loc.cit.) He concludes that the Haar-Gie must have been first established in Sunnfjord no later than the middle of the 16th century before the transition to the violin. He adds that there is no indication that this pre-violin instrument can be directly connected to the fiðla and gigja of the Middle Ages.(loc.cit.)

Sevåg then turns to documentation of a bowed instrument tradition from the 17th century that could carry on the bordun playing style. It is only seldom that string players are referred to in the sources as "feyler" or "fiolist" except for the "bierfeyler" that continue to be named even after the violin appears, and Sevåg concludes that they must be included under the category "spillemann". He cites a Danish source from 1580 that refers to the fiddle bow in the spillemann's hand, as

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[56] (loc.cit.): "en fiolin med tre strenger, buen så ut som et tynnband"

[57] I am using the term fiddle to mean a pre-violin instrument.

evidence that the term spillemann can be linked to fiddle players.[58] Sevåg finds several references to spillemenn in small towns and populated areas along the south east coast where there were no established professional stadmusikanter, and considers them to be in the tradition of the 16th century bierfidlere. He finds it reasonable to think that the bierfidlere carried on the medieval bordun style in the dance music and that this was passed on to spillemenn of the 17th century. He notes that the transition to violin wouldn't necessarily bring about a change in playing style because its versatility allows it to be played in many styles and contexts.[59]Sevåg states that the hypothesis of a musical continuity of this type is essential to the attempt to explain the bordun playing style as a cultural loan with medieval origins rather than a local reshaping of a newer playing style.(op.cit.:152)

After the expansion of the stadsmusikant system in the second half of the 17th century, trained professional musicians were more often referred to as "musikant" and "instrumentist". The name spillemann lived on, referring to musicians who played for the lower social classes. He finds several references to spillemenn in the cities where they often came into conflict with the stadsmusikantene.(op.cit.152) Turning to the countryside he finds references to spillemenn and fiolin in Sunndalen (early 17th c.), Ryfylke (ca.1620), Hardanger (1625 & 1631), Sogn (1661), Finnmark (1660's), and Røråas (1670). He cites a reference of a wedding in Hol in Hallingdal where a spillemann from Numedal played violin, and adds that Setesdal could have had spelemenn around this time as well. In the 1730's there is a reference to a stadsmusikant in Skien, Telemark, who complains about the bierfeilere in his region.(op.cit.:153)

Sevåg writes that western Norway was exposed to cultural impulses earlier than the inland eastern region because of the flourishing timber trade in the 16th and 17th centuries. He adds that the bordun style of playing associated with dance music for the common people spread from the western fjord region and the eastern coastal areas to additional regions in the course of the 17th century. He concludes that if this theory is correct, then a fele tradition with a bordun playing style existed in the western region countryside when the hardingfele was developed.

Sevåg has presented his theory of the historical background of the bordun style of playing characteristic of the hardingfele in the current folk music tradition. He traces this playing style as far back as the

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[58] (Sevåg '06): "Saa maa ingen i Hastighed eller vred Hu løbe til og nappe Fedlebuen af Spillemandens Haand" (151)

[59] Sevåg cites Boyden. This was also considered to be true of the medieval fiddle.

bierfeyler of the mid-16th century, and the references to three-stringed instruments from this time. Although he writes that there is no evidence of a connection between the medieval fiðla and gigja and the references of the 16th century, he adds that it is not unreasonable to think that the bierfidlere carried on the bordun style tradition from the Middle Ages. In this case, the existence of an unbroken tradition of bowed stringed instruments in Norway does not seem to be impossible.

Jan-Petter Blom: urban and rural violin traditions

Other scholars have researched the history of the hardingfele and have interpreted the source material in different ways. Jan-Petter Blom, writing about the uncertainty of the accuracy of the date of the Jaastad-fele, divides researchers in the two categories of 'enthusiasts' and 'skeptics'. He writes that Arne Bjørndal and Torleiv Hanaas believe the 1651 date to be accurate while the researchers Tobias Nordlind, Asbjørn Hernes and Reidar Sevåg find the date too uncertain and turn to other sources in determining the age and origin of the hardingfele.(Blom '85:191)

Blom summarizes some of the arguments presented by other researchers regarding the date of the Jaastad-fele and other literary references. He finds however, that it is more important to consider the question of continuity of use of the fele in the folk tradition. He writes that Isak and Trond built both classical Italian violins and folk violins with resonance strings. These folk violins had more rounded bodies, shorter necks and fingerboards and flatter bridges and fingerboards. Blom describes this as an alternative to the violin and states that these folk instruments were used to play music with borduns and double stops, as opposed to a playing style incorporating single line melodies and position shifting. Blom finds this to be evidence of two distinct musical cultures at the end of the seventeenth century, with urban, upper class culture and a rural folk culture.(op.cit.:195) He writes that Christen Jensøns citation,"Haargie kaldis en bondefeyle" should be understood in this context and that the bondefeyle is the counterpart to the fele used in upper class contexts.(op.cit.:196)

Blom finds evidence for dance forms that could have been in use in Norway from the early sixteenth century. He refers to a tapestry probably woven in Sweden in the early sixteenth century that shows a dance that is similar to the Røros-pols, with musicians playing bagpipe and a type of early fiddle, similar to a medieval fiddle. He finds it likely that some type of fele would have been used to play for dance, noting that bowed instruments have characteristics making them ideal to play dance music. As solo instruments, they produce enough sound with the use of bordun and double stop techniques. Rhythm can be reinforced through the use of bow changes and bow pressure changes. Intonation can be varied in order to play with other instruments. It is physically

possible to play for long periods of time, for almost continuous entertainment and dance.(op.cit.:205) Blom writes that the form of the hardingfele is especially appropriate for the older folk music playing style and technique. He sees the development of the hardingfele as being a continuous exchange between local tradition and outside impulses.

Blom finds that the slåtter repertoire exhibits structural and performance elements that could be rooted in a tradition before the development of the earliest hardingfela, and refers to the gigja and fiðla of the sagas, as well as the Nidaros Cathedral sculpture. He writes that older stringed instruments were of relatively simple construction that could have been easily made or acquired. Blom believes that it is probable that stringed instruments, including types of fele, could have been in continuous use since the late Middle Ages. He supports this theory through the advantages of the playing style and function of the instruments, and from evidence of an international contact network and internal mobility.(Blom '85:207)

Bjørn Aksdal: The Hardingfele Project60

From the research carried out by the Hardingfele Project, Aksdal presents a theory for the history and development of the hardingfele. Aksdal writes that, after the detailed analyses of the Jaastad-fele, that it is far from certain that the 1651 date for this instrument is correct, but adds that there is no definite indication that the date is inaccurate.(Aksdal '01:282) He writes that the material from the Hardingfele Project seems to indicate that the hardingfele is older than the violin in Norway. He finds that there could have been a development from the medieval fiddle and rebec to a Norwegian *bygedefele*, or *bondefele*, that sometime in the early 17th century acquired resonance strings.(Aksdal '99:28)[61] Although it is unknown what these instruments looked like, Aksdal postulates that their origin was the small, rounded rebec type of medieval fiddle which he equates with the name gigja. According to Aksdal, the violin's arrival in Norway later in the 17th century influenced the form of this bygdefele. He adds that the small round hardingfele lived on in many countryside regions, for example Sigdal, until the 1850's and concludes that this small feler could have been in use for 200-300 years.(Aksdal '99:28) Aksdal refers

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[60] (Aksdal '99): In 1993, the Hardingfele Project was established in order to research the early history of the hardingfele. The goals of this project have been to register as many hardingfela and other relevant items, including instrument cases and Norwegian-made violins, to try out different methods to study and date materials, and to present a theory of the history of the hardingfele from its beginning to the 1860's when the instrument began to assume its current form and size.

[61] Bygdefele could be translated as rural fiddle, bondefele as peasant fiddle. The term bygdefele is used in (Aksdal '99) and bondefele in (Aksdal '01).

to at least fifteen fele builders from Vestlandet before 1800 who built these old bondefele type instruments with resonance strings, and writes that there are also many similar instruments from Telemark, Numedal, Sigdal, and Valdres from the 18th and early 19th centuries.(Aksdal '01:274) He adds that the fele from Telemark are especially small and rounder than the others and could represent an earlier link or a local variant in the development of the *bondefele*.(Aksdal '05:103ff.) Aksdal notes that this small *bondefele* must have been deeply rooted in many regions, in spite of the violin's influence and competition since the 17th century.

In discussing the use of resonance strings on the bondefele, Aksdal writes that there has been a theory that resonance strings were in use in the British Isles as early as the second half of the 16th century and that the use of these strings on several different types of fiddles continued into the 17th century.(Aksdal '05:99) He notes that in this period there was much contact between the British Isles and Vestlandet through the lumber trade. Aksdal finds that this trade contact undoubtedly also brought new cultural impulses to Norway and writes that resonance strings could have been used in Hardanger already before 1650. He adds that around 1700 resonance strings began to be used again and that it was then that the Swedish nyckelharpa and the European viola d'amore added these strings. Aksdal disagrees with the theory that the hardingfele's resonance strings show the influence of the viola d'amore.(Aksdal '99:99)

Aksdal speculates about an unbroken bowed instrument tradition in which some of the oldest slåtter material could have been played on medieval fiddles. The small *bondefele* could have emerged from the medieval instruments and gradually developed towards the form of the violin.(Aksdal '01:282)

Olav Sæta: Vanlig fele

In his article, "Hardingfele-Fele, forskellige instrumenter-forskjellig kultur?", Olav Sæta presents another perspective of the history and development of the vanlig fele and hardingfele in Norway.(Sæta '06)

In the course of his article, Sæta presents the view that the two instruments were not historically so very different from one another and that they do not necessarily represent two different cultures. He discusses the earliest references to fele use in Norway, the general relationship between the vanlig fele and hardingfele traditions, and the relationship between the two instruments' special traits and their repertoires.

In writing about the early use of baroque violin or vanlig fele in the folk music tradition, Sæta turns to Reidar Sevåg's article, "Fela" and his introductory article in Slåtter for vanlig fele, volume one.(Sevåg & Sæta

'92) Sevåg writes that ca. 1650, when the system of stadsmusikant privileges became more firmly established, the schooled musicians began to be called musikant or instrumentalist. When the term spillemann was still used, it most likely referred to someone who played dance music on the fele for a lower social class or country folk.(Sevåg '75:95) Sæta cites two Danish sources from the seventeenth century that state that trumpets were reserved for the upper classes while the the lower classes should dance to fele music and that only drums and fele were allowed at the lower class wedding festivities.(Sæta '06:91f.) He also lists more than thirty references to fele players in the folk music tradition, spread throughout Norway.[62] Sæta interprets this documentation as evidence that vanlig fela of a baroque model must have been in widespread use in any case from the second half of the seventeenth century and in some areas from the beginning of the century.

Sæta also interprets these references as documentation for a folk tradition for the baroque vanlig fele in the countryside and the lower classes in the cities and sees little sign of a learned or upper class urban context.(op.cit.:95) He writes that if one accepts this interpretation of a baroque type vanlig fele folk tradition already in the seventeenth century, then there must have been a flourishing folk fele tradition when the hardingfele was developed and first played.

6. Conclusion: Ethnological evidence

Although an unbroken tradition of bowed instruments can not be documented, several scholars have concluded that it is possible to imagine its existence. Reidar Sevåg has presented his theory of the historical background of the bordun style of playing characteristic of the hardingfele in the current folk music tradition. He traces this playing style as far back as the bierfeyler of the mid-16th century, and the references to three-stringed instruments from this time, adding that it is not unreasonable to think that the bierfidlere carried on the bordun style tradition from the Middle Ages. In this case, the existence of an unbroken tradition of bowed stringed instruments in Norway does not seem to be impossible.(Sevåg '05:152) Bjørn Aksdal speculates about an unbroken bowed instrument tradition in which some of the oldest slåtter material could have been played on medieval fiddles. He adds that the small *bondefele* could have emerged from the medieval instruments and gradually developed towards the form of the violin.(Aksdal '01:282) Jan-Petter Blom believes that it is probable that stringed instruments, including types of fele, could have been in continuous use since the late Middle Ages. He supports this theory through the advantages of the playing style and function of the

[62] (Sæta '06:92f). Many of these references are from (Sevåg 1975).

instruments, and from evidence of an international contact network and internal mobility.(Blom '85:207) These scholars have different viewpoints and perspectives when interpreting the evidence of and references to early hardingfele and vanlig fele in Norway, but all agree that bowed instruments could have been found continuously in Norway from the Middle Ages.

6.1 Using ethnological evidence

In order to use ethnological evidence in the reconstruction of music for the medieval fiddle, one could search for relevant elements in the living folk music tradition.

The hardingfele and the early vanlig fele used to play Norwegian traditional music have characteristics in common with medieval fiddles. The use of a slightly curved bridge and open tunings facilitates the playing of bordun strings above or below the melody, sometimes allowing the player to bow three strings at once. The hardingfele has traditionally been a solo instrument and was expected to provide music in several different contexts. Although the medieval fiddle appears in lists of instruments in the Norwegian literary sources, it is very often described and portrayed as a solo instrument in both Norwegian and other European medieval sources. In order to use ethnological evidence in the process of reconstructing Norwegian medieval fiddle music, one can examine the repertoire and performance practice of the hardingfele with the aim of finding elements that could be applied to a medieval repertoire and performance practice.

repertoire

The slåtter repertoire has been documented both in written transcriptions and in recordings. The two largest written sources are the collections Norsk Folkemusikk, serie I, Hardingfeleslåttar, volumes 1-7, and the Norsk Folkemusikk, serie II, Slåtter for Vanlig Fele, volumes 1-4. Based on Olav Sæta's article incorporating his own research as well as that of Reidar Sevåg and others, it appears that the baroque vanlig fele as well as the early hardingfele were used to play folk music in a bordun playing style, and that the documented vanlig fele repertoire as well as the hardingfele repertoire could be consulted. He has noted that some of the vanlig fele repertoire includes asymmetrical construction, bordun playing, and unusual tunings, all characteristics that are often associated with hardingfele repertoire.

The slåtter collections document *bygdedanser*, which are considered to be the core of the native or national dance in Norway.(Blom '81:306) The dances in duple rhythm include the *gangar*, *rull*, and *halling*, in either 2/4 or 6/8 meter, and the sometimes uneven triple meter dances springar, springleik and pols. Dance historian Egil Bakka writes that although there is little early documentation of these couple dances, some forms could have become established around 1600, if not earlier.(Bakka:25) Many smaller collections of slåtter transcriptions have been published, including a collection of listening pieces, or lydarlåtter, from Valdres, transcribed by Sven Nyhus.(Nyhus and Lande '96) Consulting the transcribed repertoire, one could consider

whether dance types and elements in the slåtter could have roots in the Middle Ages.

performance elements

One could also consider performance elements that could be common to the living folk music tradition and medieval practice. The folk music tradition for vanlig fele and hardingfele has until recently been almost exclusively a solo tradition. This allows for variability in performing slåtter and developing one's own variant of known tunes. The medieval fiddle was also often a solo instrument with the possibility of variability in the performance style. The bordun playing style is common to both the medieval fiddle and the current hardingfele tradition. Consulting recordings and transcriptions of folk music could provide a glimpse of how the performance techniques of variability and bordun style could have been used on medieval fiddles in Norway.

Part Two. Reconstructing music for bowed stringed instruments in Norway in the Middle Ages

1. Introduction

Many scholars and performers have written about various aspects of the performance of medieval music and the reconstruction of a repertoire that was part of the oral tradition. Two musicians, Thomas Binkley and Benjamin Bagby, who have been influential in the area of performance practice of medieval music, have written about their approaches to the process of reconstruction.[63]

Thomas Binkley has written about some aspects of reconstruction in his description of his experiences performing medieval monophonic repertoire with the ensemble, *Studio der frühen Musik*, which he founded in 1960. Writing seventeen years after the founding of the ensemble, Binkley discusses the wide range of repertoire that was performed and recorded, and describes some of the aspects of musical reconstruction he used with the ensemble.(Binkley '77(?)) Here he is refering to the accompaniment of monophonic song, which involves reconstructing an oral tradition.

Binkley found the differentiation of musical styles to be important, and he tried to find aspects of performance he felt could fit and identify each style. This process involved searching for differences between the musical styles.

> Whatever the elements are that make up music, one is never like another. Medieval music is not like Indian music, French music is not like German music, my music is not like your music. When one expresses the category one focuses on the differences that define that category.(op.cit.:3)

Binkley seems to imply that uncertainty about aspects of a particular style is less important than the creation of differing styles.

> I am guided not only by what I interpret history to be—but perhaps in the largest part—by the need to create hypothetical traditions in order to be able to juxtapose them. The disparity of styles is important in itself, especially when we are uncertain about the elements within one style.(op.cit.:30)

He adds that,

> In retrospect it seems to me that this long pragmatic approach to the performance of monophonic song has permitted searching out stylistic contrast in the hope eventually with some degree of

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[63]I was a student of Thomas Binkley and have been a student and colleague of Benjamin Bagby for many years.

> clarity to be able to point to regionalisms in performance, and to permit them to correctly shape that performance in structuring the total sound-picture.(op.cit.:12)

The choice of instruments and aspects of their playing techniques were important elements in Binkley's search for regional musical styles and he used different types of accompaniment and orchestration for different musical styles. He writes that one way of differentiating between musical styles played on the same instrument is through a change in tuning. "A change in tuning causes other notes to want to be played." By choosing different tunings, the notes that can be played can lead to a different style of playing. (op.cit.:28)

Binkley's references to reconstruction do not refer to fixed pieces or accompaniments but to aspects of the performance. He refers to the reconstruction of the sound picture or of a musical style and writes that the reconstruction of a song is actually a reconstruction of the performance of the song. "Music is to some extent improvised, either the notes or the articulation or some other aspect. There is no repetition." (op.cit.:3)

Benjamin Bagby has written about aspects of reconstruction in the work of Sequentia. He describes the techniques of "modal language" that Sequentia developed in the study and performance of many different repertoires of medieval song.

> "Briefly, we identify a mode not as a musical scale, but rather as a collection of gestures and signs which can be interiorized, varied, combined and used as a font to create musical "texts" which can be completely new while possessing the authentic integrity of the original material." (Sequentia '02 booklet :19f.)

In the case of the Edda projects, Bagby used Icelandic rímur as the source material for developing a modal language that could be used both vocally and instrumentally.[64] He describes the process of using this modal language in an essay written for the second Edda production.

> "In developing the instrumental pieces and accompaniments for this production, the players have made use of the same modal vocabularies and language as the vocalists (we share a common *prima materia*) but then they have factored in the particular playing and tuning characteristics of their own instruments, so that in the end each piece is unique and can only be played by the musician and instrument which shaped it. There is no

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[64] The *rimur* tradition dates from the late 14th century and was still popular until the middle of the 20th century.(The New Groves Dictionary of Music and Musicians '01)–rimur) *Rimur* are long narrative poems performed with repetitions of short melodies that could have roots in an earlier tradition of skaldic poetry. (Sequentia '02:20)

> "improvisation" as such, but then there are also no written scores aside from a few sketches, and so we prefer to think of ourselves as working within a rather strict oral tradition."(Sequentia '02 booklet:22)

For Bagby, the "genetic code" of the modal language contributes to the identity of a regional style. The sound characteristics, tunings, and playing techniques of different instruments shape how one uses the modal language.

In my work for the two Sequentia Edda projects, I used the modal language of Icelandic rímur as catalogued by Bagby and applied it to some of the instrumental genres and playing techniques from Norway in order to reconstruct a regional medieval fiddle style and to reconstruct pieces and song accompaniments for medieval fiddles.

For the first Edda project, I performed on two five-string fiddles and one three-string fiddle that I had used for many other projects, including performances of troubadour song, cantigas, German song, and works of Hildegard von Bingen. The instruments were not specific to the Edda project and its repertoire, so, in order to create a regional style with them, I experimented with new playing techniques and different tunings and intonation than I had used before. For the second Edda project, I commisioned a new instrument, a four-string fiddle built after an illustration from an English psalter of ca.1050, the earliest picture I found of a fiddle from a northern country. With this instrument, I continued to work with the modal language and playing techniques of the first Edda project.

In the first part of this thesis, evidence for bowed stringed instruments in medieval Norway has been discussed. One could conclude that some types of fiddles known in medieval Europe were introduced to Norway at least as early as 1184 when it is written that two leikare performed at the court of King Magnus. From the iconographical evidence, it seems possible that the bowed harp and bowed lyre also could have been played in medieval Norway. The medieval literary references describe several different performing contexts, and the location and some characteristics of the archæological and iconographical evidence suggests that instruments were not only played at the royal courts but could have been a part of the lives of common people in the Middle Ages in Norway.

The second part of this thesis is concerned with the search for some elements of the music that could have been played on these instruments as well as some aspects of the playing techniques that could have been used. Because no notated music for instruments in medieval Norway exists, and because the descriptions of music-making are few, the attempt to reconstruct aspects of the medieval fiddle tradition involves much speculation. In the process of reconstruction one could choose to

focus on differences or “otherness” in order to give the reconstruction an identity, to reconstruct a regional style within the genre of medieval instrumental music. As Daniel Leech-Wilkinson explains, “We have to use what little information there is if we want to arrive at an answer, but we can not possibly know that it is correct; we can only believe it or not…We have to create something, because if we confined ourselves strictly to the hard evidence we should never be able to present a coherent picture, nor one that would be of any interest in the wider world, and medieval music would never be heard.”(Leech-Wilkinson:3)

The goal of the second part of this thesis is not to present a new body of repertoire, but to discuss some elements that could be used in the process of reconstruction. The topics discussed include tunings, tonality and intonation, construction and form, melodic material, and bowing techniques. With these elements, it could be possible to reconstruct not only a repertoire, but a performance technique that involves variability, where the performer shapes, rather than interprets, the piece in performance.

2. Tunings

2.1 Fiddle tunings in the Middle Ages

Very little is written in the medieval period about tunings used for bowed stringed instruments. The most extensive source of information is chapter 28 in the Tractatus de musica (Paris, Biblothèque Nationale, MS Lat. 16663) av Jerome av Moravia (fl.1272-1304):

> In tetracordis et pentacordis musicis instrumentis, puta in viellis et similibus per consonancias cordis distantibus mediis vocum invencionibus

(On four-and five-stringed instruments of music, especially vielle and similar instruments with strings separated by consonant intervals, with the notes between)[65]

In this chapter, Jerome actually doesn't write about instruments with four strings. He begins with a descripton of the rebaba, an instrument with two strings tuned a fifth apart, and he continues with a descripton of the vielle which he says must have five strings. Roy Whelden cites several scholars' explanations for Jerome's reference to instruments with four strings. Francis Galpin believes this could mean a *rebaba* with two double courses.(Galpin:84) Christopher Page suggests that Jerome's chapter could be an incomplete version of an earlier treatise.(Page '79:94) Whelden suggests that Jerome could be refering to the group of instruments with few strings tuned in large intervals as opposed to those with many strings tuned in intervals of tone and semitone. He notes that the *Summa musicae* is the only other source known from the thirteenth century which discusses tunings, and that this source classifies instruments into those tuned with large intervals (fourths, fifths, and octaves) and those tuned with tones and semitones.(Whelden:5-7)

Jerome describes three different tunings for the vielle.[66]

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[65] My primary source for this section on medieval tunings is Roy Whelden's doctoral dissertation written in the form of a commentary on this chapter, (Whelden) Whelden notes in his introduction that he has used Christopher Page's English translation of the original Latin throughout his dissertation published as (Page '79) An earlier edition of this treatise, Simon Maria Cserba: Hieronymus de Moravia, Tractatus de Musica, Regensburg: F. Pustet, 1935., is referred to in (Bachmann).

[66] As both Page and Whelden point out, Jerome's tunings do not imply a standardized pitch system. (Page '79: 83) (Whelden:72) Whelden notes that Jerome's descriptions of the three tunings places them in a very low range when notated at modern pitch. He explains that these tunings should be interpreted as relationships between pitches rather than the absolute notated pitches. There was no concept of standard pitch in the thirteenth century, with inclination towards standard pitch first appearing at the end of the seventeenth century.

The first tuning is dGgd'd'

Jerome writes that the first string, d, is the *bordonus* and that one shouldn't play e or f on it.

The second tuning is dGgd'g'

Jerome writes that all five strings are fixed to the body of the instrument so that each may be fingered. This is in contrast to the first string of the first tuning which should not be fingered, but perhaps doesn't run along the fingerboard and should be plucked.

The third tuning is GGdc'c'

In his description of the first two tunings, Jerome clarifies which notes are fingered on each string. For the third tuning, he simply writes that the fingering is the same as for the first two, but there is a note in the margin "but I do not see how b-natural may be found."

Jerome's treatise is important not only for the information he provides, but for tuning possibilities that are not as clearly stated. For instance, additional tunings could be deduced from the three he gives. The most important aspect of the first two tunings is that they only use two pitches in different octaves. The sound from an instrument tuned with only two tones can be very resonant from the sympathetic vibrations and the use of drones. Jerome writes about his first tuning, "Such a *viella* as described encompasses the essence of all the modes."(Whelden : vii) Several variants of these first tunings are also possible and would also allow the player to play in different modes.

As Whelden writes about the *Summa musicae*, "another possible reason for its lack of detail...is that viella tunings in the thirteenth century, and possibly throughout the next two centuries as well, may never have been standardized. One tuning may have been chosen because of the tonality of a piece, another tuning may have enabled the player to finger certain chords or figures handily. The most one could say, then, was that adjacent strings on the *viella* were sometimes tuned with large intervals, and these intervals were generally octaves, fourths and fifths. Seen in this context, Jerome's exactly specified tunings represent those which may have been especially common or especially useful during the thirteenth century in northern France."(Whelden:8)

Additional tunings for the 5-string fiddle could be:

dgd'd'g' dad'd'a' dgd'g'd''

Jerome doesn't provide tunings for three and four string fiddles, but the same principle of open tuning could apply. Possible tunings could include:

fc'f'c'' gc'g'c'' gd'd'g' gd'g' gc'g'

All three of Jerome's tunings, as well as the additional proposed tunings, imply a primarily bordun style of playing. The unison strings, and unequal intervals between the strings are not advantageous for melodic playing, but contribute to the resonant sound of bordun playing. Different interpretations of the performance possiblities in these tunings will be discussed in the section "Bowing techniques".

2.2 Hardingfele *and Vanlig fele tunings*

By looking at ethnological evidence from Norway, the documented and continuing *vanlig fele* and hardingfele traditions, one can find more information about tunings that is relevant for Norwegian medieval fiddles. Bjørn Anmarkrud has written his masters thesis about hardingfele tunings found in volumes 1-5 of "Norsk Folkemusikk, serie I, hardingfeleslåttar" (NF) and Olav Sæta has written an article about vanlig fele tunings in the collection *Slåtter for vanlig fele*, volumes 1-4.

Anmarkrud catalogues and discusses 28 different hardingfele tunings in the five (NF) volumes (Anmarkrud) As he notes, this is an incomplete representation of the hardingfele slåtter repertoire. The remaining two volumes were completed in 1981, and the seventh volume includes a summary of the eighteen tunings found in the complete set.[67]

Anmarkrud briefly discusses ten additional tunings that have been documented in works by Bjørndal&Alver and Gurvin.[68] Several have been mentioned by players but are no longer in use and have no documented slåtter. Two are recent, invented by Eivind Groven, and others he concludes are misinterpretations or printed errors. (Anmarkrud:21) This discussion of hardingfele tunings will be limited to the eighteen found in NF, as well as tunings documented in *Slåtter for vanlig fele.*

Anmarkrud has found that, by far, the most common tuning for the hardingfele is ada'e' with about 80% of the documented slåtter. The tuning gda'e' is represented by 11%, aea'c# and gda'd' by a little over 2% each. These percentages remain almost the same with the inclusion of volumes six and seven. Of the eighteen tunings found in the collection, ten are represented by fewer than ten slåtter each, and of those, seven are represented by only one slått apiece.

If one categorizes the eighteen hardingfele tunings by number of tones used in each one, it is clear that very few, only fourteen slåtter, are played in tunings using only two tones as in Jerome's first two tunings. There are twelve slåtter in aea'e' and two in ada'd'. Most of the slåtter are in tunings using three tones, including the tunings ada'e', aea'c#'

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[67] see appendix

[68] (Bjørndal '85) The 1st edition was published 1966, and (Gurvin '68)

and gda'd'. The remaining slåtter are in tunings with four different tones, including gda'e'.

Olav Sæta has written about the eleven tunings documented in *Slåtter for vanlig fele.*(Sæta in print) As is the case for the hardingfele repertoire in NF, the tuning ad'a'e' is used most often, for between 48% and 68% of the tunes, depending on which district they come from. The tuning gd'a'e' is the next most frequent tuning used, with the tunings ae'a'e' and ae'a'c#' as third and fourth most frequently used. Sæta lists the additional seven tunings, five of which are found in NF, and two of which are unique to the vanlig fele repertoire. The two that aren't found in NF are both tunings using three tones, dd'a'e'' and bd'a'd''.

Tuning	Vanlig fele	Hardingfele
ad'a'e''	*	*
gd'a'e''	*	*
ae'a'e''	*	*
gd'a'd''	*	*
dd'a'e''	*	
ad'f#'e''	*	*
fd'a'e'	*	*
fc'a'e''		*
bd'a'd''	*	
he'a'e''	*	*

Tuning	Vanlig fele	Hardingfele
gc'a'e''		*
gd'a'h''		*
ad'a'd''		*
ad'a'c#''		*
gd'g'e''		*
cf'a'e''		*
ac'a'e''		*
ac'a'd''		*
ae'a'h''		*

Both Anmarkrud and Sæta write that the large number and variety of tunings used could have their origins in Baroque musical practice in Europe, as well as from earlier musical traditions in Norway.

Discussing the possible origins of hardingfele tunings, Anmarkrud describes two instruments from the Baroque period that could have influenced the development of the hardingfele.(Anmarkrud:46f.) The English lyra viol, with between 4 and 7 playing strings, also had resonance strings, and 51 different documented tunings.(Anmarkrud:46) The viola d'amore had 5-7 playing strings and a set of resonance strings. Seventeen different tunings are described in a book from 1741 by Joseph F.B.C. Majer.(op.cit.:47) Anmarkrud writes that very little notated music survives for the viola d'amore, and speculates that because the instrument was often played alone, like the hardingfele, that much of the music was either improvised or performed by memory.

Sæta postulates that the use of various tunings in the folk music tradition stems from long before the documented tradition in NF and VF, and that the use of *scordatura* in both European art music and folk music could have flourished in the 17th and 18th centuries.(Sæta in print) He discusses the use of scordatura or re-tunings in Baroque music for the violin. Although there are many instances of scordatura in the Baroque violin repertoire, the Mystery (or Rosary) Sonatas of Heinrich Biber stand out as a virtuosic highpoint. The fifteen sonatas, describing different episodes in the lives of Jesus and Maria, each use a different tuning, shaping a wealth of variation in sound and resonance for the violin. Sæta writes that, according to Peter Holman, these tunings as well as the motivic material, were used to affect the listener's feelings.[69] Anmarkrud also cites the Biber Mystery Sonatas as an example of scordatura that could have influenced folk music traditions. His description omits several tuning however, and misinterprets the re-entrant tuning gg'dd' as gdg'd'.(Anmarkrud:45)

Although a wide variety of tunings for the violin were used in Mystery Sonatas, the context for their use is different from that of the folk tradition. The Mystery Sonatas of Biber were probably intended to be performed in October at Salzburg Cathedral as postludes to services dedicated to the Rosary[70] The scordatura were used to appeal to the emotions of the listeners in a religious context. I have not found evidence that these sonatas were known or performed in Norway.

The large number of tunings for both hardingfele and vanlig fele, often with varying intervals between the strings, are an indication of a bordun playing style. Each unusual tuning carries a special tonal color from the differing bordun strings. Even the tuning gd'a'e'' that in modern violin technique provides the greatest range and ease in melodic playing, is used as a bordun tuning on the hardingfele, providing its own tonal color.

2.3 Tunings for fiddles in medieval Norway

Jerome of Moravia's treatise from 13th century France is both relevant and important in considering what music played by fiddles in medieval Norway could have been like. It has been assumed by many scholars, including Panum, Vollsnes, and Kolltveit, that the instruments fidla and gigja refer to medieval fiddles found in Europe. European travelling musicians, the leikare, performed in Norway, at the royal court and possibly in other settings for the general population as well, and it is likely that they used tunings that were in use at the time in Europe. These tunings could have included both the three described by Jerome

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[69] Sæta (in print) cites (Holman, Peter, The Violin book, London 1999:20).

[70] New Groves—"Biber, Heinrich Ignaz Franz von" Elias Dann&Jiri Sehnal

as being in use in Paris in the 13th century, as well as other similar tunings as discussed above.

Several of the hardingfele tunings could be adapted for the medieval fiddle. The tunings ae'a'e" and ad'a'd", using only two tones, correspond to Jerome's first two tunings and variants of these tunings. Tunings consisting of three tones could be used on the three-string fiddle or adapted to the five-string fiddle with the addition of unison or octave strings as seen in Jerome's tunings. Reidar Sevåg has written that some of the unusual tunings, and the slåtter played in them, have characteristics of an earlier playing style. In several slåtter in the tunings ae'a'e" and ae'a'c#" and in other less frequently used tunings, one of the outer strings is used only as a bordun. It would be possible to play slåtter such as these on a three-string fiddle. In some cases, the bass string is not played at all, and the top string is used as a bordun, resulting in a slått that could be played on a fiddle with two or three strings. (Sevåg '79)

Sevåg has noted that the many unusual tunings used by the hardingfele could be associated with different contexts. Some are linked to stories about events from the Middle Ages, and others are part of rituals that could have roots in the medieval period. (Sevåg '89:332) Re-tuning is described in both the folk tradition and the medieval literary references.

3. Tonality and Intonation

Considering what types of music could have been played on medieval fiddles in Norway could lead to speculation about aspects of tonality and intonation. One can turn to both medieval treatises and to the documented Norwegian folk music tradition to see if they share common elements or provide information useful for Norwegian medieval fiddle performance.

Some medieval treatises of music theory contain information about how musical pitch structure was described and understood. Other medieval treatises provide additional information about intonation in the performance of various types of repertoire. Contact between Norway and continental Europe would suggest that the theoretical and practical information found in these medieval treatises could be relevant in Norway for some repertoire.

Ethnological evidence, the living and documented Norwegian, and in one example, Icelandic, folk music tradition, provides information about tonality and intonation in practice. Many scholars have not only attempted to describe what is seen to be unusual in the intonation and tonality of some Norwegian folk music, but to find an underlying theoretical system or origin for these unfamiliar aspects. One could consider whether the tonality and intonation practice documented in recordings, transcriptions, and surviving fixed-pitch instruments sometimes apply to fiddle music from the Middle Ages in Norway.

3.1 Tonality and Intonation in Medieval Music Theory

Early medieval music theory is largely concerned with the arithmetical aspects of music, deriving intervals and describing them in terms of consonance and dissonance. Later writers develop aspects of musical theory to describe the chant repertoire and to help singers learn new chant. In the twelfth century, music theory treatises began to include sections discussing the process of writing and improvising early polyphony. In some treatises, tuning and intonation are also discussed. Aspects of medieval theory that could have some relevance for the medieval fiddle in Norway include the Pythagorean tuning system, the church modes, and the system of hexachords.

Boethius (c480-c524) is the most influential of the the early theorists, transmitting Greek music theory and adding his own original elements.[71] He describes the derivation of the musical scale through the division of the monochord, resulting in the Pythagorean tuned scale. String length ratios between multiples of 2 and 3 are used to derive the intervals.[72] To find the ratio for the sum of two intervals, their ratios

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[71] New Groves—theory

[72] (Page '86: Pythagorean intonation)

are multiplied, and to find the ratio for the difference of two intervals, their ratios are divided.

octave 2:1

fifth 3:2

fourth 4:3

whole tone 9:8

major sixth 27:16

minor third 32:27

major third 81:64

'limma', diatonic minor second 256:243

'apotome' larger minor second 2187:2048

The Pythagorean scale can also be derived by moving through the circle of perfect fifths and descending by octave. Beginning on C, one leaps up a fifth to find G, then up another fifth and down an octave to find the D a whole tone above the starting point C. All the tones of the scale can be found in this way, but moving through a complete circle of fifths does not lead exactly back to the starting point. The last fifth is too narrow by what is called the 'Pythagorean comma'

Boethius wrote briefly about the Greek system of *tonoi*, or what he called *modi*, and the later theorists of the 9th century expanded on this, presenting the eight modes used to describe and classify Gregorian chant. The modes are organized in four pairs, each pair based on a final tone, or *finalis*, of D, E, F, or G. The pairs each have two forms of the mode, the *authentic* with the range of the melody above the *finalis*, and the *plagal* with the melody above and below the *finalis*. Each mode is made up of a pentachord and a tetrachord. In the authentic form, the tetrachord is above the pentachord, and in the plagal form, the tetrachord is below the pentachord. The modes were given Greek names, the authentic modes called Dorian, Phrygian, Lydian, and Mixolydian, the plagal modes with the prefix *hypo*, meaning 'under': Hypodorian, Hypophrygian, Hypolydian, and Hypomixolydian.

The 11th century theorist Guido of Arezzo is most often associated with the system of hexachords and what has been come to be known as the Guidonian Hand. The notes of the *gamut*, or scale, are divided into three hexachords in the sequence: tone-tone-semitone-tone-tone. The natural hexachord (*hexachordum naturale*) is formed on C, the hard hexachord (*hexachordum durum*) on G, and the soft hexachord (*hexachordum molle*) on F. The pitches of the hexachords are named ut, re, mi, fa, sol, la, which Guido derived from the hymn *Ut queant laxis*. As Whelden describes, the hexachords form an interlocking system that is in contrast to the later system of stacking octaves on one

another.(Whelden '93) Using the hexachords and transposing from one to the other, a singer could sing an unfamiliar melody, finding the tones and semitones.

These three elements of medieval music theory, the Pythagorean scale system, the church modes, and the system of hexachords could have some practical application to the medieval fiddle.

Roy Whelden has written about the application of the Pythagorean tuning system to fiddle performance in his dissertation on Jerome of Moravia.(op.cit.:13-22) He notes that Jerome has included chapters on the theory of music in his treatise before the final chapter about the *viella* and *rebab*. When Jerome describes which note is fingered on each string, Whelden writes that the Pythagorean tuning described earlier in the treatise is assumed to apply to the notes on the fiddle. This tuning system can seem unfamiliar to modern players with its wide major third and narrow semitone. Whelden compares the use of the Pythagorean third with that of the pure major third, also known and used, especially in music from the British Isles.(op.cit.:15) The major third was considered by the theorists to be an imperfect consonance, and Whelden writes that it most often needs to be resolved, expanding outward to a fifth. Whelden presents two musical examples to demonstrate the use of the Pythagorean third and the pure major third. He finds that the two-part *Nota* from London, British Library, *Harley* 978, f.9r., could be played with Pythagorean thirds, noting that the thirds appear as unstable intervals resolving to fifths or octaves. The second musical example is titled *Dance* and is from Oxford, Bodleian Library, *Douce* 139, f.5v. Whelden finds it most likely that the pure third was used, especially in the ending where the melody is played in parallel thirds with a higher bordun.

Christopher Page discusses aspects of tuning used in the performance of polyphony before 1400. He writes that variations in intonation were used intentionally to produce dramatic musical effects.(Brown and Sadie: 80ff). The octave, fifth, and twelfth were considered to be perfect consonances and were sung as pure intervals while the imperfect consonances, especially the third and sixth, could be varied according to context. As Page writes, most of the theorists of the 13th and 14th centuries taught Pythagorean intonation, but he adds that a tuning system only provides guidelines for performance, and that in the later 13th century, French musicians sometimes altered the Pythagorean intervals in practice. He quotes a 13th c. Parisian theologian who asserts that the minor semitone can vary in size. Page cites the 14th c. Italian theorist, Marchetto da Padova, as recommending a narrow semitone step and in cadential figures, a semitone that is less than a quarter tone. Page adds that French music of the 14th c., such as the polyphonic music of Guillaume de Machaut, could also call for the widening of imperfect intervals resolving to perfect intervals. He writes

that English music, however, uses thirds and sixths differently, often presenting them as consecutive triads. He cites the theorist Walter of Odington who writes that the Pythagorean thirds can be made more sweet and consonant in performance. This agrees with Whelden's reference to the use of perfect thirds in the British Isles, and can be applied to English medieval music.

There is no written evidence of polyphony associated with Norway in the Middle Ages besides the enigmatic Magnus hymn found in a manuscript dated 1280. The hymn itself could date from a century before the manuscript, and its historical context and possible connection to Norwegian folk music will be discussed in the next section of this chapter. The Magnus hymn is the oldest example of polyphony in Scandinavia and is especially unusual because much of the melody is sung in parallel thirds. As Nils Grinde writes, the structure is different from polyphonic practice elsewhere in Europe at the time, as found in the *organum* of the school of Notre Dame and the *ars antiqua,* in which thirds were usually avoided. Grinde concludes that the Magnus hymn, with its strings of parallel thirds, could reflect a folk tradition from the Orkney Islands and possibly elsewhere in Scandinavia rather than the tradition of polyphonic church music.(Grinde:23) Grinde cites the British author Giraldus Cambrensis (Gerald of Wales) who writes ca.1200 about a two-part singing style heard in Wales and northern England. Giraldus writes that the lower voice part is hummed while the upper voice is sung softly.(loc.cit.) Grinde adds that although there is no evidence of a similar style of singing in Norway, it is told, however, in the Icelandic source *Biskupa Sögur* that Bishop Laurentius, bishop of Holar from 1322 to 1331, spoke out against two- and three- part singing in the church because he found it too closely associated with the minstrel tradition. Grinde notes that it is unclear whether Bishop Laurentius is refering to *ars antiqua* polyphony or a style of folk singing. Grinde seems to believe that it is most likely that an effort had been made to introduce French polyphonic church song.(op.cit.:26) He adds that *ars antiqua* organum was known elsewhere in Scandinavia and that organum was reportedly sung in the Uppsala Cathedral in 1298. Later, in 1462, the statutes of the Lund cathedral choir forbid the use of polyphonic songs.(loc.cit.) Grinde assumes that ars antiqua organum was known in Norway but that it did not have an important role in the church music.

Because there is no clear indication of a polyphonic repertoire for the medieval fiddle in Norway, the treatises describing intonation practice in Italian and French polyphony are not directly relevant for the instrument and its intonation practice. However, these examples point out a certain flexibility regarding intonation in the Middle Ages. The medieval treatises present Pythagorean theory and the resulting intervals, but, as Page and Whelden have described, there are

references to performance practice that indicate that intervals other than the fifth and octave could be altered, sometimes radically, according to the musical context.

O.M.Sandvik has considered the possibility that the system of the church modes or the chant using these modes could have had some influence on Norwegian folk music, and perhaps similar influence could have been found in the music for medieval fiddle as well. In Norsk Folkemusik, Sandvik discusses the possible influence of the church modes on Norwegian folk music. He finds that it is difficult to imagine that church music, which for five hundred years represents the most beautiful music people heard, wouldn't have had some influence.(Sandvik '21:62) He compares four aspects of the tonal elements of both chant and folk music to determine if they contradict one another.

First, he finds that in both repertoires a whole tone between the seventh degree and the tonic is used.

Second, he finds that the fifth degree, or dominant, has an important role in both repertoires. In chant in the first mode, this is the reciting tone used to recite the psalm text between renditions of the antiphon. He writes that although the repetition of the antiphon returns to the tonic d, he finds it possible that the emphasis of the repeated a as reciting tone could influence melodies constructed outside the church context in which the tonic could seem to shift from d to a.

Third, he finds examples of shifting modal identities in both folk melodies and church hymns.

Last, Sandvik writes that the lydian mode with an augmented fourth is found in both folk music and chant. He cites examples from C. Elling, however and writes that the lydian feeling would not be so pronounced if the fourth tone was raised by a quarter tone instead of a semitone. Sandvik concludes that there are no contradictions between the tonal systems of church music and folk music.(op.cit.:65) In looking for melodic similarites between the two repertoires, he considers the motivic formulas that are used in the construction of chant. He concentrates on the formula consisting of a minor third and a whole tone citing many examples of this motive in church hymns (op.cit.:66). Sandvik also finds that the melismatic quality of folk hymns is not similar to the ornamentation of rhythmic dance genres, but is similar to the recitative quality of chant.(op.cit.:69)

Nils Grinde also finds it reasonable to suppose that song heard in the Norwegian church for centuries could have had some influence on the secular musical language during the Middle Ages.(Grinde:16) He writes of the "Voluspaa" melody found in the book *An Essay on Ancient and Modern Music* published in 1780 by J.B. de La Borde, that some scholars have found a similarity between it and the Gregorian

Lamentations used in the Good Friday liturgy, adding that it is uncertain whether the similarity is coincidental or due to actual influence.(op.cit.:15) Writing about Norwegian traditional lullabies, Grinde presents an example of a lullaby that he believes is derived from a chant fragment from the "St. Olaf" liturgy. (op.cit.:77)[73]

If melodic fragments from chant could have been used as the basis for a lullaby, perhaps they could have been played on medieval fiddles as well, either as vocal-like listening tunes, or as melodic motives in the construction of dance tunes.

The medieval system of hexachords that was used to sing unfamiliar chant repertoire in the Middle Ages presents a system of organizing music that does not necessarily result in octave equivalents. For some chant in the Dorian mode, one finds both B and Bb in the upper octave and Bb in the tetrachord below the *finalis* D. Perhaps this organizational system could apply to the fiddle as well, resulting in pieces where motives aren't repeated exactly in different octaves, but in different hexachords or on different strings. In this case, octave equivalency is not necessary and a note that is played unaltered in one octave could be altered, with a sharp or flat, in another octave.

3.2 Tonality and Intonation in Norwegian Traditional Music

Reidar Sevåg provides a thorough discussion of the history of scholars' and collectors' attempts to document and explain the enigmatic aspects of tonality and intonation in Norwegian folk music.(Sevåg '93)[74] He writes that when collectors from an urban milieu began to be interested in documenting the rural folk music, they were confronted with unfamiliar tones that they found difficult, if not impossible, to notate. These included what are known as *svevende* or variable tones, which could be neutral, *halvhøye*, or "blue" tones. They were difficult to define because they are either variable or because they are fixed in positions that don't conform to the tones of the modern tonal systems. Sevåg notes that these tones have been an important theme in folk music research since the beginning of the 19th century.(Sevåg '93:343)

The earliest collectors noted the presence of unusual tones and sometimes added brief descriptions of them. Later researchers looked for the origin of these tones and the intervals resulting from their use, often trying to fit them into some sort of system.

The earliest indication of the problem of unusual tones is from 1813 when Cornelius Enevold Steenbloch (1773-1836) sent a small collection of folk songs to a publisher in Copenhagen. He included a commentary

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[73] The lullaby and chant fragment are reproduced on page 106

[74] This chapter is a revision of an article written in 1971. An English version was published in (Sevåg '74)

in which he expressed his frustration with the impossibility of notating all of the sung pitches. As Sevåg points out, he doesn't attempt to justify "normalizing" or "restoring" the melodies to fit contemporary notation, but accepts the unusual tones as a musical characteristic he is unable to notate exactly.(loc.cit.)

Other collectors of folk song and langeleik and hardingfele tunes in the 19th century described the tones that fell outside those of the major/minor scale system. In 1818, J.Ch.Fr.Haeffner (1759-1833) wrote of a "nordic" scale with variable 6th and 7th degrees.(op.cit.:344) In 1848, with the presentation of his first field research, and throughout his career, Ludvig M. Lindeman made careful observations about folk music and instruments. As Sevåg notes, however, Lindeman had to adjust the unusual tones he observed in order to publish the folk music he collected in conventional notation. He provided descriptions of the unusual intervals as commentary to his transcriptions. In one example of a langeleik tune, he writes that the instrument, with a tonal center of F, had a fourth between Bb and B (ca. natural fourth (=naturkvart)), and a seventh between Eb and E (low neutral).(loc.cit.) Similarly, in the 1890's, Einar Övergaard provided commentary to his transcriptions of hardingfele slåtter played by Ulrik Jensestogun from Aurdal, noting that the 3rd tone is played a little lower than usual, the 4th a little higher.(loc.cit.)

In the 20th century scholars began to search for tonal systems that could explain the origin and use of the tones that are outside the major/minor tonal systems. In the 1920's, researchers such as Erik Eggen and Eivind Groven turned to fixed pitch instruments in order to understand possible tonal systems. Both Eggen and Groven were searching for musical rules that could be expressed in fixed scale systems, and, independent of one another, became convinced that the natural overtone scale was significant.(op.cit.:353) In the 1960's it became possible to measure pitch in recordings with greater accuracy and to make detailed analyses. As Sevåg points out, though, it is not possible to be certain that a recorded performance represents an older tonal system. The change from an older tonal system to the modern has been, for the most part, gradual, and performers are influenced in varying degrees by other musical styles and regional musical milieu. Sevåg believed that folk instruments could provide a more reliable picture of the older tonal systems.

The two instruments used most extensively in this research are the *seljefløyte* and the *langeleik*, both of which could have been played in the Middle Ages.[75] As Hedvig Vollsnes explains, the seljefløyte is a

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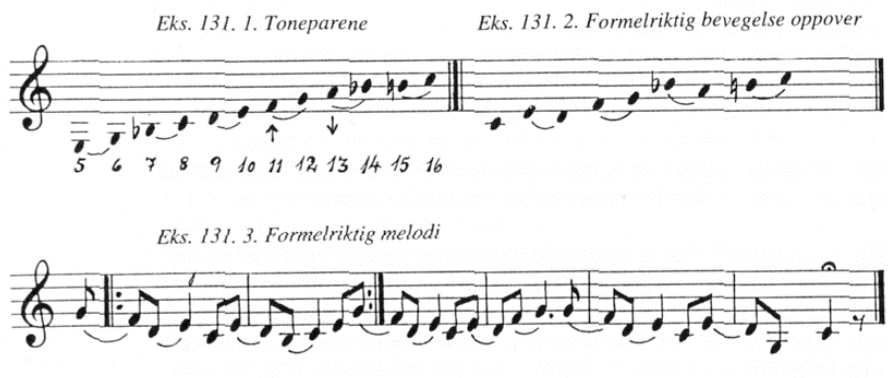
[75] The seljefløyte is a long flute, traditionally made of willow bark, with no finger holes. Different pitches are produced by altering the strength of the breath and by covering or uncovering the end of the flute. The langeleik is an instrument from the board

fragile instrument, made of willow bark, that would not likely survive from the medieval period. It was played in the countryside and was not included in texts describing instruments at the royal court, but it is not impossible to imagine that this type of flute could have been played in the Middle Ages. Vollsnes includes the oldest surviving langeleik in her thesis, noting that it barely fits in her medieval time frame. The langeleik is dated 1524 and was found in Vardal. It is well-made and gives the impression that it is an example of an established langeleik tradition rather than being the first attempt at a new instrument. Again, it is not impossible that the langeleik was played earlier in the Middle Ages in Norway as well. If these instruments could have been played when the medieval fiddle was played, perhaps their tuning systems could be applicable to the fiddle as well.

Eivind Groven and the Seljefløyte

Eivind Groven believed that the seljefløyte was an important influence in both the tonality and the musical structure of the older folk music repertoire. Not only does he assert that the seljefløyte produces the tones of the natural overtone scale, but the playing technique, as Groven understands it, results in melodic formulas that could be identified in song and tunes played on other instruments. The open flute produces the even numbered overtones and the closed flute produces the odd numbered overtones with a fundamental an octave lower than that of the open flute. The melodic range of the seljefløyte is between the 6th and 16th overtones, and a scale is produced by combining the overtones of the open and closed flute.

Groven observes that it is easiest to play two consecutive tones that require the same air pressure, and groups the tones of the overtone scale into tone pairs in which one tone is played in the open position, the other in the closed position, played with the same breath pressure.



zither family with one fretted melody string and several bordun strings. Although the langeleik is related to other European instruments originating from the monochord, the playing style and repertoire are unique to Norway.

ill. Tone pairs, upward movement according to the flute formulas and melody according to the flute formulas: from (Sevåg '93)

Other tone combinations that are not difficult are those in which the flute remains either open or closed and the breath pressure is changed. Groven was certain that the seljefløyte and its melodic formulas played a large role in folk music, and he looked for these formulas in transcriptions of hardingfele slåtter and other repertoire. He listed eight types of melody that he considered to be influenced by the seljefløyte:

1.formula melodies

2. melodies with minor third and expanded fourth

3. melodies with major third and minor seventh

4. melodies with expanded fourth and minor seventh

5. formula melodies with minor third, major sixth and minor seventh

6. melodies with alternating minor and major third

7. melodies with neutral (=halvhøye) intervals

8. melodies with major third and expanded fourth

Groven also looked for signs of the seljefløyte's influence in hardingfele ornamentation. On the seljefløyte it is only possible to play ornaments using the tone pairs, and Groven interpreted these tone pair ornaments played on the hardingfele to be evidence of the seljefløyte's influence.(Sevåg '93:359)

Reidar Sevåg points out the problems with Groven's theory. First, he doubts the central position of the seljefløyte, noting that it was a fragile instrument that could only be made during a few months in the spring. Sevåg acknowledges that the seljefløyte had a widespread tradition, but adds that other instruments, including the lur and munnharpa, also used a natural overtone scale and could have been influential as well. He writes that formulaic melodies could have been used that are not a result of a particular instrument's playing technique. However, he adds that the seljefløyte, with its tone pairs could have influenced the melodic formulas more than instruments without such specific technical restrictions determining which consecutive tones should be played. Sevåg also notes that Groven includes tunes with a neutral third or minor third in his categories of tunes showing seljefløyte influence although the natural overtone scale includes a major third. Sevåg finds the practice of adjusting notated minor and neutral thirds to fit the overtone scale third problematic.(op.cit.:355)

Ola Kai Ledang also describes problems with Groven's theory of the seljefløyte overtone scale.(Edwards et al.:150) Ledang explains that the acoustic spectrum of the seljefløyte is complex and variable, and that

the scale is affected by several factors. The resonance in a slightly conical bore is not exactly harmonic, and the open and closed seljefløyte have differing resonance qualities. He writes that the scale produced on the seljefløyte always differs perceptibly from the overtone scale, especially in the uppermost register.

In conclusion, it seems doubtful that the seljefløyte had the widespread influence on older folk music that Groven asserted. However, its influence can be seen in some of the older repertoire, and the natural overtone scale, used not only by the seljefløyte, but the lur and munnharpe as well, could have influenced the intonation used on instruments and in song. If the seljefløyte is seen to have influenced some of the early hardingfele repertoire, perhaps, if it were in use in the Middle Ages, it could have influenced some of the music played on medieval fiddles as well. If medieval fiddlers were found in rural areas, or if traveling musicians heard rural, folk instruments, they could have heard music played on several different instruments using the natural overtone scale. If the seljefløyte was in use, fiddlers could have also heard its characteristic tone pairs and formulas, maybe making and playing the seljefløyte themsleves. Perhaps the fiddlers would have consciously or unconsciously adapted the intonation and melodies to their own instruments.

Reidar Sevåg and the Langeleik[76]

While the seljefløyte, lur, and munnharpe are fixed pitch instruments using a natural overtone scale, the langeleik is a fixed pitch instrument with pitch patterns determined by the instrument builder, and presumably accepted by the players.

Over two hundred langeleiks have been registered from Norway, the earliest dating from 1524. The string length and the tuning of the frets of the different instruments varied widely before the instrument began to be modernized, using a major tuning. Researchers have studied early langeleiks in order to determine tonal systems that could have been used in the older folk music styles. In the 1920's, Erik Eggen had access to ca. 35 instruments for his doctoral research, many of which were unusable either because they were in major tunings or in disrepair. Eggen was convinced that there must be one type of scale that could apply to the Norwegian folk music tradition, and tried to combine elements of both the natural overtone scale and a "decorative" scale, dividing a string into twelve equal parts, that could produce this scale.(Sevåg '93:353-3) Sevåg points out the shortcomings with Eggen's theory but stresses that he had made two important observations, that the 3/4 tones were important in the langeleik tunings and the 1/2 step was almost never used.

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[76] section based on (Sevåg '93)

Reidar Sevåg catalogued and studied langeleiks for many years and had access to over 200 instruments in his search for further understanding of an older folk music tonal system. He writes that ca.100 of the langeleiks were usable in his research, the others being either built in, or converted to, a major tuning or in disrepair. After comparing the remaining ca.100 instruments, he was able to make several observations:

- If a langeleik has a perfect fourth, then the third is lower than major (neutral).
- If there is a major third, the fourth is wider than perfect. (natural fourth)
- The sixth is never minor. (He concludes that this is because it is next to the fifth.)
- The seventh is never major. (He concludes that this is because it is next to the octave.)
- The minor seventh always has a neutral sixth next to it.
- The major sixth always has a neutral seventh next to it.
- It is not unusual to find neutral sixth and seventh next to each other with the interval between them a whole tone, or variant.

He writes in conclusion that the langeleik scale has seven tones in the octave with fixed frame intervals of fifth and octave. The other tones can vary as much as a 1/4 tone but, in relation to each other, neighboring tones are never closer than 3/4 tone.(op.cit.367f.)

Sevåg also notes that the range of the langeleik is often at least two octaves and that the tonic is one octave above the open string. Very often the fret spacing of the two octaves is different, and he concludes that the frets were fixed according to known melodies rather than as a scale pattern that repeats in the second octave.

Perhaps this flexible tonal system seen in the early langeleik could have been an important element in the music of the Middle Ages in Norway. As has been noted, the earliest langeleik, from 1524, could indicate that the langeleik was played in the the Middle Ages in Norway, although one can only speculate how widespread the langeleik could have been. If fiddles were played in the same musical milieu, perhaps they could have used similar interval patterns, at least some of the time. Tuning the three-stringed fiddle in an octave divided in a fifth and fourth, for example, either D-A-D or D-G-D, would allow for the use of the interval patterns described by Sevåg. Tuning a five-string fiddle in an open tuning, such as the first two tunings described by Jerome, would also allow for the various langeleik interval patterns to be used.

As Sevåg has noted, the two octaves of the langeleik are not always tuned with the same interval pattern, indicating that octave

equivalence was not a necessary part of the langeleik's tonal system. The medieval tonal system is also not based on octave equivalence, but on the system of hexachords already described.

Morten Levy and Gorrlaus slåtter/Magnus hymn

Morten Levy discusses one specific aspect of tonality from the Middle Ages in Norway, comparing the gorrlaus slåtter from Setesdal with the Magnus hymn in the Codex Upsalensis C 233.(Levy '74:81)[77]

ill. Magnus hymn, from (Grinde:23)

The manuscript has been dated ca.1280, but Levy believes that the hymn could be older. The Magnus hymn has been the subject of much study and speculation because it is the first known notated example of polyphony from the Nordic region, and because its tonality is difficult to define. Levy finds that the same tonal system can be seen in both the Magnus hymn and the gorrlaus slåtter, and that it can not be understood in terms of traditional tonal description.(op.cit.121)

Levy writes that if the Magnus hymn could be defined according to church mode, it would either be lydian, with a tonal center on F and reciting tone of C, or hypolydian, with a tonal center of F, and a reciting tone of A. The scholars Georg Reiss and Angul Hammerich both agree that the hymn is in the hypodorian mode, although Reiss believes that the frequent use of the tritone F-B indicates a Norwegian origin, while Hammerich believes that it indicates either Norwegian or Icelandic origin.(loc.cit.) Levy points out, however, that the hymn does not fit either the lydian or hypolydian church modes because it cadences on D in the second line, while the church modes have secondary tones of C or A. He adds that such an emphasized use of the tritone would be unusual

[77] The gorrlaus slåtter are a family of three slåtter played in many variants. They are from Setesdal and are played in the tuning fd'a'e", gorrlaus meaning loose bass. The gorrlaus slått, "Norafjells" can be seen in the appendix.

in church music. Levy cites Nils Wallin who asserts that the hymn could not have been used in the usual liturgical context because its construction deviates too much from the chant practice of the time.(loc.cit.) Wallin writes that the tritone is often found in a modified form in Scandinavian folk music. He adds that the B has a leading tone function to C; however, Levy disagrees, noting that C has no function as reciting tone or cadence, and that of the eleven times that B appears, it moves to C only twice. Levy asserts that the Magnus hymn can not be described according to church mode or the known tonal structures of Norwegian folk music and concludes that it is formed in the gorrlaus tonality.

Levy describes the gorrlaus tonality by analyzing a vocal version, or *trall*, of the gorrlaus slått, Norafjells.(op.cit.:117)[78]

He then compares this slåttetrall with the Magnus hymn. He finds that the slåttetrall can be divided into three sections with different melodic contours. He divides the Magnus hymn into three similar sections, following the tonal structure rather than the text. The first section has a melodic motion from the tonal center F and back again. In the case of the hymn, the melodic motives are all above F, moving to A or B, while in the case of the slåttetrall, the motion is above and below, to D or C. The second section shows motion from F upwards to D and back again. The third section has melodic motion below F to D and back.

Levy then turns to the gorrlaus tonality as it is seen in the hardingfeleslåtter, later comparing it to the Magnus hymn. He describes the gorrlaus tonality on the hardingfele as being built of three pitch regions, the lower (nedre) hexachord from f to d', the upper (øvre) hexachord from c' to a'' and the sub-basis region from f to f'.

ill. Levy's hexachords, from (Levy '74:127)

Melodic motives using tones from these pitch regions are organized around tonal stations. The tonal stations of the lower hexachord are f', a'-b', and d''. The tonal stations of the upper hexachord are c'', e''-f'', and a''. The tonal stations of the sub-basis region are d' and f'.

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[78] Levy describes the experience of recording Gro Heddi Brokke in the cafeteria she owned with her husband in Helle, Setesdal, 5.7.68. Transcription of slåttetrall in appendix.

Levy describes six types of tonal arch that can be organized into phrases. Each arch begins on the tonal center, f', travels to one of the six tonal stations, and returns to f'. Levy finds that the musical material in the upper hexachord is, for the most part, derived from that of the lower hexachord, and concludes that the phrases from the lower hexachord and sub-basis region include all the musical material of the gorrlaus slåtter and that the phrases of the upper hexachord elaborate on that material. He notes that Gro Brokke's slåttetrall was limited to the lower hexachord and sub-basis region, and concludes that it represents the original form of the slått. He continues with his analysis, demonstrating parallels between the Magnus hymn and the phrase of gorrlaus hardingfeleslåtter played in the lower hexachord and sub-basis region.

Levy describes the intonation used by Gro Brokke in her vocal version of Norafjells. The tone c'' is consistently neutral (=halvhøye). The tone b' appears twelve times and in five of them, it is slightly lowered, but never as low as b flat. He notes that even though the tone f' is the tonic of the *trall*, it is pitched slightly high, but never as high as f'#. In several of Vidar Lande's transcriptions of gorrlaus slåtter, he notates both the open string, f, and the fingered f', as slightly sharp, or neutral.(Lande: 193-97)[79]

The use of a common tonal system by both the Magnus hymn and the gorrlaus slåtter does not necessarily indicate that they are from the same time period. The gorrlaus slåtter could represent a later genre based on the tonal structure of the medieval Magnus hymn. Levy argues, however, that the Magnus hymn is based on a folk music genre using the gorrlaus tonality. He discusses the historical context of the Magnus hymn and the possibility that it could be older than the Codex, dated ca.1280.

The Magnus hymn describes the life and death of Magnus Erlendsson who was jarl over the Orkney Islands together with his cousin Håkon Pålsson.(Levy '74:85-102)[80] The two cousins found it difficult to rule together, and although they agreed to meet in peace, Håkon killed his cousin Magnus in 1115. Miracles associated with Magnus were described and travelers from the Orkney Islands and from the Shetland Islands visited his grave site. Many people considered him a holy martyr, but it wasn't until 1135 that the bishop Vilhjelm declared him a saint and moved his body first to Kirkwall, and then later to the newly-built Magnus Cathedral. Levy describes the political connection between

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[79] Gorrlaus (Gunnar Liestøl), Norafjells (Grunde Austad), Han som sto oppatt av grava (Eivind O. Hamre), Norafjells (Gunnar Liestøl), Norafjells (Anders Olson Hytta), Norafjells (Olva Krokan)

[80] This section summarizing the historical context of the Magnus hymn and the gorrlaus slåtter is drawn from Levy '74, chapter 8.

Agder in Norway where the ramme slåtter, or gorrlaus slåtter, have their origin and the Orkney Islands in the 12th century. Kale Kolsson was born ca. 1100 in Agder, and his mother, Gunhild, was the sister of Magnus and the daughter of the jarl, Erlend. Kale Kolsson was given the jarl title to the northern half of the Orkney Islands that Magnus had held, and his name was changed to Ragnvald. It proved difficult to claim his right to the jarldom, until Magnus had been declared a saint. Ragnvald used his relationship to Saint Magnus to assert his right to the jarldom of the Orkneys. He promised to build a cathedral in honor of Magnus and to move the bishop's seat there. The bishop Vilhjelm supported this effort, and Håkon's son, the jarl Pål, who was kidnapped, later disappeared, leaving Ragnvald as jarl over the Orkney Islands. Levy finds it most likely that the Magnus hymn was composed at this time when the worship of the new saint Magnus blossomed. He notes that when Ragnvald lived in Agder, he wrote a verse citing his own accomplishments, among them playing the harp and writing songs. Levy finds it possible that Ragnvald could have composed the hymn himself using a melody from the ramme slåtter he knew from Agder. Levy interprets this as a political gesture, the ramme slåtter melody pointing to Ragnvald's birthplace and connecting him to the saint Magnus. The ramme slåtter melody asserts the Norwegian identity of Ragnvald as opposed to the increasing influence of Scotland in the Orkney Islands.(op.cit.:97)

Levy acknowledges that the possibility that the Magnus hymn is older than the gorrlaus slåtter should be considered. The slåtter would then be ornamented versions of an earlier church melody. Levy finds no evidence to support this possibility, however, noting that the Magnus hymn is not part of a larger tradition, but an isolated example not fitting any church music tradition or compositional practice. Based on the unique nature of the Magnus hymn and its historical context, Levy concludes that it is composed using melodies from the ramme slåtter which, therefore, were known in Agder at least as early as the 12th century.(op.cit.:102)

Levy writes that a possible medieval version of the gorrlaus slåtter could have been played on the three-string fiddle tuned in the bottom three tones of the gorrlaus tuning, f-d'-a', and using melodic material from the lower hexachord and sub-basis region.(op.cit.:135)

However, medieval fiddles with more than three strings were common in Europe, and could also have been found in Norway. The fiddle bridge found in Gamlebyen seems to indicate that the five-string fiddle was played in Norway in the Middle Ages. The additional strings could have been tuned either F, D, or A as well, adding resonance to the tuning postulated by Levy for the three-string fiddle. Because there is no medieval reference to a fiddle tuning using four different tones, and because the described tunings emphasize resonance, it seems unlikely

that one of the additional strings on a medieval fiddle would have been tuned to e'. The top e' string could have been first used with the arrival of the violin from Europe.

As noted above, in Morten Levy's recording of Gro Brokke's trall, the f is slightly sharp, and in some of Vidar Lande's gorrlaus transcriptions, the open f string and the fingered f' are often slightly sharp. However, if f functions as the tonic, other intervals should be measured in terms of their relationship to it. If the f is considered to be sharp, that must be in relationship to another tone, in this case d, with the result that d functions as a reference tone as well. Perhaps that could justify tuning at least one of the additional strings of the four or five string medieval fiddle to d in the medieval version of the gorrlaus tunes.

Benjamin Bagby and the Icelandic *Rimur*

In preparation for the first Sequentia Edda production in 1995, Benjamin Bagby listened to hundreds of recordings of *rimur* in the tape archives of the *Stofunn Árna Magnussonar*. He distilled modal motivic material from the *rimur* that he then grouped according to type, represented by different tetrachords consisting of whole tones and semitones. In the reconstruction process that took place for the two Edda projects, the singers used Bagby's *rimur*-derived modes and motivic material to declaim the texts. This *rimur* material was also used in the construction of song accompaniments and instrumental pieces, including several for medieval fiddle.

Because of the close cultural contact between Norway and Iceland in the Middle Ages, one could consider using rímur material in the reconstruction of Norwegian medieval fiddle music.

3.3 Tonality and Intonation in music for medieval fiddle in Norway

In considering what tonalities and tuning systems could have been used in the repertoire of the medieval fiddle in Norway one can turn to a number of different sources of information. The medieval treatises provide detailed information about the Pythagorean scale, and later, its application to the performance of polyphony. If one postulates that polyphonic music could have been sung in the church and that fiddle players could have heard it and experimented with polyphony themselves, then the Pythagorean tuning and the later intonation practices described by Marchetto de Padova could have been applied. However, it seems more likely, due to the lack of any written evidence besides the Magnus hymn, that polyphony was not well established in Norway during the Middle Ages. In this case, other systems of intonation and tonalities could have been used.

Music heard in the church, or during festivities celebrating important local saints could have influenced both vocal and instrumental secular music. Sandvik describes tonal similarities in church music and folk

music, while Grinde refers to secular vocal melodies that could have been derived from chant.

Folk music tonalities that could apply to medieval fiddle include the natural overtone scale as played by the lur, munnharpa, and , with deviations, on the seljefløyte, the tonal system found in the gorrlaus slåtter and the Magnus hymn, tonalities derived from Icelandic *rimur*, and tonalities resulting from the tunings found on early langeleiks.

All of these possiblities remain speculative because of the lack of specific information about what music was played on the medieval fiddle, but they provide starting points for experimentation.[81]

[81] See (Sequentia '99)

4. Form, Construction, and Variability

The literary references to bowed stringed instruments in medieval Norway provide some information about different contexts in which the instruments could have been played, but no clear information about the form and construction of the pieces played. One could turn to other musical genres in order to find elements of construction that could be used in the reconstruction of Norwegian medieval fiddle music. The use of ethnological evidence can be important in this process.

In order to use hardingfele slåtter as possible models for the reconstruction of Norwegian medieval fiddle music, one could examine elements of tune construction and form in both the extant medieval instrumental pieces and the slåtter repertoire. In addition, elements of performance practice, and the relationship between the performer and the musical work are aspects that could be considered. Elements of tune construction and performance practice that are common to both repertoires could be used in the reconstruction process.

4.1 Construction of hardingfele*slåtter*

One of the most striking aspects of the repertoire for hardingfele is the construction of the oldest dance tunes or *bygdedansslåtter*.

Many slåtter are constructed of small motives, that are put together to form phrases of irregular and variable length often called *vek*. These slåtter are typically constructed of from two to five vek that are set together in phrases of uneven length, or asymmetrical construction. Other slåtter are built of relatively long vek that make up symmetrical phrases, often eight measures, that are divided into two four-measure phrases and are said to have symmetrical construction. Symmetrical construction has been associated with vanlig fele and asymmetrical construction with hardingfele, but Bjørn Aksdal points out that there are many exceptions to this generalisation and finds that the instrument played has little meaning for the type of construction used for the slåtter.(Aksdal & Nyhus '93: 136f.) He adds that asymmetrical construction is older than symmetrical, and that the symmetrical forms are dating from the 18th century. The asymmetrical slåtter are most relevant to this re-construction project both because they could contain elements of a much older tradition and because much of the surviving medieval dance music also exhibits asymmetrical construction.

Bygdedansslåtter can be divided into the two categories of duple or triple meter, and are associated with different dance types. The dances in duple meter include the couple dances *gangar* , a walking dance, *rudl*, a turning dance, and *halling*, a men's solo dance. The triple meter dances are the couple dances *springar* and *springleik*, both known as running dances. The triple meter dances vary rythmically, some having three beats that are equal in length, while several others have three

beats of different lengths. These asymmetrical divisions of the meter vary according to geographical region and the local traditions. Although the triple meter dance slåtter sometimes have phrases of differing lengths and offer possibilities for variation, they represent a later dance tradition in Norway, dating from the end of the sixteenth century. For this reconstruction project, the duple meter dance slåtter gangar and halling will be most useful, representing an earlier tradition.

It is not possible to discuss the form and construction of these slåtter without considering questions of identity and variant, and the performance elements of variability and improvisation as well. The slåtter are constructed of melodic motives that form longer phrases, or vek, which can be assembled in varying combinations. The identity of a slått, and the relationship of different slåtter to one another is not always easy to determine. In addition, the performer is often free to vary the form of the slått.

Tellef Kvifte has written about slåtter form in a music theory guidebook for performers of Norwegian traditional music. He describes what he calls “usual hardingfele form”.(Kvifte '00:17) This is slåtter form with more than two vek and with varying numbers of repetitions of each vek. It is not always obvious where the divisions between musical phrases or vek are because adjoining phrases could share some of the same musical motives. Another form is known as “variable form” or “network form”.(op.cit.:23) In this form, the phrases can be repeated and varied, and also set together in differing orders. There are many possible permutations of the musical material in the slått, but the performer may chose to limit himself to a smaller selection of them. As is seen in these definitions of form types, variation is an important element. Kvifte stresses that form is not something inherent and fixed in the slått, but is in the minds of the performer and listener.(op.cit.22 and 26)

Hans-Hinrich Thedens has discussed the question of slåtter identity in his doctoral dissertation, a portrait of hardingfele spelemann Salve Austenå from Tovdal in Aust Agder.(Thedens:110) He finds that from the performer’s perspective, the slått is most often learned as a whole in a relatively fixed form. The melodic material, or vek, used are seen to determine the identity of the slått, and slight variations of this material result in another form or variant of the same slått. The use of additional melodic material, or even the combination of two slåtter could also be seen to result in a variant. Salve Austenå differentiates various forms of the same slått mostly by player rather than by geographical region. Thedens also summarizes other researchers’ approach to the question of slåtter identity and variant. In the collection, “Norsk Folkemusikk, Serie I: Hardingfeleslåtter”, the slåtter are grouped according to tune family. However, the collection does not include an explanation of the

criterion for grouping the tunes, and Thedens turns to other scholars' work in this field.(op.cit.:113)

He discusses Andrea Een's analysis of the variants of the slått "Brynjulf Olson/Haugelåtten" in NF Bd.III, nr. 150. She defines the tune family according to the head motive, or opening eight measures of the slått. This motive is stable, with a direct relationship to a sung tune, and she contrasts this with the following motives that she characterizes as improvisatory. Thedens points out that although some tune families include slåtter with a stable opening motive and varied additional motives, from the performer's perspective, the additional motives could be transmitted as exactly as the opening motive, and that material that once was was improvisatory could become as fixed as the opening motive.(op.cit.:114)

Eivind Groven has grouped slåtter into tune families based on what he terms "relevant motives" as opposed to clichées.(loc.cit.)[82] Thedens finds that this method could function for tune families such as "Brynjulf Olson" that are limited to one region and have a clearly identifiable motive. He adds, however, that the same motives can appear in several slåtter that performers perceive as distinct from one another. It is also possible to find variants of the same slått that do not share the same opening motive, but present the same motive at different points in the slått.

James R. Cowdery has written about tune construction in the context of Irish folk music. He first refers to the Samuel Bayard's theory of "tune family", in which variants of a tune are seen as likely to be descendants from a single ancestor tune.(Cowdery: 496) Cowdery finds that the traditional musician does not search for an original version of a tune, but compares tunes to other tunes and versions of tunes. He presents three principles of tune construction that can be used to describe the relationships between tunes. The "outlining principle" decribes melodic similarity, and tunes that are grouped together according to this principle are similar in melodic contour. They can, however, differ in rhythmic patterns, scale, and cadence, and final tone. The "conjoining principle" describes tunes that have some sections in common, while other sections are different. Cowdery's third principle, the "recombining principle", combines aspects of the first two principles. Tunes are compared according to similar sections and as a whole, but without the requirement of a similar contour.

Cowdery uses his model not only to describe tune variants, but also the composition process:

> "...the actual process of composition is suggested by complex permutations based on melodic pools...certain melodic moves are

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[82] (Thedens) has this information from conversations with Reidar Sevåg (114)

> seen to belong together not as a fixed chain of events, but more as a system of potentialities. These motives can recombine in various ways, expanding or contracting, to make new melodies which still conform to the traditional sound."(loc.cit.)

Although Cowdery is writing about traditional Irish music, he adds that "any sufficiently large and coherent repertoire may be studied according to these principles".(loc.cit.) The slåtter repertoire, with its motivic construction and extensively documented variants, falls under this category.

Morten Levy has written an extensive analysis of the gorrlaus slåtter from Setesdal. He describes the three main tune families of these slåtter according to characteristic rhythmic groupings called constituents that are not associated with melodic material. The rhythmic groupings therefore assume a motivic function.(Thedens:118)[83]

Vidar Lande, in his documentation of the slåtter repertoire from Bygland, has used transcriptions and recordings to determine the path of a slått from one spelemann to another. He finds motives that are used in different players forms of the same slått and attempts to find out who could have learned from whom. He finds that the slåtter repertoire has remained fairly stable. Lande is more interested in the process of how a slått is passed on from one player to the next than in the possibilities of variability available to individual performers.(op.cit.:119f.)

These examples demonstrate some of the different perspectives scholars and performers of hardingfele slåtter have regarding slåtter identity and variant. One can conclude that slåtter form is flexible and includes the possibility of variant according to geographical region or individual player.

4.2 Improvisation and variability in slåtter performance

Improvisation and variability are important elements in the performance of slåtter, and slåtter construction allows for varying degrees of involvement of the individual performer both in shaping the form of the pieces as well as using different techniques to vary the motivic material. The free structure of some slåtter allows the player to determine the order and variation of the motives during the performance. A player can repeat and vary motives, leave some material out, add a motive from another slått and even combine two slåtter. In some cases the slått consists of motivic material that the player is free to set together in any order. Individual performers make use of these possibilities in different ways. Some musicians find what they consider to be their optimal form of a slått repeating it exactly for each performance. Others improvise more freely according to the slått

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[83] This will be discussed further in chapter 6, "Bowing techniques"

played and the performance context. Some slåtter are seen to be more open to variation than others, often those that are constructed of small motives transposed from string to string. The performance context can influence a performer's tendency to improvise as well. A performer who may chose to carefully determine a version of the slått for a concert or competition performance, could improvise more freely when playing for dancing.

Tellef Kvifte has written in detail about the process of improvisation in his annotated master's thesis, "Om variabilitet i fremføring av hardingfeleslåtter-og paradigmer i folkemusikkforskningen".(Kvifte '94) He has analyzed six performances by Salve Austenå of the gangar "Skorsvikjen" in order to find out how the slått can be varied and to develop a model for the variation process. Kvifte presents a hierarchical model of slåtter construction and describes the amount and type of information the performer needs to progress through this model in the performance of a slått. He divides the slått into vek, or *vendsle*, that consist of motives that are divided into partial motives, generally of one beat. In "Skorsvikjen", most of the motives are four beats long, and if consecutive motives share three beats of the same material with one beat of differing material, then the second motive is considered to be a variation of the first. In order to use a hierarchical model, the divisions between the parts need to be clearly defined. Kvifte discusses parsing, or this division, at some length because the division between vek is often unclear. When two consecutive vek share some of the same melodic material, it is often unclear whether the shared material should be interpreted as the end of one vek or the beginning of the next. This ambiguity led Kvifte to explore other models for describing the path of a slått, and in the concluding chapter added to his masters thesis, he presents several diagrams of circuits. (=*kretsløp*) He also analyzes the slått "Den gamle Sordølen" which presents an unusually free form without an established order of the four vek. Kvifte finds that this doesn't fit a hierarchical model and presents a network model as an alternative.

Writing about variation possibilities at the motive level, Kvifte makes two general observations, noting that it is usually small means (=*virkemidler*) that are used, and that if a motive can be varied, there are often several possible variations of that motive that can be used. Kvifte then describes different categories of variation techniques that can be applied to the musical motives(op.cit.:76-9). There can be pitch variation in both the melodic and accompanying materials. Melodic variation is usually small, with one or two tones of a motive traded for neighboring tones. The accompanying tones can be altered in several ways. A unison can be exchanged for a fifth, an upper drone string can be substituted for a lower one, a first finger double stop can be used instead of a drone, different double stops can be used. Another variation

possibility that only occurs twice in the first of the six performances of Skorsvikjen and not at all in the other five, is the omittance of two beats of a motive. In these cases, the four beat motives are condensed to two beats. Variation in the bowing patterns is often used. A slur can be shifted so that a different bowing figure appears, a new bowing pattern can be used for a motive, and a single slur can be added or omitted in order to bow in the right direction for the next motive. Melodic ornaments are most often varied or left out, only rarely being played alike in all repetitions of a motive.

The ambiguity inherent in some vek can lead to personal variation at the level of the vek. A fiddler could convey different interpretations of the vek's possible beginning and end in different performances of the slått. As Kvifte writes, "Operating with for instance two sets of vek limits for a tune gives the fiddler (or listener) the opportunity to view a given motif in two different ways; it will be possible to delimit units precisely, which is a must for the coding processes, without having to resolve the ambiguity inherent in the music. The phenomenon of personal variability gives the fiddler opportunities to create different "metacommunicative riddles" for his listeners every time he plays a tune."(Kvifte '81:232)

Hans-Hinrich Thedens has studied Salve Austenå's use of variability in much of his repertoire. Austenå is a player who often makes use of variability in his playing, depending on the type of slått and the musical context. Although, as Thedens writes, Austenå found, when listening to various recordings of his own performances of the same slått, that the differences between the recordings and his current playing style were negligible, at the same time, he acknowledged that the playing style in Tovdal was always flexible and that the spelemenn made no effort to play a slått consistently the same.(Thedens:206f.)

Thedens points out that the type of slått being played and the playing situation together determine the amount of flexibility found in the playing style. The slått "Skorsvikjen" is made up of melodic motives that are first repeated and varied and then transposed from one pair of strings to another. Although it is possible to play a relatively fixed and symetrical form of this slått, Austenå has played varied forms and has also at different times, incorporated two different endings he learned later from the spelemenn Dreng Ose and Torleiv Bjørgum. (op.cit.209);(Kvifte '94)

Thedens cites the slått "Fanten" as an example of a fixed form determined by context, in this case, teaching. Austenå chose one form to teach to nearly all his students, and that form became so fixed for

him that even in the context of playing for dance, he played exactly that form.(Thedens:210)[84]

According to Austenå, there are other slåtter that are almost impossible to play together with another spelemann because it is so difficult to determine a fixed form. “Vårnauæ” is a slått with a basic form, the melodic motives being played first on the middle pair of strings, then the upper strings, and finally the lower pair, but, in addition, there are many opportunities for variation.

Austenå refers to “*taktslåtter*” or slåtter built of small one or two-beat motives, and slåtter often played for dance as being the slåtter that a spelemann could play differently each time. “Dolkaren” is an example of a taktslått constructed of two basic motives that can be repeated, varied, and joined together in many different combinations.[85] The transcription is not directly from a performance or recording, but a theoretical possible form. In Austenå’s opinion, there was no need for Thedens to write this slått out once he knew the melodic motives. In addition to providing a possible form for “Dolkaren” in his collection of transcriptions, Thedens provides a list of melodic motives in his analysis that could be used by a player to construct many different performances of the slått.(op.cit.214)

According to Austenå, playing for dance is the musical context that provides the most opportunity for variation. The spelemann can repeat and vary musical motives that are especially appropriate for certain dance movements before moving on to other musical material.(op.cit.:212) While playing taktslåtter, such as “Dolkaren”, the spelemann can be drawn deeply into the rhythm, or beat, of the slått and the minimal melodic material can be endlessly varied and repeated, maintaining an element of tension and connection between the spelemann and the dancers.(op.cit.:213)

[84] A transcription can be seen in the appendix.

[85] A transcription can be seen in the appendix.

4.3 Medieval Instrumental Music

Form

In order to use hardingfele slåtter as possible models for the reconstruction of Norwegian medieval fiddle music, one could search for elements common to both the slåtter repertoire and the extant medieval instrumental pieces. The characteristics of slåtter that have been discussed include: construction based on small motives that can function as building blocks of differing lengths, form that is not necessarily fixed, the existence of variants according to region, time period, or individual players, and the possibility of personal variability and improvisation. If it is possible to find examples of these characteristics in the extant medieval instrumental music, or in other surviving medieval music, then they could be interpreted as appropriate for the reconstruction of a lost medieval fiddle tradition from Norway.

Not surprisingly, very few medieval instrumental pieces have survived in written form. Although it is clear through countless pictures, sculptures, and literary references that instruments were played in many different settings, instrumental music was an oral tradition that was only rarely documented.

Medieval dance pieces

Timothy McGee has compiled a collection of forty-seven medieval instrumental dances found in eleven manuscript sources from before ca.1430. Although there is extensive iconographical evidence of dance in the Middle Ages, the only theoretical statements about dance are in Johannes de Grocheio's treatise *De Musica* where he describes dances and dance music popular in Paris in the 14th century.

As McGee writes, the *estampie* is the only dance described by Grocheio that is found in the extant manuscripts. Eight dances called *estampies* are in the 13th century French manuscript, Paris BN fonds français 844, and eight dances called *istanpitta* are in the late 14th century Italian manuscript London, BL Additional 29987.

Grocheio has written two passages refering to the estampie:

> The parts of a ductia and stantipes are commonly called *puncta*. A *punctum* is a systematic joining together of concords making harmony in ascending and descending, having two sections alike in their beginning, differing in their end, which are usually called the close and open.[86]

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[86] "Partes autem ductiae et stantipedis puncta communiter dicuntur. Punctus autem est ordinata aggregatio concordantiarum harmoniam facientium ascendendo et descendendo, duas habens partes in principio similes, in fine differentes, quae clausum

> An estampie is an untexted piece, having a complicated succession of concords, determined by *puncta*...Because of its complicated nature, it makes the soul of the performer and listener pay close attention...(the estampie form) is determined by *puncta* since it is lacking in that percussive measure which is in ductia, and (the form) is recognized (by only) the differences between its *puncta.*[87]

McGee concludes that the estampie described by Grocheio has several double puncta that include a common refrain with open and close endings, and that the puncta are of different lengths.(McGee '89:8) He finds that the sixteen estampies all fit this description, even though the Italian istanpittas are markedly different from the French estampies. The French dances are in triple meter and have relatively short puncta, from eight to twenty units of measure. While some puncta are constructed of two four-measure phrases, many phrases are of varied length, similar to the vek of asymmetrical slåtter. The Italian istanpittas are in duple meter and have puncta widely varying in length from twenty to over one hundred units of measure.(McGee '89:9) While the French estampies are simply numbered one through eight, the Italian istanpittas all have titles. Several scholars have discussed the similarites between these estampies and certain Middle Eastern genres.

Italian Istampitta

Timothy McGee writes that Ewald Jammers, in his analysis of "Ghaetta" and "Isabella" finds that the estampies can be reduced to embellishments of a basic melody.(op.cit.:23) McGee adds that both he and Kenneth Zuckerman noted that the basic melodies resulting from this reduction produce scale patterns related to Eastern melodic traditions. Analyzing "Ghaetta", McGee finds that different sections are embellishments of a particular tetrachord, and he concludes that "the entire dance consists of melodic-rhythmic elaborations of the scale from f# to high f, with a final on g and a dominant on d."(op.cit.:24) McGee refers to Jacques Handschin who wrote in 1929 about the similiarity between the estampies and the traditional eastern Mediterranean composition, *pesrev,* and concludes that "the Italian estampies conform more to the Turkish *makam* system and Arabic theoretical practices than to the techniques of Western Europe."(loc.cit)

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et apertum communiter appellantur" (from Rohloff , Ernst: Die Quellenhandschriften zum Musiktraktat des Johannes de Grocheio, Leipzig 1972:136, translated by McGee, based on Albert Seay, *Johannes De Grocheo Concerning Music* (Colorado Springs: Colorado College of Music Press, 1973:20).

[87] "Stantipes vero est sonus illitteratus, habens difficilem concordantiarum discretionem, per puncta determinatus...Propter enim eius difficultatem facit animum facientis circa eam stare et etiam animum advertentis...Dico etiam per puncta determinatus, eo quod percussione, quae est in ductia, caret et solum punctorum distinctione cognoscitur" (loc.cit.).

Writing about the Eastern influence on medieval European music, Shai Burstyn finds that the phrase structure, melodic style, and use of melodic sequences in the estampies is very different from other 14th century music, and he concludes that these pieces "can in no way be explained as indigenous European music."(Burstyn:138) Burstyn compares the embellished melodic sequences of the estampies with almost identical figures used in the performance of taqsim improvisations, and also finds long, asymmetrical phrases to be common to both genres. He thinks it likely that the Italian scribe notating these pieces could have modified both the form and some of the pitches of them to fit the estampie form more exactly. He writes that "As to the orality of musical contents, the fact that medieval monophony was written down does not necessarily make it a product of literate culture. Rather, numerous written-out chants and secular songs have the earmark of documented performances."(loc.cit.) He seems to imply, however, that the estampies do not fall under the category of documented performances, but that the musical material was performed in a different form than was notated. He finds it unlikely that the estampies are western European imitations of Eastern models, but views these pieces as examples of 14th century musical acculturation involving either the transfer of entire pieces or of important stylistic elements.(op.cit.:139) If the scribe has altered the form of the performed piece to fit the estampie scheme, one must speculate what the original form of the performance could have been. Burstyn describes some aspects of taqsim performance, emphasizig that it is not merely an unstructured free improvisation, but a form with defined segments relating to tones from the maqam on which the taqsim is based. He writes that the performer usually presents the segments "in a gradually ascending order, reaches a peak, and descends to the main tonal center"(op.cit.:142) This structure is significantly different from the estampie form with its repeating puncta. It is unclear why a scribe would choose to notate an Eastern instrumental piece as an estampie and what purpose the notation would serve.

Istampitta (Estampie) choreography

Joan Rimmer, in her review of McGee's book, "Medieval Instrumental Dances", has commented on his explanatory text and transcriptions from the perspective of a dance historian. She makes no reference to the theories of Eastern influence regarding the estampies, but discusses them in terms of choreography. The estampie is a dance for a single couple or several couples in sequence, and earlier, a virtuosic solo man's dance.(Rimmer '91:64) The dancers move forwards towards a personage or fixed point, and then in reverse back to the starting point. She notes that this choreography exactly fits the open and close puncta, and that the estampie form presents a plan over time and space for the dancers. The constant pre-cadential formula functions as a signal for

the dancers to adjust their steps to the available space before coming to the cadential turning point. She adds that the mixed metres and varying choreometric patterns make the estampie a difficult social dance needing personal concentration.(loc.cit.) Her view seems to accept the notated dances as a record of actual performance, inseparable from the dance choreography.

"Ghaetta" variation possibilities[88]

A closer look at the Istampitta titled "Ghaetta" could provide additional information, not only about its construction, but perhaps about performance possibilities. "Ghaetta" consists of four large sections, labeled prima, secunda, terza, and quarto pars. Timothy McGee provides a diagram of the form of this dance:

Verse	Endings
ABC	x/y
DEC	x/y
FEC	x/y
GBC	x/y

He writes, "In this dance each new double punctum (pars) begins with new material, continues with a second section of either new or old material, and concludes with a refrain and open and close endings."(McGee:9)

Looking more closely at the notation of this dance brings up questions about the structure and performance possibilities. The sections of new material at the beginning of each punctum are of widely differing lengths. A and G are long, 26 beats and 47 beats, while the second section they have in common, B is short, 7 beats.[89] D and F are short, each 5 beats long, while the second section they have in common, E is long, 31 beats. These two pairs of puncta function differently from one another. A and G provide significant amounts of original musical material while B functions as a link to the common refrain C. D and F provide only short bits of musical material that function as short first and second beginnings, something that is impossible to notate in modern conventional notation. The second section, E, contains the most original musical material.

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[88] See facsimile in Appendix

[89] In the transcription, a beat is equivalent to a dotted half-note until beat 32 where the meter shifts and the beat is a half-note.

Perhaps the musical structure and the nature of some of the musical motives could give a glimpse of the performance possibilities. Although it is most likely that the endings, x/y, were not varied in length in performance, it seems possible that the other sections could have been played differently by different musicians, or by the same musician on different occasions. In the quarto pars, after G, section B begins at beat 27, but it could just as well start at 23 or 31 in order to provide a transition of different possible lengths to C. There are several small motives that could have been repeated in performance, for instance,

beats 23-26 or 24-26, 32-33. It is also conceivable that a variant of this dance could have omitted some material entirely, for instance, beats 23-30 which function as an elaboration of the arrival on Bb. Perhaps more B material could have been played after G than after A, so that near the end of the dance one would hear an elaboration on a motive that one had heard at the beginning.

Sections D,E. and F invite speculation regarding performance as well. Since D and F are so short and function as first and second beginnings, one of the sections could have been left out entirely without losing much musical material. There could also be more variety between the secunda and terza pars if the E material were varied between the two sections. It would be possible to skip beats 76-94, omitting the high phrases of E in either the secunda or terza pars. There are several small motives elaborating a note that could either be repeated and extended or omitted, for example, beat 71, beats 79-80, 95-96.

There is also a short transition phrase found in both E and G, beats 75-83 and beats 124-132. It would be possible to continue from beat 133 after playing 75-83, or to continue from beat 84 after playing 124-132.

All of these variations could be incorporated into a performance of "Ghaetta" without disturbing the cadential formula used by the dancers as a signal, as described by Joan Rimmer. The freedom to vary and repeat musical material would make it possible for the musicians to interact with the dancers during a performance. The musicians could extend phrases during certain dance figures and, in response to the dancer's movements, determine when to play the cadential figures signaling the end of a section of the dance. In this case, there could be flexibility in both the musical and dance performance resulting in the necessity of communication between the dancer and musician. In conclusion, it is possible that many variants of "Ghaetta" are hidden within this one notated version. Unfortunately there are no other manuscript copies of these dances and no written descriptions that can give insights into the performance of them. Many scholars have written about the Arabic or Eastern influences on these dances and these ideas have shaped modern performance of them. They are often performed as ensemble pieces using principles of heterophony found in contemporary performance of Eastern music and are seen to demonstrate an accomplished musical memory because they are difficult to learn and remember exactly as they are written in the source. But when "Ghaetta" is performed as a solo piece, the musician has an opportunity to spontaneously vary the structure and create a new form. The title itself means "bagpipe" which conjures up an image of a solo bagpipe player, or perhaps a solo fiddle with bordun strings.

The istampitta, "Parlamento", is described by Timothy McGee as an estampie with two sets of open and closed endings.[90]

Verse	Endings
AB	x/y
CB	x/y
DB	x/y
EF	s/t
GF	s/t

The melodic material of sections A,B,C,and D all use B flat and have D, F, and C as important reference tones. The endings x/y are in the middle/low range as well; x ends on D and y ends on C.

The melodic material of E.F,and G is very different. It is in a higher range, and after a short transition phrase at the beginning of E, B natural is used. The beginnings of the quarta and quinta pars and the two endings, s and t, all begin on a long C. The open ending, s, ends on C, while the closed ending, t, ends on F. This is clearly a different modal world than that of the prima, secunda, and terza pars.

If one asks why this istampitta should have two such very different sections, one answer might be that it is actually made of fragments of two dances. For some reason, the two dances were combined into one in the manuscript. Is that because it was performed that way and the scribe is transcribing a performance he heard, or did the scribe remember fragments of two separate dances and set them together in order to have an istampitta long enough to seem complete?

In the case of the written medieval instrumental dance repertoire, one can only speculate about the possiblity of variants. Each dance is represented by only one source, so it is impossible to compare different variants of the same piece. The structure of the pieces, as well as some performance possibilities suggested by McGee, imply the possibility of both variant form and of variability in performance. The estampie form of several puncta with differing melodic material followed by a common refrain and open and close endings, allows for the use of additional puncta to create a longer variant, or the subtraction of some puncta for a shorter variant. The puncta could also be played in a different order, resulting in another variant.

Song from Piæ Cantiones

Laus virginis, often refered to as a sequence, is found in the Scandinavian song collection, *Piæ Cantiones*, printed in 1582.[91]

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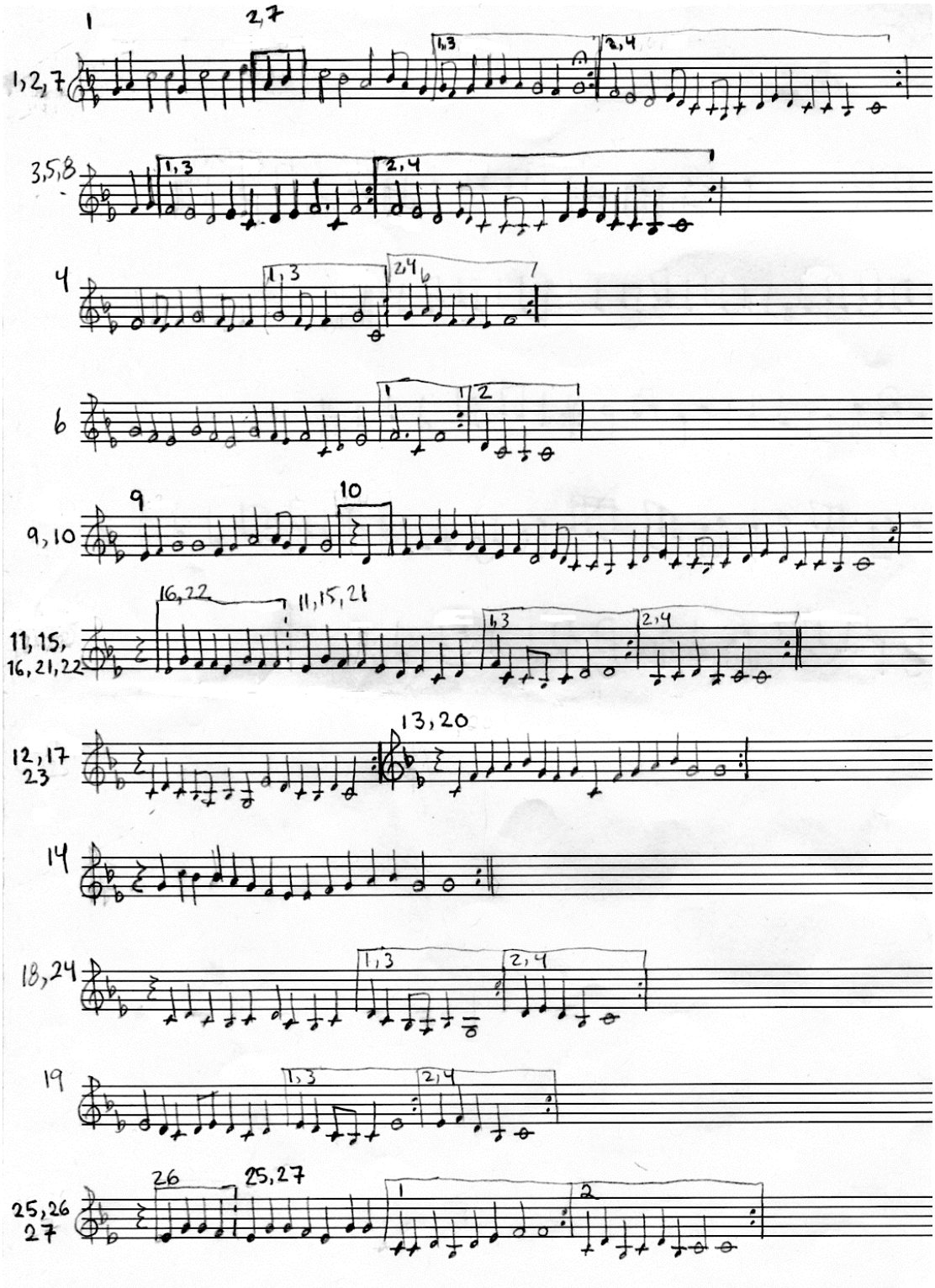
[90] See facsimile in Appendix



The notation of *Laus virginis* in the Piæ Cantiones includes both text and music, and therefore must present the piece in a written-out form, from beginning to end. In the printed edition from 1582, phrases 1-5, 7-13 are written as pairs of texts. Phrases 6, 14 ,15 and 17 are written as a single line of text followed by a pair of texts, and phrase 18 is written

[91] See facsimile in Appendix

as a single line of text. Phrases 6, 14, 15, and 17 can be divided into smaller units which brings greater clarity to the melodic structure as well as the text. An examination of the melodic structure of the resulting 27 phrases reveals a complicated construction with much repeated and slightly altered melodic material, not unlike what is found in the structure of some hardingfele slåtter. The melodic material of *Laus virginis* can be divided into two large sections, phrases 1-8 and 11-27, which are joined together by phrases 9 and 10 functioning as transitional material between the two sections. Examining phrases 1-8, one finds that much of the same melodic material appears in different pharases. Phrase one begins the sequence with extroverted melodic motives emphasizing the fourth a'-d' and reaching up to e', the highest note used in the entire piece. Although phrase one is written out completely in the 1582 printed edition, to be sung twice with different text, melodically it consists of a short phrase with first and second endings. Phrase two has a similar structure, and the opening section is almost identical to phrase one, replacing the first eight notes with two different tones. The first and second endings are the same as those for phrase one.

Phrase three presents unique material in the first half, and then continues with the same second ending found in phrase one and two. Phrases one, two and three, are therefore closely related melodically. Phrase four introduces new material, also with written out first and second endings. Phrase five is melodically identical with phrase three. Phrase six presents new material, also with written out first and second endings, but this phrase is only sung once. Phrase seven repeats the melodic material of phrase two, and phrase eight repeats the melodic material of phrase three. This first large section, phrases one to eight, presents much of the same musical material in different phrases. Phrases two and seven are melodically identical, and phrases three, five, and eight are melodically identical. In addition, phrases one, two, three, five, seven, and eight all share the same second ending which therefore is heard twelve times. Only phrases four and six present completely different material. After this first large section, phrases nine and ten function as a transition to the second large section. Phrases nine and ten are through-composed without internal first and second endings as seen in the first eight phrases. The two phrases are closely related having differing opening motives but the same following long melodic segment.

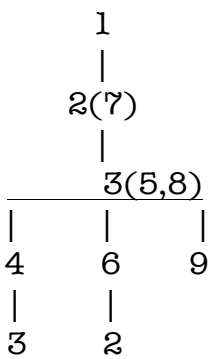
The second large section of *Laus virginis*, phrases 11 to 27, show much of the same type of repetition and variation as seen in the first section, phrases 1 to 8. Phrase 11 is short phrase with first and second endings, phrase 12 is short phrase that is through-composed and introduces the lowest tessitura of the piece *Laus virginis*. Phrase 13 is very short with internal first and second endings. Phrase 14 is through-composed and is

the only phrase to return to the opening motive of the fourth a'-d' first seen in phrase one. The segment phrases 11-14, therefore present four phrases each with different melodic material. Phrase 15 is melodically identical to phrase 11 and phrase 16 is almost identical to 11 and 15, but includes a repetition of the first melodic motive. Phrase 17 is identical to phrase 12, and phrase 18 presents new material, remaining in the same low tessitura. Phrase 19 presents new material, also with first and second endings, that only appears once. Phrase 20 is identical with phrase 13, and phrases 21 to 24 are identical with phrases 15-18. Phrases 25 to 27 are melodically similar to 15 and 16. Phrase 26 includes a repetition of the first melodic motive in phrase 25, and phrase 27 is identical with phrase 25.

The structure of *Laus virginis* has much in common with the structure of some hardingfele slåtter. The first section, phrases 1-8, is constructed of much less melodic material than is evident in conventional notation. The first three phrases, in addition to each having first and second endings, are actually closely related, all sharing the same second ending. Phrases one and two also share the same internal melodic material and first ending, and the opening motives can be interpreted as first and second beginnings of the same following phrase. Phrase three exhibits a little more independence with its own first ending, but this also functions as a third beginning to the original opening phrase, and ends with the common second ending.

The use of varying beginning material with a common ending is often found in hardingfele slåtter and because, with the conventional notational system, it is possible to notate first and second endings, but not first and second beginnings, one is obliged to write out phrases without indicating this relationship.

The repetition pattern of the first eight phrases of *Laus virginis* can be illustrated by a diagram:



This song, *Laus virginis*, is not found in any other source, so it is not possible to examine other possible variants. This type of phrase structure, however, allows for both regional and historical variants, as well as for individual variability. In an instrumental version, after playing the first three phrases, the performer is free to choose phrase 4,

6, or 9. Phrase 4 leads back to phrase 3, and phrase 6 leads back to 2 followed by 3. This results in several different paths that can be taken before moving on to the beginning of the transitional section, phrase 9. The notated path is 1-2-3-4-5(3)-6-7(2)-8(3,)-9. It would also be possible to add extra repetitions, for example, 1-2-3-4-3-4-3-6-2-3-9, or 1-2-3-4-3-6-2-3-6-2-3-4-3-9. Material could also be left out, as in 1-2-3-4-3-9, or 1-2-3-6-2-3-9, or even 1-2-3-9.

If this piece were to be performed instrumentally, it could be repeated using a different form for each iteration.

Two citations from medieval French poetry list types of music played on the medieval fiddle. In the *Roman de Brut* of Wace is written,

> There are many jongleurs,
> singers and instrumentalists at the court;
> You many hear chansons, *rotruenges* and new melodies,
> *viella* pieces, tuneful lays,
> lays for *vielle*, rotes, harps and flutes.[92]

There is a similar description of music in the royal court in the *Roman de la Violette*.

> After the meal, when all were washed
> and the tables cleared,
> They led away through the palace.
> The jongleurs fiddled lays, melodies,
> tunes and *conductus*.[93]

Whelden notes that, "The lay (or lai), which the author says is performed on instruments, may likely refer to the vocal and poetic genre noted for its extreme length and formal irregularity." This

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[92] *Le Roman de Brut de Wace*, ed. I. Arnold (*Société des anciens textes français*, 1938: 553f), II.10543-10549. Quoted in Ian Parker, "The Performance of troubadour and trouvère songs." *Early Music*, vol.5, no.2 (1977:185-207). Quoted in (Whelden '93:111). The italics are from the translator.
Mult out a la curt jongleurs,
Chanteurs, esttumenteurs:
Mult peussiez oir chancuns,
Rotruenges e novels suns,
Vieleures, lais de notes
Lais de vieles, lais de rotes,
Lais de harpes, lais de frestels.

[93] *Le Roman de la Violette ou de Gerat de Montreuill*, ed. D.L. Buffim (*Société des anciens textes français*, 1928:59), II 3086-3090. Cited in I. Parker, ibid. Quoted in Whelden 1993:111 The italics are from the translator.
Apries mangier ont tout lavè,
Puis se sont des tables levè,
Deduisant vont par le palais.
jougleour vielent lais
Et sons et notes et conduis.

description would apply to *Laus virginis*, although it is not labelled according to genre in the Piæ Cantiones.

Although the construction of these works allows for the kind of variation and improvisation documented in the hardingfele repertoire, one can't be certain just by examing these medieval works, that the same type of variation also took place. Very little information about performance practice can be found in medieval sources. As Christopher Page writes, "In the Middle Ages trained singers regarded performance as the naked body of musical art: as a natural thing, but a shameful one, which writers on *musica* should discreetly ignore. Far better for writers on music to dwell upon the measurement of intervals, for example, or upon the proportions of mensural notation, for these were subjects which allowed them to hold their heads high in the company of mathematicians and astronomers whom they claimed as fellows."[94]

Because it is difficult to find clear indications of medieval performance practice in the musical treatises and literary references to music-making, it can be helpful to turn to writings outside the field of music. It could be possible to find some indication of medieval musical performance practice by turning to medieval writings about rhetoric.[95] Some of the variation possiblities seen in hardingfele performance can be described in terms of rhetorical techniques documented in the Middle Ages.

Rhetoric and grammar are subjects within the liberal arts taught in the universities of the Middle Ages, and together they provided a method of acheiving successful, convincing communication. Rhetorical methods were used in order to guide effective communication in the creative arts, especially in the composition of poetry and letters and were also applied to other fields including theater and landscape design. Thomas Binkley finds it likely that the art of rhetoric played an important role in musical composition and performance as well. He notes that although there were treatises of musical theory written in the Middle Ages, there were no treatises dealing with music practice. The practical aspects of music, composition and performance, could only be learned through the teachings of rhetoric and imitation of models.(Binkley '90:113-5 entire paragraph)

Because some of the methods of variation seen in Norwegian traditional music reflect aspects of medieval aesthetic as documented in the rhetoric treatises, these methods could also perhaps apply to medieval musical performance practice in Norway, and possibly to other documented medieval instrumental music as well.

The *Poetria Nova* of Geoffrey of Vinsauf is a treatise intended for the poet-in-training discussing aspects of verbal invention, arrangement,

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[94] Christopher Page, in: (Brown, Howard Mayer and Stanley Sadie '89).79

[95] This was first suggested to me by Thomas Binkley when I was his student.

expression or style, memory, and delivery.(Vinsauf:9)[96] The treatise was most likely written ca. 1200 with later revisions, and it uses other rhetorical manuals such as those by Cicero and Horace, as models.(op.cit.:10) Geoffrey writes that "Poets...are formed through a happy collaboration of three elements: *ars*—a thorough knowledge of the rules; *imitatio*—the study and imitation of great writers; and *usus*—diligent practice."(op.cit.:9) The same could be said of musicians as well, that they must know the rules of composition and performance practice, study and imitate other composers and performers, and practice diligently. In the context of Norwegian traditional music, the musician-in-training has learned, until fairly recently, almost exclusively by oral transmission. The *ars* of playing the hardingfele has been taught mostly by *imitatio*, rules being learned or inferred in the process of playing. Each experienced player could have somewhat individual rules that he passes on to his students.

In the case of medieval dance music, it is very difficult to discuss the *ars* of a given piece when there are widely differing views of what genre the piece represents. For "ghaetta", for instance, Shai Burstyn's rules of performance could include use of free rhythm, a solo performer, or soloist with accompaniment, and intonation based on Eastern models. Joan Rimmer considers "ghaetta" to be a dance piece with a specific type of choreography. She writes that the dancers use cadential clues to adjust their steps to the phrase, which seems to imply that the musical phrases are fixed. She doesn't mention the possiblity of the performer adjusting the phrase length to fit the dancer's steps. Rimmer's rules of performance for "ghaetta" could include a fixed tempo and exact repetition of phrases.

Geoffrey begins by discussing the order of the poetic material, contrasting natural order with artistic order.

> "The material's order may follow two possible courses;at one time it advances along the pathway of art, at another it travels the smooth road of nature. Nature's smooth road points the way when "things" and "words" follow the same sequence, and the order of discourse does not depart from the order of occurence. The poem travels the pathway of art if a more effective order presents first what was later in time, and defers the appearance of what was actually earlier...Deft artistry inverts things in such a way that it does not pervert them; in transposing, it disposes the material to better effect."(op.cit.:18f.)

Geoffrey describes eight types of artistic order- beginning at the middle or end of the story, stating a proverb from the beginning, middle, or end

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[96] The Latin treatise, Poetria Nova, was translated by. Margaret F Nims. All citations from her translation.

of the story, or citing an exemplum from the beginning, middle or end of the story.

Telling a story from beginning to end would be to follow the natural order. Playing a slått from beginning to end and repeating the slått with the same motives in the same order corresponds to the natural order. However, some slåtter illustrate aspects of the artistic order in their beginnings and endings.

"Sordølen", as played by Salve Austenå, can begin with two different vek.[97] When the slått begins at line two, then it is played in the natural order, the following repetitions of the slått beginning there as well. When the slått begins with line one, then it could be seen to be following an artistic order, the first line functioning as an introduction. This could be considered to be an exemplum from the middle of the slått, as this vek appears in line four. This vek does not appear again as the opening line of the slått, the repetitions beginning with the vek of line two.

[97] The following examples of Austenå's versions of these tunes are taken from vol. 2 of (Thedens) The complete slåtter can be found in the appendix.

“Skuldalsbrura ette’ Borjæn”, as played by Salve Austenå, begins with a short motive that serves as an introduction and does not appear later in the slått. Repetitions of the slått begin after this motive so that it is only played as the opening figure. It is rhythmically similar to motives in the beginning of the slått, measures 3 and 7, and could be interpreted according to Geoffrey’s categories, as a proverb drawn from the beginning. Therefore, this slått follows an artistic, rather than natural, order.

Austenå’s form of “Kjempe-Jo” has two possible beginnings. It can begin with line one, starting with a short motive of three beats establishing G as the tonal center, and then continuing with the first two lines reinforcing the tonality on G. When the slått is repeated, the first three beats are omitted. However, Austenå sometimes begins the slått with the *vek* beginning in line three on the upper two strings. In this case, according to Geoffrey’s descriptions, he is using an artistic order beginning in the middle. Rather than providing an opening that firmly establishes G tonality on the lower strings, beginning in the middle, the first interval heard is a major seventh. The slått travels from the upper strings, through the middle strings, finally reaching the lower strings and the octave G in the ninth line which gives a feeling of tonal stability. The repetition of the slått includes the opening two lines emphasizing G tonality.

Although Geoffrey doesn't discuss where to end the story, it is interesting to note that there are slåtter without clearly defined ending points. "Bestelanden" is an example of this and the transcription gives no indication where the slått should end. Salve Austenå's performances of this slått are so varied, that it is not possible to define the ending. In this case, he is using the motivic material to shape the path and outcome of the musical text. The beginning is consistent, but the ending is not.

After discussing the various possibilities for beginning a poem and for ordering the material, Geoffrey turns to the rhetorical techniques in the poem's development. These fall under the two large categories of amplification and abbreviation. As Geoffrey explains, the poet may chose his path through the poetic material.

> "The way continues along two routes: there will be either a wide path or a narrow, either a river or a brook. You may advance at a leisurely pace or leap swiftly ahead...Reflect upon the precepts below; they will guide your pen and teach the essentials for each path. The material to be moulded, like the moulding of wax, is at first hard to the touch. If intense concentration enkindle native ability, the material is soon made pliant by the mind's fire, and submits to the hand in whatever way it requires, malleable to any form. The hand of the mind controls it, either to amplify or curtail."(op.cit.: 23f.)

This description applies to the performance of some slåtter as well, the player having the possibility to chose the pace through the melodic material. He can chose to modify the pace within each repetition of the slått, moving quickly through some motivic material and spending more time varying and repeating other motives.

Geoffrey describes eight techniques for amplifying the poetic material, not all of which have clear musical counterparts. They are repetition,

periphrasis, comparison, apostrophe, personification, digression, description, and opposition.

Geoffrey considers *repetition* to be the first step in creating an amplified form, writing,

> "If you chose an amplified form, proceed first of all by this step: although the meaning is one, let it not come content with one set of apparel. Let it vary its robes and assume different raiment. Let it take up again in other words what has already been said; let it reiterate, in a number of clauses, a single thought. Let one and the same thing be concealed under multiple forms- be varied and yet the same." (op.cit.:24)

Geoffrey's description of repetition is itself a poetic example of this technique. Repetition is an integral part of slåtter performance, small motives very often being repeated at least once. Geoffrey's definition of repetition includes not only exact repetition, but also variation in the repetition, as is clear when he writes, "varied and yet the same".(loc.cit) This type of repetition is found in slåtter performance when motives are repeated with different bowing patterns, different ornamentation, or small melodic alterations.

In the slått "Ola Monen", the motive beginning in the second ending in the second line is repeated once and then the bowings are varied when the motive is played again starting in the second ending in the third line.

The opening of the slått “Dolkaren” illustrates extensive use of repetition of a short motive with slight melodic variations. The almost hypnotic repetitions serve to emphasize the opening tonal center on E. Much of the slått is made of passages where adjacent fifths alternate back and forth. Repetition of the short motives on one fifth, either EB or BF#, is used to establish the tonal center before the motive is shifted to the fifth a tone lower.

The second technique of amplification Geoffrey discusses is *periphrasis*. He writes,

> “Since a word, a short sound, passes swiftly through the ears, a step onward is taken when an expression made up of a long and leisurely sequence of sounds is substituted for a word. In order to amplify the poem, avoid calling things by their names; use other designations for them. Do not unveil the thing fully but suggest it by hints. Do not let your words move straight onward through the subject, but, circling it, take a long and winding path around what you were going to say briefly. Retard the tempo by thus increasing the number of words.”(op.cit.:24)

The opening measures of “Dolkaren” described above under the technique of repetition could perhaps fit the description of periphrasis as well. The small motives repeated and varied again and again function as a lengthy statement of the tonal center E.

Comparison is another technique of amplification discussed by Geoffrey, and he writes that it can be found in two forms, overt or hidden. “A comparison which is made overtly presents a resemblance which signs explicitly point out. These signs are three: the words *more, less, equally.*) (op.cit.:25) In the musical context, the comparison words could be *higher, lower*. This would correspond to the amplification technique of playing motives on higher and lower pairs of strings. Although some slåtter can be played entirely on two strings, many make use of this comparison technique to expand the range and length

of the slått. In “Frøyrakjen” (also called “Gravbakken”) as played by Salve Austenå, the vek at the beginning of the second line of the excerpt is repeated a fifth higher starting at the beginning of the fourth line.

The ending of the slått “Den kaldsteikte” illustrates amplification through both comparison and varied repetition. The motive beginning in the second measure of line one is repeated a fifth higher, illustrating comparison. It is repeated at the end with different bow strokes illustrating Geoffrey’s varied repetition.

Another rhetorical technique of amplification that can also be found in musical performance practice is *digression*. Geoffrey describes this technique in terms of poetic material.

> "If it is desirable to amplify the treatise yet more fully, go outside the bounds of the subject and withdraw from it a little; let the pen digress, but not so widely that it will be difficult to find the way back. This technique demands a talent marked by restraint, lest the bypath be longer than decorum allows. A kind of digression is made when I turn aside from the material at hand, bringing in first what is actually remote and altering the natural order. For sometimes, as I advance along the way, I leave the middle of the road, and with a kind of leap I fly off to the side, as it were; then I return to the point whence I had digressed.") (op.cit.:35)

Digression is illustrated in Salve Austenå's form of the slått "Fanten", a popular dance tune in both Setesdal and Tovdal. Austenå finds it important to note that no other spelemann includes the vek beginning on a' in the last measure of the first line of this excerpt. He considers this to be additional material not essential to the identity of the slått, but a special feature of the version he learned from his father.

Vidar Lande has transcribed versions of "Fanten" played by five spelemenn from Bygland. Two versions of "Fanten" which don't include Austenå's extra vek are quite short, transcribed in four lines and consisting of two contrasting motives and a cadence figure. In two other versions, played by Gunnar Liestøl and Tor O. Sandnes, motivic material appears that is similar to the Salve's additional vek.(Lande '83: 335-8) In Austenå's form, the vek begins after the cadence figure of two quarter notes, and its end returns to the previous vek. It is additional material that could be left out without altering the identity of the slått, but which functions as a digression, amplifying the usual "Fanten" melodic material.

"Dolkaren" also includes vek that could be interpreted as a digression. The last line of the transcription is a motive that Austenå heard from Torleiv Bjørgum and added to his own variant. The contour of this motive is very different from the rest of the motivic material in the slått, being an ascending and descending scale passage. It is not essential to the identity of the slått and could be omitted.

The amplification technique of *opposition* is described by Geoffrey, writing,

> "any statement at all may assume two forms: one form makes a positive assertion, the other negates its opposite. The two modes harmonize in a single meaning; and thus two streams of sound flow forth, each flowing along with the other. Consider this example: "*That young man is wise.*" Affirm the youthfulness of his contenance and deny its age: *"His is the appearance of youth and not of old age."* ...Or, choosing details closely related to the theme, you may travel a rather long path...In this way, plentiful harvest springs from a little seed;...(op.cit.:40)

In the musical context of hardingfele slåtter, *opposition* could be seen to describe the contrast of different motives. This is seen in the simpler versions of Fanten as transcribed by Vidar Lande where the slått is constructed of two contrasting motives in opposition.

The use of contrasting endings or beginnings when a motive is repeated could be a type of opposition. This would correspond to the open and closed endings of the medieval estampie and other forms. Although *Laus virginis* is not a dance piece, many of the phrases have open and closed endings.

Opposition could also be considered to be the joining of two short slåtter to form a new, longer slått.

This is also seen in medieval musical forms. The Italian istampitta, *Parlamento* could be two short pieces, or fragments of longer pieces, joined together either in performance, or by the scribe who notated the piece. Each section has a different pair of ouvert and clos endings. *Laus virginis* is constructed of two sections joined by transitional phrases, sections 9 and 10. The first eight sections have several internal repetitions, but after the transitional phrases, this opening material does not appear again. The second section has several internal repetitions of the new material, sections 11 to 27.

If Geoffrey's section on amplification illustrates the topic itself, being 570 lines long, his section on abbreviation is equally self-descriptive, being only 47 lines long. He discusses seven techniques of abbreviation; emphasis, articulation (articulus), ablative absolute, avoidance of repetition, implication, asyndeton, and fusion of clauses. Emphasis, articulation, and avoidance of repetition can be found in musical examples, while the other techniques apply more obviously to poetic language. Geoffrey writes,

> "If you wish to be brief, first prune away those devices mentioned above which contribute to an elaborate style; let the entire theme be confined within narrow limits."(loc.cit.)

Salve Austenå's form of "Reisaren" makes use of abbreviation, contrasting four beat motives that are repeated with two beat motives that are abbreviations of the four beat material. In the example, the first motive is four beats long while the second short motive repeats the first two beats of the first motive. This second short motive illustrates Geoffrey's cartegories *emphasis* and *articulus*. He writes,

> "Let *emphasis* be spokesman, saying much in few words. Let *articulus*, with staccato speech, cut short a lengthy account."(loc.cit.)

In this example, the bow strokes of the short motive correspond to staccato speech.

In the slått "Frøyrakjen" the ending illustrates an effective use of the technique of abbreviation.[98] The main body of the slått in this version consists of eight short phrases, each of which is repeated. The slått begins on the lowest two strings with short melodic figures that move from G to A and back to G, establishing G as the tonal center. With the third phrase, the slått moves to the middle two strings, and with the sixth phrase, it moves to the top two strings. The slått has travelled a leisurely path from its lowest to highest range, repeating each short phrase. The ending provides a marked contrast when repetition is abandoned and after stating a short motive that has been heard and repeated before on the top string, the slått cascades through the open string fifths, plays one motive without repetition on the lower strings emphasizing the return to G, and then returns to the beginning.

[98] This was transcribed from a recording from 1991, (NFS 1-41725) On a later recording (NFS 1-41779) Salve played a much freer form with more fifth transpositions.

It has been possible to describe several aspects of slåtter construction as well as ways that a slått can be varied by the player in terms of rhetorical techniques as described by the medieval poet Geoffrey of Vinsauf. Where the slått begins is sometimes not fixed, and different types of beginnings can correspond to Geoffrey's description of various poetic beginnings. Some types of slåtter construction and variability can be described according to Geoffrey's rhetorical techniques of amplification and abbreviation.

The last sections of the Poetria Nova discuss the topics *memory* and *delivery*. Geoffrey describes methods of memorizing a discourse, writing that one should,

> "divide it into very small parts. Do not take several at once; rather, take one at a time, a very short section , much shorter than your shoulders are capable and desirous of bearing. In this way there will be pleasure, and nothing burdensome in the burden. Let practice come as a companion; while the matter is fresh and new go over it frequently and repeat it; then stop, rest for a little while, take a breathing space. After a short delay has intervened, another piece may be summoned up; when it has been memorized in the same way, let practice join both parts together in the cell mentioned above, let it consolidate them and cement them together. Join a third part to these two with a similar bond, and a fourth part to the other three.(op.cit.:88)

This description could apply to the method of learning a slått, and corresponds to personal experiences of both Kvifte and Thedens.

In addition, Geoffrey describes other methods of memorizing, using signposts, and stresses the importance of finding signposts that are meaningful for oneself.

> "When I wish to recall things I have seen, or heard, or memorized before, or engaged in before, I ponder thus: I saw, I heard, I considered, I acted in such or such a way, either at that time or in that place: places, times, images, or other similar signposts are for me a sure path which leads me to the things themselves...Cicero relies on unusual images as a technique for training the memory; but he is teaching himself; and let the subtle teacher, as it were in solitude, address his subtlety to himself alone. But my own subtlety may be pleasing to me and not to him. It is beneficial to one whom it suits, for enjoyment alone makes the power of memory strong...if you wish to proceed with greater security, fashion signs for yourself, whatever kind your own inclination suggests. As long as they give you pleasure, you may be taught through their means."(op.cit.:89)

As Geoffrey writes, each person must find signposts through the material to be memorized that he finds to be meaningful and enjoyable.

The same could be said to be true of slåtter where the divisions between the vek is not always unambiguous. Each player must find sections of musical material and signposts that are meaningful for himself. Kvifte has postulated that the way a spelemann teaches a slått can indicate his own perception of the slått's form. His description of the teaching process is similar to Geoffrey's method of memorization. The teacher begins with a motive in the first vek and repeats it until the student can play it himself.[99] In observing Salve Austenå's teaching process, however, Thedens found that the length of the elements that Austenå chose to repeat could vary in different situations and he concludes that Austenå could imagine more than one possible way of dividing the slått.(Thedens:74) It seems that the most successful way to learn and remember a slått is to follow Geoffrey's advice, finding signposts that are meaningful to oneself.

Geoffrey's final section, on delivery, stresses the importance of using the voice, facial expression, and gesture in an appropriate manner to express the meaning of the text. He writes, "let a voice controlled by good taste, seasoned with the two spices of facial expresson and gesture, be borne to the ears to feed the hearing...let all be in harmony: suitable invention, flowing expression, polished development, firm retention in memory."(Vinsauf '67)91

This section concludes the *Poetria Nova*, and emphasizes the goal of expressive communication through harmonious delivery. The rhetorical techniques described in such detail in the earlier chapters are all devices to be used in the communication of the substance of the discourse in prose or poetry. Although Geoffrey alludes to the poet and his pen, he most often refers to the speaking poet, and it is clear in his sections on memory and delivery that he is writing about an oral tradition of discourse. He presents rhetorical techniques that not only can be used by the poet to create a work that is memorized and delivered, but also to amplify or abbreviate the work in performance. In both situations, Geoffrey seems to be constantly searching for ways to improve his discourse. He writes,

> "This is my method when I am labouring to polish words: I chide my mind, lest it linger in one place, for the quiet of standing water makes it stagnant. Rather, with unflagging energy I turn now in one direction, now in another. I do not turn it over in my mind only once; rather, I reconsider it many times. At last the active mind, when it has completed its circuit, chooses one form out of many...See to it that an expression, as it wins the mind's

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[99] (Kvifte '94) "Som nevnt tidligere, lærer man normalt en slått ved at læremesteren starter med motivet i den første vendsla, og spille det om og om egjen til eleven kan spille etter- med andre ord, læremesteren viser en grunnleggende indeling av slåtten fra første stund."(127)

> approval, may likewise charm the ear, and the two approve the same thing. Even that is not sufficient, and I still do not trust it unless I reflect upon it again…As I revolve the subject, I evolve more…See, then, that there are three judges of the proposed expression: let the mind be the first judge, the ear the second, and usage the third and final one to conclude the whole."(op.cit.:87)

In this passage, Geoffrey describes the process of finding new forms for his material. For each situation he chooses one form of many, but appears to be willing to continue the search for new forms. He writes that as he continues to consider the subject, he "evolves" which could be interpreted as artistic development. He adds that the poet must judge his expression in three ways; the mind, or what he imagines to be a good form, the ear, or how the expression actually sounds, and the usage, which could perhaps correspond to the performance context.

This approach to finding a form for a verbal expression could apply to the process used by a spelemann to shape his own form of a slått. Just as Geoffrey considers his subject material and evolves as a poet while he develops new forms, a spelemann can vary his performances and evolve as a musician with added experiences. Both Geoffrey's discourse, in poetry or prose, and the spelemann's slått can be seen as embodiments of a process rather than fixed works. The reciter of the discourse and the spelemann are both involved in constructing and continually altering the form of the material used. These examples of medieval rhetorical techniques and of variation techniques used in slåtter performance suggest a similarity between the role of the medieval poet and the Norwegian spelemann.

4.4 Construction, form, and variability in music for the fiddle in medieval Norway

In conclusion, it has been possible to find common elements in the Norwegian slåtter tradition and medieval music. The building block structure of the slåtter, the existence of variants, and the possibility of the performer's use of variation, are all characteristics of both Norwegian traditional music and medieval music. In the case of the medieval instrumental dances, one must infer from the structure of the pieces that variants could have existed and that performers could have varied their performances. The existence of variants in medieval music can be seen in other repertoires, and the performance practice of variability has been described in the medieval rhetoric treatise of Geoffrey of Vinsauf. One could conclude that the elements of form and construction seen in both slåtter and the medieval repertoire could be used in the construction of pieces for the medieval fiddle in Norway. The aim could be to construct pieces of motivic building blocks, possibly with ambiguous boundaries, that could be varied according to the performance context and that could even develop variants if they were played by different musicians adapting them to their own instruments and playing styles.[100]

[100] For examples of pieces for medieval fiddle using this type of construction and allowing for variability through the use of different bowing patterns and repetition, see Grottasongr and Fafnismål in the appendix.

5. Melodic material

The medieval literary sources refering to bowed instruments reveal some aspects of the music that was performed, but can give little information about the melodic material used to construct this music. In some cases, the performance context could suggest characteristics of the musical material. The leikare who performed at the royal court or perhaps the local marketplace, not only played music, but entertained the public with tricks and trained animals. It seems likely that the music played in this context could not be complicated either melodically or in form. The same could be said for music played by groups of instruments in processions outdoors to greet royalty. Music performed for church festivals or on pilgrimages could have used melodic material derived from familiar church hymns or sequences. The titles of the pieces played by both Bose and Norna Gest suggest a relationship to slåtter music from the folk tradition and could have been constructed of short melodic motives functioning as *vek*.

Melodic material that could be used in the reconstruction of music for fiddles in medieval Norway is found in several different sources either documented from the Middle Ages or from folk traditions. One medieval source could be instrumental music from Europe in the Middle Ages which provides some information about types of melodic formulas that were used. Another source is the notated music from medieval Norway. This is almost exclusively church music, the one exception being a secular song written in church style. Sources from the folk tradition include both instrumental and vocal repertoires.

5.1. Melodic material from the Middle Ages

Melodic frameworks used in medieval Europe

Walter Salmen has described the music of the traveling musicians in Europe as spontaneous and playful, expressing the joy of creating something new through variation. At the same time, it is not simply free virtuosic improvisation, but is structured through the use of melodic frameworks and performance conventions. He has found several melodic frameworks that are documented in the Middle Ages which he finds could be used to construct dance pieces in several different idioms, including different national styles.(Salmen:184f.) Although it is not documented where the leikare in Norway come from, Salmen writes that German traveling musicians came at least as far as Copenhagen, by foot, on horseback, or by sea.(op.cit.:171) It seems possible that some of these musicians could have traveled on to Norway, appearing as the leikare described in the sagas.

Perhaps the leikare in Norway could have used some of the melodic frameworks described by Salmen in the music they performed. As he explains, it would be possible to improvise pieces of any length using

repetitions of these simple frames. Groups of musicians playing in a procession to greet royalty, or playing together for courtly entertainment, could structure the music around a melodic framework resulting in a heterophonic texture.

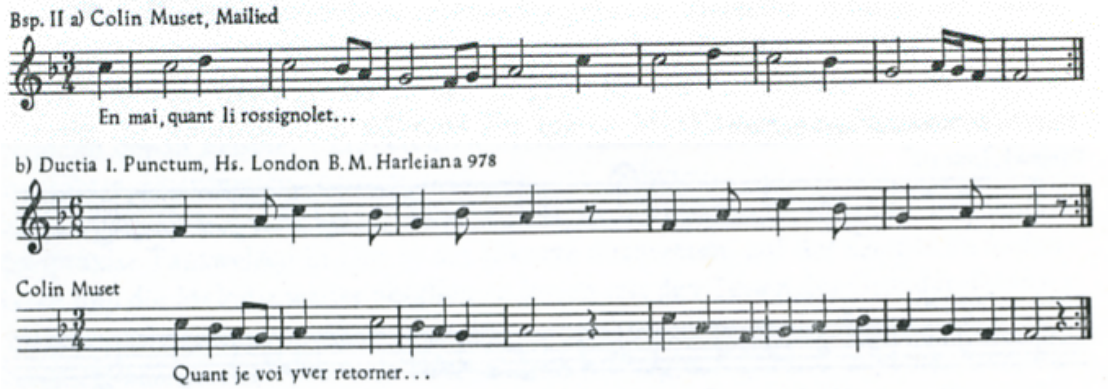
melodic framework 8-5-1

The first melodic framework Salmen describes encompasses an octave, starting on the eighth degree, moving to a cadence on the fifth and continuing to the tonic. Additional cadences can be added on the third or fifth before reaching the tonic, and the framework can be expanded through the use of sequences.

ill. from (Salmen:191)

melodic framework 3-1

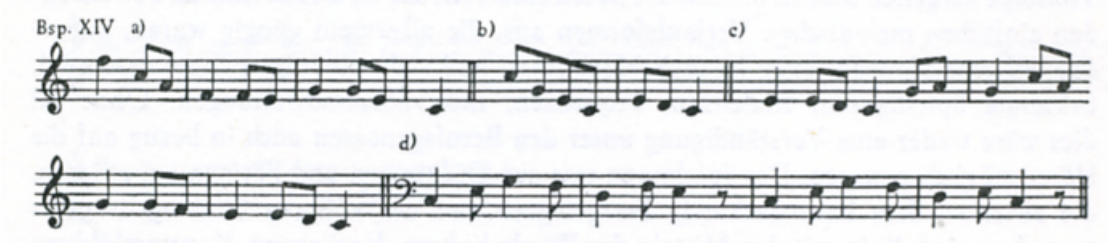
In this framework, there is first a cadence on the third degree, and then the tonic.



ill. (op.cit.:192)

melodic framework 1-3-5-8

Salmen notes that many dances are constructed of motives based on a major triad.



ill. (op.cit.:225)

These melodic frameworks and the improvised music structured around them were part of a European musical genre in the Middle Ages. They can not be seen to represent a type of music specific to Norway, but perhaps are a part of the repertoire that could have been played by traveling musicians in Norway. The remainder of this section will include examples of melodic material found in Norway and Iceland.

Church music in medieval Norway

It is not clear how much influence church music of medieval Norway could have had on the folk culture and lives of the common people. Most people went to church services at least somewhat regularly and would have heard the chants sung for the services by the clergy and some of the students from the local cathedral school. The congregation could have participated in the singing of sequences, hymns, and possibly the simpler Kyries.(Grinde:27)

Some of the church hymns were sung so often in the course of the church year that the melodies could have been easily learned by the people attending the church.(Edwards et al.:74)

Celebration of local saints' feasts days was an important part of life in the Middle Ages and some of the music of the liturgy for particular saints could have been especially familiar for the congregation. The most important saint in Norway in the Middle Ages was St. Olav who was killed in the battle of Stiklestad in 1030. A liturgy for St. Olav was found in England dating from ca. 1050, just twenty years after his death. (Grinde:20) Olav's burial place in Nidaros became the most popular site for pilgrims in the north. (op.cit.:82) The celebration of St. Olav extended for several days with religious services and festivities. Other saints celebrated in the archbishopric of Nidaros include Hallvard (Oslo), Sunniva (Selje), Magnus (Orkney Islands) and Thorlak (Iceland). Some of the music used in the liturgy for local saints consisted of familiar melodies or melodic fragments from the liturgies for other important saints. Perhaps these melodies could have been adopted by the local musical tradition, either as elements of instrumental music played for church festivities or as a part of daily musical life.

St. Olav sequence: Lux illuxit

The sequence *Lux illuxit* is a part of the celebration on St. Olav's day and is one of the most well-known pieces of the Olav music. The poetry is thought to have been written by a Norwegian cleric who had contact with the St. Victor cloister in Paris at the end of the 12th century. The musical material includes parts of known sequence melodies that are set together to form a new song that has been described as monumental. (Edwards et al.:78) An instrumental version of this sequence would itself be monumental, but perhaps some of its melodic material could

have been used to construct pieces played during the week of celebrations associated with St. Olav.

Alleluia/lullaby

Grinde cites an example of a fragment of a church melody entering the music of daily life. An Alleluia melody from the St.Olav music seems to be the source of a lullaby from Gudbrandsdal.(Grinde:76f.)

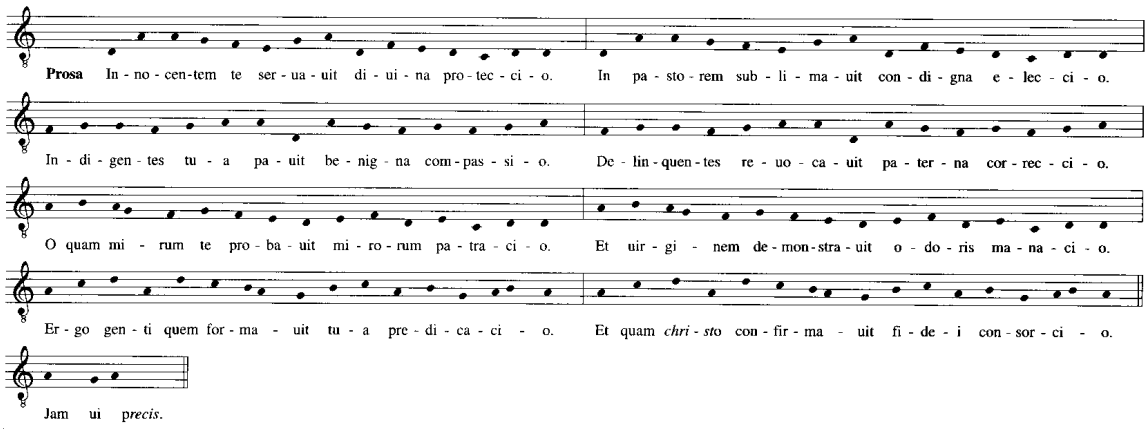
ill. from (Grinde:77)

A fragment such as this could also be played instrumentally and could function as a melodic framework such as those described by Salmen. Repeating the framework as the basic musical structure allows ensemble or solo instrumental pieces to be spontaneously performed. A short melodic fragment, such as this one from the Alleluia, could also be used to construct instrumental pieces in slåtter form, treating the motives as vek.

Prosa Innocentum te servavit

The prosa, *Innocentum te servavit*, is found in the liturgy for Þorlákr Þórhallsson (1133-93) who became the seventh bishop of Skálholt in 1178. He was declared a saint in 1199 with celebrations in his honor on December 23. The responsory, *Iubar vite luminose*, is the ninth antiphonal song for Matins of Thorlak's feast day, and, in order to

emphasize its significance, a prosa was added in a constrasting style. It was common to set new words to existing chant melodies when constructing the liturgy for a saint's feast day, and this prosa text is set to one of the most well-known prosa melodies, found in the office celebrating saint Nikolaus. The prosa, *Innocentum te servavit*, is a syllabic setting of a melody that is easy to remember and could have been sung by pilgrims as a walking song. (Edwards et al.:67 entire paragraph) Perhaps it also could have been played on instruments as part of the church festivities or pilgrimage. The song could have been played as notated or the melodic material could have been adapted to different musical forms. The first line could function as a refrain between the following phrases. If the ending of the first phrase were slightly altered, the second half of the first phrase could function as the open and closed endings of an estampie. Melodic material could be extracted and used as short motives in pieces with slåtter construction.



ill. From (Edwards et al.:67)

Wedding Song from 1281

The Latin song *Ex te lux oritur* was written for the wedding of princess Margareta of Scotland and king Eirik Magnusson which took place in Bergen in 1281. The text is a strophic poem praising the king and new queen of Norway. This song is the only example of notated secular music from the Middle Ages in Norway, and is closely related in style to church song from the same time, with a free rhythm following the text.(op.cit:53) Perhaps musicians could have constructed instrumental pieces using melodic motives from this song to be played during part of the wedding celebrations. The rhythmic transcription of the first part of the song illustrates a possible adaptation of the melody to a regular, dance-like rhythm.

ill. (op.cit.:53)

Conclusion: medieval melodic material

Two types of sources of medieval melodic material that could be used to reconstruct medieval fiddle music have been discussed. First, the melodic frameworks described by Walter Salmen could be used to improvise pieces in different styles. Second, some of the notated church music, as well as the wedding song in the form of a sequence, could be sources of melodic material. It is possible to use the melodic material from the vocal music discussed above in different ways. An instrumental piece using much of the melodic material could become an instrumental version or paraphrase of the song and could be recognized by the listener as being directly related to the song. Alternatively, short motives could be extracted from a vocal piece, such as the Alleluia melody that was used to make a lullaby. The melodic fragments could become melodic frameworks such as those described by Salmen, used to construct solo or group pieces. Melodic fragments could also be used as *vek* to make pieces with slåtter construction.

5.2. Melodic material from folk traditions

Melodic material that could be used to construct pieces for the medieval fiddle could also be found in the folk music tradition. Melodic material from some hardingfele slåtter, other instrumental music and vocal music from the Norwegian folk tradition could be used. The close cultural ties between Norway and Iceland in the Middle Ages could allow for the use of melodic material from the Icelandic rimur, dating from the 14th century, in the construction of Norwegian medieval fiddle pieces.

Melodic material from slåtter

Melodic material from hardingfele slåtter could be used in the construction of pieces for medieval fiddle. Although it is difficult to develop a method for determining the age of melodic material used in slåtter, it is possible to consider melodic material from slåtter thought to be representative of an older style. In addition, melodic motives that are similar to motives found in medieval repertoire could be considered,

as well as motives that are idiomatic for the hardingfele in various tunings.

Anmarkrud has found that although the location of the tonic in each tuning affects the melodic structure, the same melody types are found in each tuning. He has found, however, that there is a tendency for slåtter in unusual tunings to have simpler melodies or melodic formulas within a narrow range. In addition, they are often played with a simpler technique using bordun rather than double stops.(Anmarkrud:121) Some slåtter in unusual tunings have remained in the played repertoire and have developed expanded forms with many double stops, but others have not been played so often and have retained an older, simpler form. (Sevåg 79:75)

Perhaps the slåtter in unusual tunings with simple melodic formulas that are played on two or three strings could be sources of melodic material as well as models of construction and playing technique for pieces for the medieval fiddle.

Slåtter in tunings ae'a'e" & ae'a'c#"

Slåtter in these two tunings often have characteristics of an older style. The tuning ae'a'e" is similar to the first two tunings of Jerome of Moravia and to other tunings possible on the medieval fiddle that only use two tones. The tuning ae'a'c#" could be considered a variant of ae'a'e" in which the tonality is fixed by the a major triad. Anmarkrud writes that in both tunings, short melodic formulas are used that can be repeated and varied. Slåtter in ae'a'c#" have melodic motives that are centered around certain tones, most often those of the a major triad. (op.cit.:95) This emphasis of the triad is a characteristic of the third melodic framework used in medieval instrumental music described by Walter Salmen.

The slått "Eldgamal Springar" (Ancient Springar), after Anders Sagen, is played in the tuning c'f'a'e''. The first half of the tune does not use the e'' string and is played on the bottom three strings which are the same intervals as the top three strings of the tuning ae'a'c#''. The melodic material in this part of the slått is made up of two-measure formulas that are based on the second melodic framework described by Salmen. The first measure of each pair ends on the third degree and the second measure ends on either the tonic or the fourth below.

ill. (NF. Vol. IV Nr. 26, 1st part)

Gorrlaus slåtter

As discussed in chapter 3, "Tonality and Intonation", Morten Levy traces a connection from the ramme slått of Boses saga to the Magnus hymn and the gorrlaus slåtter of Setesdal. He has suggested that these slåtter could have been played in a version for three-stringed fiddle tuned fd'a'. (Levy '74:135) If one accepts his hypothesis that the ramme slåtter and the gorrlaus slåtter are the same, the motives from the gorrlaus slåtter could be considered to be medieval melodic material.

Langeleik slåtter

Some slåtter played on langeleik could be a source of melodic material for medieval fiddle pieces. The earliest langeleik dates from 1524 which could indicate a tradition of playing dating from the Middle Ages. The bordun strings of the langeleik were earlier tuned in the tones of the octave and fifth, corresponding to the ae'a'e'' hardingfele tuning and the first two medieval fiddle tunings of Jerome of Moravia. The melodic motives played on the melody string of the langeleik could be adapted for the medieval fiddle in an open tuning of octave and fifth. Many langeleik tunes are made of short melodic formulas with a range of a fifth that are repeated and varied.

The repertoire for the langeleik includes listening tunes as well as dance tunes. The largest group of listening tunes are the bell tunes which use motives imitating church bells. For these tunes, the bordun strings of the langeleik are tuned in octave, fifth and third, as in the hardingfele tuning ae'a'c#''. Church bells played an important role in the Middle Ages, being rung to signal events associated with the church year including church services and religious holidays. In cities, they were also used together with processions to praise and greet the arrival of royalty and noblemen.(Edwards et al.:55) Churches often had many bells tuned to each other that produced a resonating sound of shifting

melodic and rhythmic patterns.[101] Perhaps these church bells could have been a source of melodic material for fiddle pieces in the Middle Ages.

Melodic material from vocal music

It could also be possible to use melodic material from vocal music in the construction of pieces for medieval fiddle. Bjørndal notes that motives from vocal music were often used to construct hardingfele slåtter, and that talented spelemenn were able to make long slåtter from a small motive. (Bjørndal and Alver:151) Perhaps fiddle players in medieval Norway could have used vocal material to form vek used in the construction of pieces in the form of slåtter.

Ballad and Stev

Two of the oldest vocal genres in Norway are the ballad and the gamalstev (old stev). The Nordic medieval ballad is thought to date from the late 13th century, but the earliest collections of ballad texts and melodies in Norway are from the middle of the 19th century. Refering to the Swedish medieval ballad tunes, Margareta Jersild writes that they are found in widely varying styles not associated to particular text genres. The earlier tunes, documented in early and mid19th century show some elements of an older style. In some, the melody is written with a minor third and both major and minor sixth, which could indicate intonation between the two tones. Other tunes are made up of a series of thirds that function modally rather than chordally. Some of the ballad tunes with stepwise motion in a small range are constructed of melodic formulas that can be set together in different ways. Jersild writes that if any aspect of the older ballad tunes could be thought to date from the Middle Ages, it would be this formulaic construction, but adds that this remains a hypothesis. (Jersild '95)

The gamalstev is a single strophe vocal form with origins possibly in the early Icelandic rimur. Because the form of the stev remains the same, melodies and texts are interchangeable. There are stev melodies associated with local traditions and each performer can develop his own version. The stev melodies and the melodies associated with the ballad or stev sequence, “Draumkvedet” were all notated in the 19th century. Determining what aspects of this material, if any, could date from the Middle Ages is a matter of speculation.

Icelandic rimur

As discussed in the introduction to Part Two and Chapter 3, Benjamin Bagby catalogued melodic motives from Icelandic rimur and

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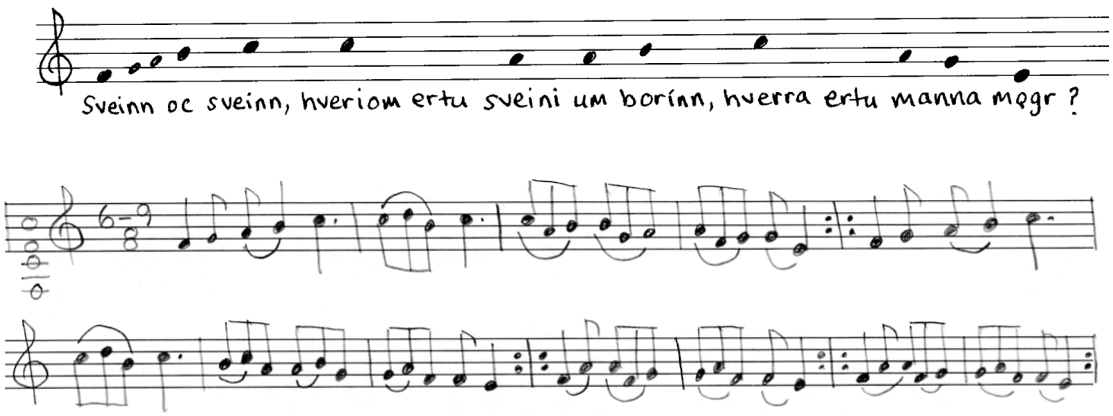
[101](Kværne '94:31) Slidredomen in Valdres was said to have twelve bells tuned to each other and the church in Fillefjell was said to have nine bells.

constructed a modal language which was then used to perform texts of the Poetic Edda and to construct instrumental pieces and song accompaniments. One example of this is the arrangement of "The Lay of Fafnir" in which motives from rimur were used both to perform the text and in a fiddle piece. The opening motive of the sung text is used as the opening motive of the fiddle piece and is combined with additional figures to form a vek that is repeated and varied throughout the piece. This form allows the piece to be played in varying lengths, and much of the material is also used as musical interlude between text segments.[102]



ill. The Lay of Fafnir[103]

5.3. Conclusion: melodic material

There are several sources of melodic material that could be used in the reconstruction of music for fiddles in medieval Norway both from the Middle Ages and from the folk tradition. Walter Salmen has described three types of melodic formulas used to construct instrumental music in the Middle Ages in Europe that could have possibly been used by leikare in Norway as well. Melodic material could be derived from the written chant repertoire from Norway. From the folk tradition, melodic material from slåtter could be used, as well as motives from the vocal tradition.

[102] (Sequentia '02) disk 1, track 3

[103] For the complete instrumental piece see appendix.

6. Bowing techniques: Bordun playing style and Bowing groups

The use of bordun is an important element in the playing technique of both the medieval fiddle and the hardingfele, enhancing melodic and rhythmic elements of the music and strengthening the instruments' sound.[104] Using what is known, or speculated, about bordun styles on the medieval fiddle and hardingfele, one could imagine a possible bordun playing style on the medieval fiddle in Norway. Bowing style is not discussed in medieval sources, but a legato bowing style and the use of bowing patterns is an integral part of hardingfele performance and could perhaps be applied to the medieval fiddle in Norway.

6.1 Medieval bowing techniques

Indications of the use of bordun playing technique on fiddles in the Middle Ages can be found in the iconography and in the tunings documented by Jerome of Moravia, as well as tunings deduced from his and other medieval writings.[105]

Representations of the bow from the late 10th century in Europe are found in many different shapes, some extremely arched, other almost flat, and in lengths ranging from very long, ca. 120 cm. to very short with bow hair 20-30 cm.(Bachmann:84) The usual form of the bow from the 12th century was moderately curved with a length from 50-80 cm.(loc.cit.) In some bows the stick extended beyond the hair, forming a handle, while other bows could be held so that the hair tension could be regulated with the fingers.(loc.cit.) Bachmann writes that the bow often appears to be held in the clenched fist, but this could actually be a bowhold with the thumb under the bowhair or nut. This type of bowhold was used until the 18th century by French violinists, and is still used by many folk fiddlers today.[106]

The shape of the bridge is an important factor in determining the extent of bordun playing style on the medieval fiddle. Many researchers have used the available medieval iconography in order to speculate what playing style could have been used. Instruments with from two to six strings are depicted, although five strings is usual in the 13th century.[107]

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[104] (The New Groves Dictionary of Music and Musicians '01)—drone: Bordun, or drone, has been defined as "a sustained droning sound, or a musical instrument or part of an instrument which produces such a sound and maintains it throughout a piece or section of music.", but the term has also been used to describe sustained open-string techniques on folk fiddles. Although I refer to hardingfele throughout this section, this bordun playing style was used on the vanlig fele as well.

[105] as discussed in the chapter on tunings

[106] New Groves—bowing; American fiddle players like Bruce Greene and Vassar Clements

[107] New Groves—fiddle

Bachmann has observed in that many pictures it often appears that the performer pressed two or three strings with one finger which he believes implies that the bow played on several strings at once. He finds this to be the most widespread or perhaps only, bowing style from the medieval period.(Bachmann:92) He sees little evidence of changing bow angles which would allow bowing on different pairs of strings.

Howard Mayer Brown has made an extensive study of fiddle iconography from the Italian 14th century and notes that, of the 350 pictures he had collected, 300 do not clearly show the shape of the bridge. He writes that, of the bridges that are clearly portrayed, a third are flat, another third are attached to the fingerboard, and the rest are arched. He has found pictures of instruments that are almost exactly alike, one with a flat bridge, the other with an arched bridge and finds it likely that the player could shift the bridges easily in order to fit the repertoire.(Brown:321)

Peter Holman writes that the majority of fiddles are shown with flat bridges into the fifteenth century. He finds that the arched bridges found in pictures from the 14th and 15th centuries do not imply single line playing but could have allowed the player to "vary the notes in a chord".(Holman:7) The ability to play single lines would become necessary when fiddles took part in polyphonic performance, and Holman believes that first took place in Italy at the end of the 15th century.(op.cit.:11)

6.2 Medieval tunings and bordun

Jerome of Moravia mentions bordun in the description of his first tuning, dGgd'd'. He explains that the d string is the *bordonus* of the others and only makes d.(Whelden:78)[108] Jerome's description of his second tuning reveals an important feature of the first tuning. Writing of the second tuning, Jerome says that it is necessary for secular songs and melodies with a large range, and that, therefore all the strings must run over the fingerboard so that notes can be fingered on them. This implies that the first tuning was meant for a 5-stringed fiddle with the lowest string to the side of the fingerboard where it can be plucked or bowed. The second tuning is the same as the first except that the top string is tuned to g'. The d string is still referred to as the bordun.(op.cit.:103f.)[109]

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[108] Secunda, que bourdonus est aliarum [marginalia: que est prima vielle] D solum facit. (The second string, which is the *bourdonus* of the others [marginalia: which is the first of the *viella*] only makes d.)

[109] Et nunc necessarium est ut omnes v corde ipsius vielle corpori solido affigantur nullaque a latere, ut aplicacionem digitorum queant recipere. (Then it is necessary that all the five strings of this viella are fixed to the real body of the instrument, not to the side, so that they may be able to receive the applications of the fingers.)
Sic tamen sint disposite secundum sonum ut easdem claves per se constituant

Christopher Page's interpretation of Jerome's first tuning, dGgd'd', is that the strings are arranged in two pairs with an additional bordun string to the side of the fingerboard that can be either plucked or bowed. In his view, the player fingered the Gg strings together in parallel octaves and the d'd' strings together in unison, resulting in octave-ambiguity as the melodic line shifted from one string pair to the other. The doubled melody line would be accompanied by the "plucked, percussive drone of the bourdonus". These three different sonorities, octave, unison, and bordun would result in what Page terms "disjunctions", creating "an impression of density, changeability and abundance."(Page '86:128)

Howard Mayer Brown considers Jerome's second tuning, dGg'd'g', as an indication that the strings could have been bowed separately, so that all the notes of the gamut could have been played except for the top e''.(Brown:310)

Page, however, finds it most likely that the octave strings Gg in the second tuning continue to be played as a pair.[110]

ill. excerpt from Grottasongr

Bachmann misinterprets this tuning as Gdg'd'g', and finds that with unequal intervals between the strings it would be disadvantageous to use this tuning for purely melodic playing. Therefore, he thinks it more likely that this tuning would be used on a fiddle with a flat bridge, all strings sounding at once. He writes that the melody could be played on all five strings, always accompanied with drone strings.(Bachmann:94)

Page interprets Jerome's third tuning, GGdc'c' as a constant bordun played by the lower three strings with a unison melody played on the upper two, and describes the resulting sound as "one large, humming block"(Page '86:129).

[marginalia: et hoc secundo modo temperandi prima corda, scilicet bordunus, facit E et F per aplicacionem indicis et medii]... (However, they should be so arranged in pitch that they make the same notes as in the method of the first (viella tuning) [marginalia: and in this manner of tuning the first string, namely the *bordunus*, makes e and f by the application of the first and second fingers.].

[110] Grottasongr from (Sequentia '99) is an example of a fiddle piece in this tuning, the octave strings often fingered and bowed as a pair.

Bachmann also thinks that the top unison strings were played together, and he finds this tuning to be appropriate for simple four-note melodies over drones, similar to what could be played on the hurdy-gurdy.(Bachmann:104) Bachmann assumes that in the first and third tunings of Jerome, the player would finger and bow on the two unison strings simoultaneously. He writes,"The increase in the number of strings was not at first designed to extend the complass of the instrument, since two of the strings were generally paired in unison, so that playing was not interrupted if one of the strings broke...Furthermore, tuning in double courses was presumably an attempt to strengthen the melodic line relative to the drone."(op.cit.:83)

Christopher Page also assumes that the unison strings were grouped together. He lists Jerome's three tunings and adds, "The arrangements shown here preserve the sequence of the notes exactly as they are given by Jerome, but grouped into probable courses which Jerome does not specify."(Page '79:83)

While Bachmann and Page believe that the unison and octave strings of Jerome's tunings were played as double courses, Whelden points out the additional bordun possibilities unison strings provide. He explains that they can provide an alternate drone string for melodic figures that are played on one of the unison strings.(Whelden:107) If a fiddle were tuned dad'd'a', a melody could be played on the top string with a bordun on d', and if the melody continued below a', the notes d' to g' could be accompanied by the adjacent d' string. In addition, refering to the tuning gd'd'g', Whelden writes that unison stringing results in a "special timbre, obtainable in no other way, which is due to the almost inevitable slight distuning of the unisons as well as the distuning effect that the drawing of the bow can have upon strings."(op.cit.:108)

Conclusion medieval bowing techniques

These differing interpretations of both the iconographical representations of fiddle bridges and of possible ramifications of fiddle tunings point out not only the difficulty of interpreting the evidence available but the versatility of the medieval fiddle. Johannes de Grocheio, a Parisian theorist writing ca. 1300 century asserted, "A good performer on the viella plays every cantus and cantilena and in general every musical form."(Whelden op.cit.:9)[111] Howard Mayer Brown in his research of fiddles in the Italian music of the fourteenth century has found that they "can easily be associated with all types of trecento music."(Brown:315) Different bridge shapes and tunings could have been used for the different types of repertoire played by fiddles in the various times, places and musical contexts of the European Middle

[111] Whelden quotes E. Rohloff, Bonum autem artifex in viella omnen cantum et cantilenam et omnem formam musicalem generaliter introducit.

Ages. Flat bridges would have resulted in a constant full sound especially on a five-string fiddle. With a slightly curved bridge, it could be possible to play on single strings, pairs of strings, or perhaps three strings at once. An arched bridge allows for single line playing, and makes it possible for the fiddle to participate in the performance of polyphony. The extensive iconography of fiddles in medieval Europe shows that stringing in courses did occur, along with the more usual string spacing of equal distances between each string. If the strings are all placed relatively close together, it is possible to finger two adjacent strings even if they are not obviously arranged as courses.

The bordun style of playing on the medieval fiddle has been compared to the hurdy-gurdy where the drone sounds continuously while a melody is played on the top string.(Bachmann:93)[112] On the fiddle, however, the bow is able to add varied articulations and bowing patterns that affect not only the melody notes, but the accompanying open strings as well. The melody is also not confined to the top string, but can be played on middle strings as well, shifting their function from drone to melody. The extant instrumental dance music from the Middle Ages shows no indication of bowings or articulations, which is not surprising because it was not intended for any particular instrument. One could turn to folk traditions to find examples of how the bowing techniques and bordun playing style interact.

6.3 Bowing techniques in Norwegian folk music

Bordun playing style

Reidar Sevåg has found that the bordun style of playing is a fundamental characteristic of hardingfele performance of the slåtter repertoire regardless of region. He writes that the instrument's construction facilitates playing on two strings. The bridge and fingerboard are both slightly arched and the string height above the fingerboard is relatively low. The slight arching of the bridge makes it easier to change the bow level from the upper to lower strings, and playing on two strings means that there are only three bowing planes to move between rather than the four planes corresponding to the open strings. (Sevåg '79:71, entire paragraph)

In the documented hardingfele repertoire, melodic figures are played on any string while the other strings function primarily as drones. In addition to open string drones, fingered double stops are used, as well as the technique of placing the first finger on two strings and then playing figures above this new bordun fifth, both elements that probably were introduced in the 19th century(Sevåg '75: 98). The hardingfele tunings

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[112] "The hurdy-gurdy...permits all the strings to be sounded simoultaneously—it and the fiddle in their early forms were mainfestations of the same sonorous principle."

do not incorporate unison strings as are found in the medieval tunings, but the playing technique of stopping a string to make a unison with an adjacent string and then playing melodic figures that move across the two strings results in the same sound.

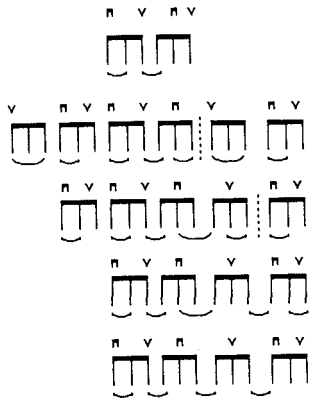
Sevåg describes an additional bordun technique that he labels "punkt-bordun" when the lowest string is played on important points in the melodic figure.(op.cit.:75)

Bowing Patterns

Sevåg describes the legato bowing style as another fundamental element of the hardingfele repertoire and playing style.(op.cit.:72) Bowing patterns incorporating slurs over several notes are often an integral part of the slåtter motives.(op.cit.:73) Passages of fast notes are not played with separate bow strokes, but slurred in various patterns.

Tellef Kvifte has written about the bowing patterns and their significance. In the hardingfele tradition, the bowings played are considered to be an important element of the music, and in learning a slått from a spelemann, the bowings are taught along with the pitches.(Kvifte '86:19) Kvifte writes that there is freedom to vary different aspects of a slått but that if one bows incorrectly, the performance is considered wrong.(loc.cit.)

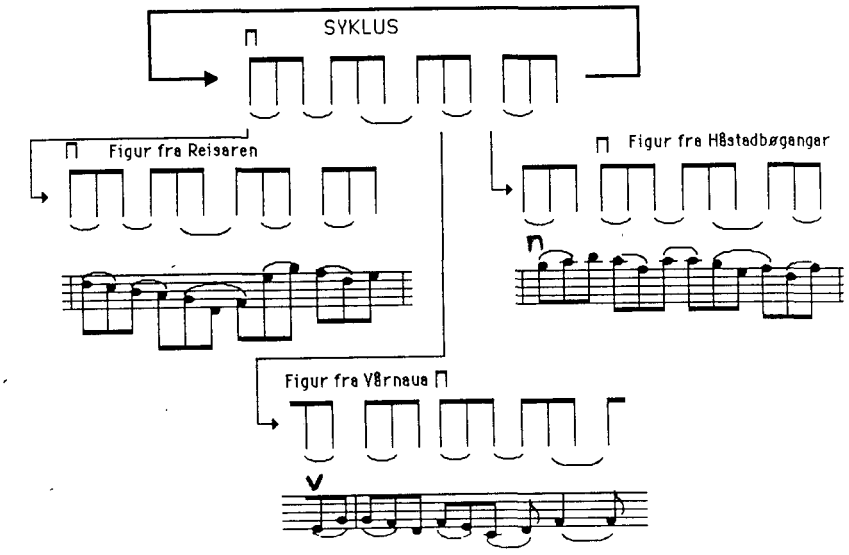
The general style of bowing in hardingfele music can be described as legato, with two or more notes played in one bowstroke that is rarely more than two beats long. Kvifte has found that the bowing patterns used often arrange themselves in cycles that can be repeated. The bowing cycle can be abstracted from both melody and meter.



ill. bowing cycles, from (Kvifte '86:22)[113]

[113] Note that the bowing marks in the last two examples are actually wrong.

A bowing cycle appearing in 3/8 gangar could be placed in three different relationships to the meter.



ill. bowing groups, (loc.cit.)

Kvifte has found that the bowing cycles are an identifying feature of the different genres and has called the set of bowing cycles belonging to one genre, a "cycle family"(=syklusfamilie).(op.cit.:22)

Kvifte lists four principles of the use of bowing cycles.[114] First, he finds that some bowing cycles belong to specific genres. Second, a motive always is bowed with an even number of bowstrokes so that it can be repeated and varied. Third, the bowing cycle is either as long as the motive or it is played completely more than once in the course of the motive. Last, the number and total length of up-strokes and down-strokes should be approximately the same.

Kvifte then turns to the question of musical function of the bowing cycles, considering musical form, phrasing and rhythm. He notes that the bowing cycles are often the same length as the motives and that they could help clarify the boundaries between motives. The cycles can also be used in variation when bowing cycles belonging to the same genre are interchanged. However, Kvifte finds that the bowing cycles have a rhythmic function independent of particular motives or slåtter. The clearly-heard bow changes in this playing style emphasize the rhythmic role of the bowing patterns.(Kvifte '86:24) There are relatively few bowing cycles most often used in each genre, and they can help to define a particular genre within a meter.(loc.cit.)

Kvifte examines regional variants of a genre in order to find out if the bowing cycles can be identified with dialect. He tests what he calls the

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[114] (Kvifte 86:23): genreprinsippet, syklusprinsippet, motivprinsippet, likesumprinsippet

"Blom hypothesis" which postulates a correlation between bowing cycles and the patterns of vertical movement in forward motion that are associated with specific dances.(op.cit. and Blom '81) After examining bowing cycles in two regional variants of the triple meter springar, from Telemark and Valdres, Kvifte finds that the same bowing cycles are used by both types and that the few bowing cycles found only in one or the other type, do not appear frequently or consistently. He concludes that although there may be some sort of relationship between bowing cycles and regional variants of dance genre, it is most likely at the performance level, involving elements that are not transcribed in notation. The spelemann has the possibility of communicating a particular dance pattern through the use of stress or weight within the bowing cycle.(Kvifte '86:31)

Morten Levy has written extensively about the construction of the gorrlaus slåtter from Setesdal, and has found that the bowing patterns used in each slått can be considered an identifying feature of the slått.(Levy '89:75) He finds five gorrlaus-types that he classifies according to their rhythmic groupings. These groupings are defined according to the interaction of the foot stamps which express the pulse or beat of the music, and the bowing figures that are played. When the bow change corresponds with a foot stamp, Levy calls this a "point of interference". The notes between two interference points make up an "interference group". The shortest ones, which do not slur over the foot stamp, are called "co-groups" and longer groups that include slurs over the footstamps are called "counter-groups". One gorrlaus type has a rhythmic subdivision of four sixteenth notes per beat, footstamp, or co-group and is known as gorrlaus III.

ill. co-group gorrlaus III, (op.cit.:76)

Levy classifies a short fragment with the same metric pattern as GIII but differing tonal material as GV.The other three gorrlaus types are have a rhythmic subdivision of three sixteenth notes per beat, footstamp, or co-group. Each of the three types has its own identifying counter-group.

The interaction of different bordun techniques, bowing patterns, melodic variation, and the underlying beat marked by the feet results in a complex and varying sound. The "impression of density, changeability

and abundance" that Page associated with the medieval fiddle could apply to the hardingfele as well.

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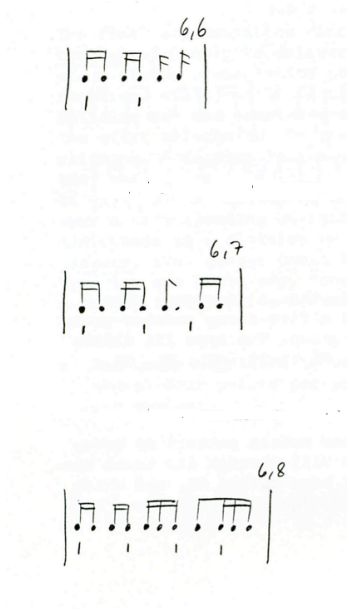

ill. bowing groups gorrlaus I, II, and IV (op.cit.:78)

6.4 Bowing techniques in medieval Norway

It seems fairly certain that the repertoire of the medieval fiddle was more limited in Norway in the Middle Ages than in Europe. There is no clear indication of polyphonic music in the church in Norway and no mention of specific European repertoire in the literary references. It seems most likely that medieval fiddles in Norway were bordun instruments and that they were used to play monophonic music with borduns.

The five-string bridge found in Gamlebyen is slightly arched which would allow for the type of bordun style playing found on both the hardingfele and other medieval fiddles with similarly arched bridges. It would not be possible to play all five strings at once. Although it would be possible to play single-line melodies using this bridge, there is no indication of a repertoire played in medieval Oslo that would require a melody line without bordun. Kolltveit notes, however, that the 2nd and 3rd notches on the bridge are close enough together that the corresponding strings could have been fingered and bowed as a pair.(Kolltveit '98:62) A fiddle with this bridge could have been tuned in one of Jerome's tunings or another tuning using unison strings and

could have been played with the bordun techniques used on the hardingfele. The “punkt bordun” technique would be especially suited to the five string fiddle and could be used to provide the deeper tones of the lower open strings while playing melodic motives on the upper strings. The bordun string lying off the side of the fingerboard on some fiddles was often plucked, and the “punkt bordun” could achieve the same plucked effect with the bow.

The bridge from Skåne with four pairs of notches demonstrates that courses of strings were not unknown in Scandinavia, at least at the end of the Middle Ages.

The bowed lyre, as pictured on the Røldal church panels, and the bowed harp, as found on the Trondheim cathedral are instruments that have flat bridges. Traditionally, melodies are played on the upper string while the lower strings provide a constant bordun.

There are no indications of possible bowings or articulations in the written dance music from the Middle Ages but the style of bowing found on the hardingfele could be applied to medieval fiddles. Sevåg points out that the hardingfele bowing technique is actually rather simple, the bow always lying on the string and using bowstrokes that are neither very long nor fast.(Sevåg '79:74) The bowing cycles described by Kvifte are used on the hardingfele and were perhaps an element of the slåtter played by Norna-Gest and Bose.

Following Morten Levy’s hypohesis that the ramme slått of Boses saga is related to the gorrlaus slåtter of Setesdal could lead to the application of some of the elements of these slåtter to pieces for the medieval fiddle. One could adapt both tonal material and bowing co-groups and counter-groups to the medieval fiddle. Another possibility would be to create new co-groups and counter-groups, and to construct pieces combining them with tunings and tonalities judged to be appropriate.

Conclusion:

The aim of this thesis has been to present evidence of bowed stringed instruments in medieval Norway and to discuss elements in common between the European medieval music tradition and the Norwegian folk music tradition that could be used in the process of reconstructing music for these instruments.

In Part One, literary sources, archæological and iconographical evidence provide information about instruments, and ethnological evidence provides a link to the Norwegian folk tradition and theories about a possible unbroken tradition of bowed stringed instruments from the Middle Ages. According to the literary sources, it seems probable that medieval fiddles of the sort known in Europe were brought to Norway by the leikare as early as the 12th century. The bridge found in Gamlebyen, Oslo, suggests that the five-string fiddle was known, and from the Novgorod excavations, one finds three-string fiddles that could perhaps have been found in Norway as well. Iconographical evidence suggests that the bowed harp was found in Norway in the Middle Ages.

Several aspects of musical construction and performance techniques are discussed in Part Two, including fiddle tunings, tonality and intonation, melodic material, form and construction, and bowing techniques. Conclusions, often speculative, are discussed under each topic.

Tunings for fiddles in medieval Norway

Leikare performed in Norway at the royal court and possibly in other settings for the general population as well, and it is likely that they brought with them tunings that were in use at the time in Europe. These tunings could have included the three tunings described by Jerome of Moravia as well as other similar tunings. Several of the hardingfele tunings could be adapted for the medieval fiddle. The tunings consisting of two or three tones could be used on the three-string fiddle or the five-string fiddle with the addition of unison or octave strings as seen in Jerome's tunings. Reidar Sevåg has written that some of the unusual tunings and the slåtter played in them, have characteristics of an earlier playing style, and that some are linked to stories about events from the Middle Ages while others are part of rituals that could have roots in the medieval period. (Sevåg '89:332) These unusual tunings could be adapted to medieval fiddles as well. Re-tuning is described in both the folk tradition and the medieval literary sources and could have been part of the medieval fiddle tradition in Norway.

Tonality and Intonation

In considering what tonalities and tuning systems could have been used in the repertoire of the medieval fiddle in Norway one can turn to a number of different sources of information.

Music heard in the church, or during festivities celebrating important local saints could have influenced both vocal and instrumental secular music. Sandvik describes tonal similarities in church music and folk music, while Grinde refers to secular vocal melodies that could have been derived from chant.

Folk music tonalities that could apply to medieval fiddle include the natural overtone scale as played by the lur, munnharpa, and , with deviations, on the seljefløyte, the tonal system found in the gorrlaus slåtter and the Magnus hymn, tonalities derived from Icelandic *rimur*, and tonalities resulting from the tunings found on early langeleiks.

Construction, form, and variability

It has been possible to find common elements in the Norwegian slåtter tradition and medieval music. The building block structure of the slåtter, the existence of variants, and the possibility of the performer's use of variation, are all characteristics of both Norwegian traditional music and medieval music. In the case of the medieval instrumental dances, one must infer from the structure of the pieces that variants could have existed and that performers could have varied their performances. The existence of variants in medieval music can be seen in other repertoires, and the performance practice of variability has been described in the medieval rhetoric treatise of Geoffrey of Vinsauf. One could conclude that the elements of form and construction seen in both slåtter and the medieval repertoire discussed could be used in the construction of pieces for the medieval fiddle in Norway. The aim could be to construct pieces of motivic building blocks, possibly with ambiguous boundaries, that could be varied according to the performance context and that could even develop variants if they were played by different musicians adapting them to their own instruments and playing styles.

Melodic material

There are several sources of melodic material that could be used in the reconstruction of music for fiddles in medieval Norway both from the Middle Ages and from the folk tradition. Walter Salmen has described three types of melodic formulas used to construct instrumental music in the Middle Ages in Europe that could have possibly been used by leikare in Norway as well. Melodic material could be derived from the written chant repertoire from Norway. From the folk tradition, melodic material from slåtter could be used, as well as motives from the vocal tradition.

Bowing techniques

It seems likely that medieval fiddles in Norway were bordun instruments used to play monophonic music with bordun. The five-string bridge found in Gamlebyen is slightly arched which would allow

for the type of bordun style playing found on both the hardingfele and medieval fiddles with similarly arched bridges. The “punkt bordun” technique would be especially suited to the five-string fiddle and could be used to provide the deeper tones of the lower open strings while playing melodic motives on the upper strings. The bowed lyre, as pictured on the Røldal church panels, and the bowed harp, as found on the Trondheim cathedral are instruments that have flat bridges. Traditionally, melodies are played on the upper string while the lower strings provide a constant bordun.

There are no indications of possible bowings or articulations in the written dance music from the Middle Ages but the style of bowing found on the hardingfele could be applied to medieval fiddles. The bowing cycles described by Kvifte could be used on the hardingfele and were perhaps an element of the slåtter played by Norna-Gest and Bose.

Following Morten Levy’s hypohesis that the ramme slått of Boses saga is related to the gorrlaus slåtter of Setesdal, could lead to the application of some of the elements of these slåtter to pieces for the medieval fiddle. One could adapt both tonal material and bowing co-groups and counter-groups to the medieval fiddle. Another possibility would be to create new co-groups and counter-groups, and to construct pieces combining them with tunings and tonalities judged to be appropriate.

The goal of this thesis has not been to present a collection of reconstructed pieces for medieval fiddles, but to discuss some of the elements that could be used in the process of reconstruction. Each person approaches this process with a unique perspective and musical aim. The elements of music and the performance techniques described in this thesis can all be interpreted and used in many different ways. The process of reconstruction involves the search for and, to some extent, invention of a past musical tradition that reflects an imagined version of the Middle Ages.

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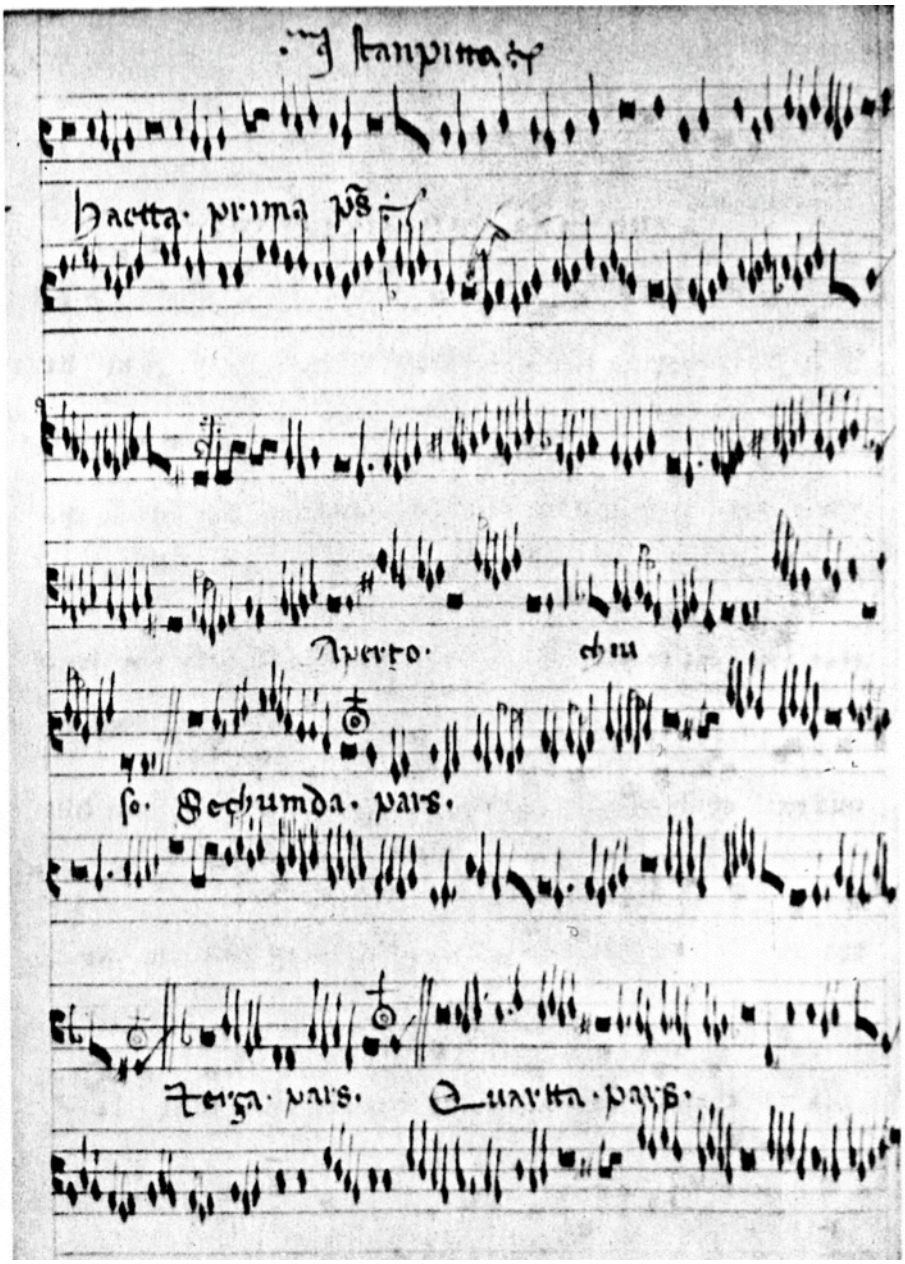
Appendix:

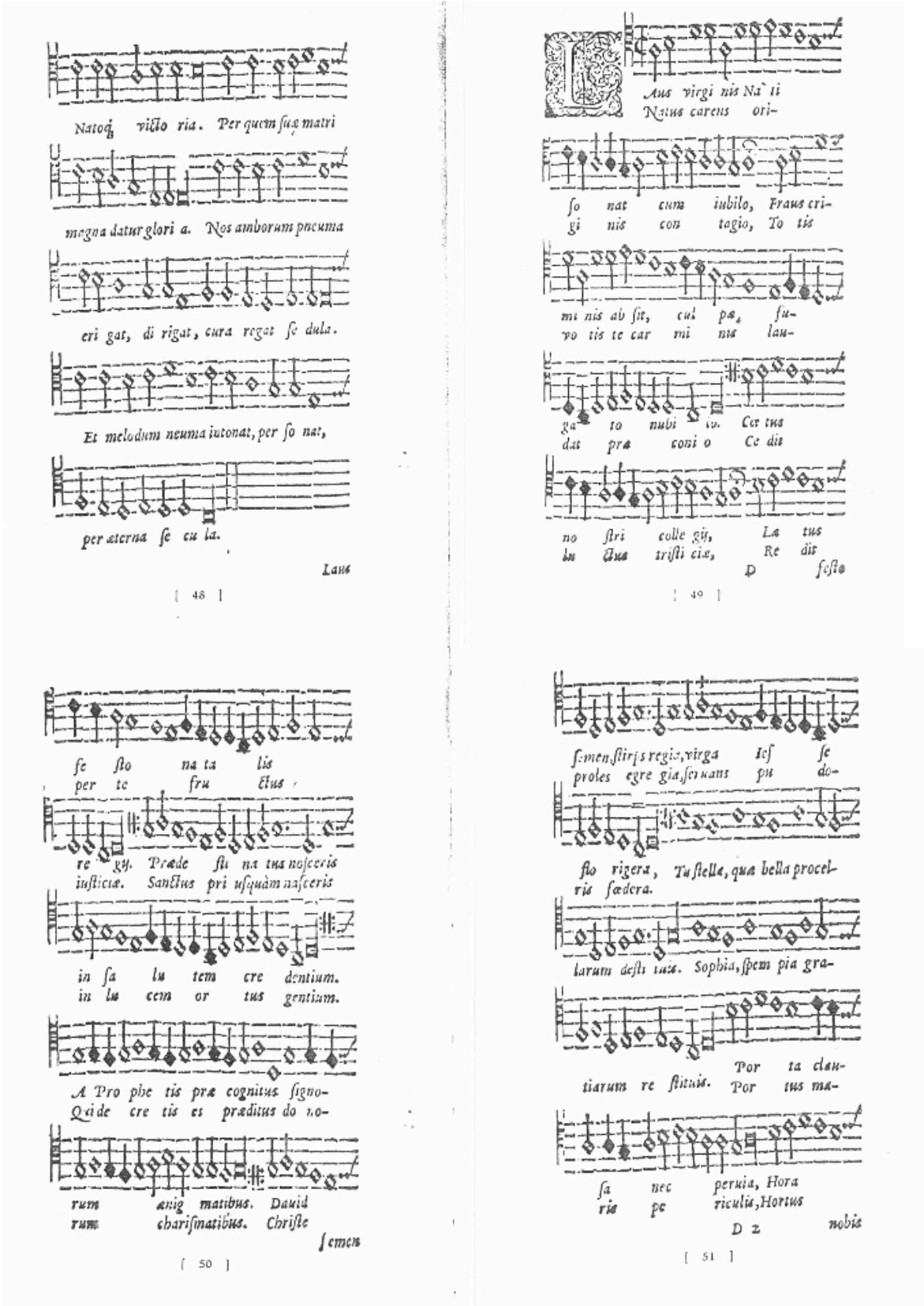
Tunings used in the Hardanger fiddle tune volumes 1-7(NFM), from Vol. VII



Facsimile of Ghaetta

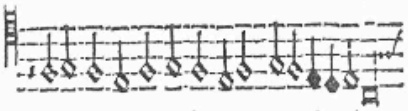
Facsimile of Parlamento

1. *Laus virginis*, facsimile; from www.spielleute.de

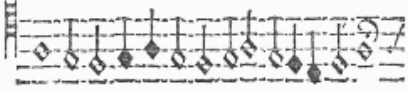


D 3 O ſalus

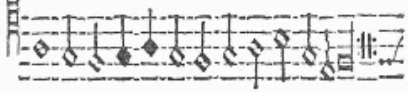
D 4 In



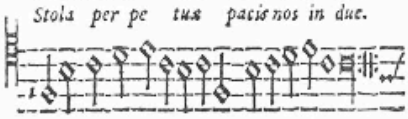
In hoc dignare guberna re nos exi lio.



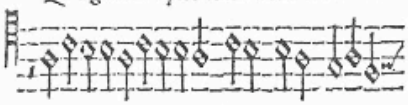
A malis e rue, aduerſa de ſtrue.
Reatum di lue, ſa lutem tribu e.



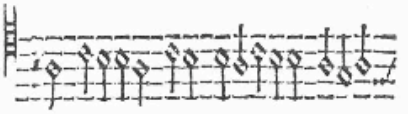
Statum inno cuæ vitæ re ſti tue.
Stola per pe tuæ pacis nos in due.



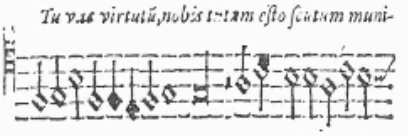
Te collaudantes aſpice nos decus angelorum,
Qui dignitatis apice tenes arcem cælorum.



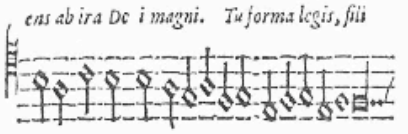
O dulcis Ieſus, ſpinis Ieſus, flagris cæſus aſperis,
velis



Tu vas virtutũ, nobis tutam eſto ſcutum muni-

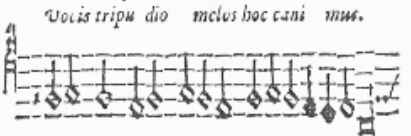


ens ab ira De i magni. Tu forma legis, ſili



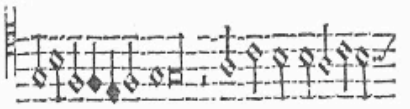
Regis, ſis dux gregis, vniẽs morte redemtos agni.

Te cordis ſtu dio exorat a ni mus.
Vocis tripu dio melos hoc cani mus.

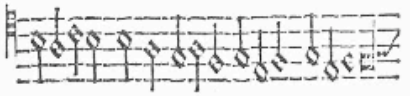


Vt nos conducas & adducas Patri Domino,

Qui

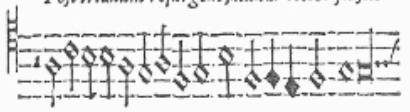


velis placatus fore. Qui lux de luce, victo

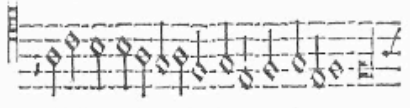


duce, pendens cruce, ſceleris indutus es ſplendere.

Inferni portas vrgens, inde tuos duxi ſti.
Poſt triduum reſurgens, mundi victor fuiſti.

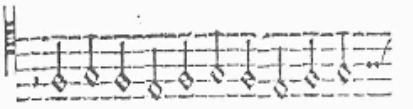


Eya ſola ri facie ſplendens Nate re gina,

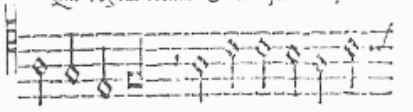


Cœleſtis aula gratiæ, ſerua nos à rui na.

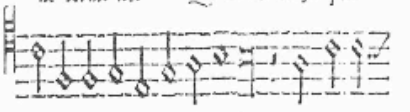
D 5 Tu



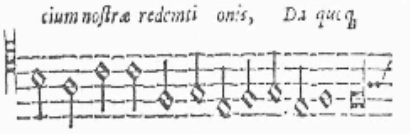
Qui regnat tecum & tu ſecum ſi-



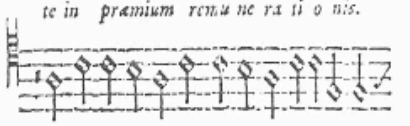
ne termi no. Qui te de cẽ ſti ſpe-



cium noſtræ redemti onis, Da quę



te in præmium remu ne ra ti o nis.



Vt congaudentes & plaudentes iugiter nos

vnitati


vni ta ti trinæ, Laudes pangamus &
canamus dulciter reguan ti ſine fi ne.
Sit fi nis huius carmi nis & can-
tio finita, Quæ dicitur Laus virginis
Chriſti laus infinita.
Vnica

21) Fars/ Norafjells

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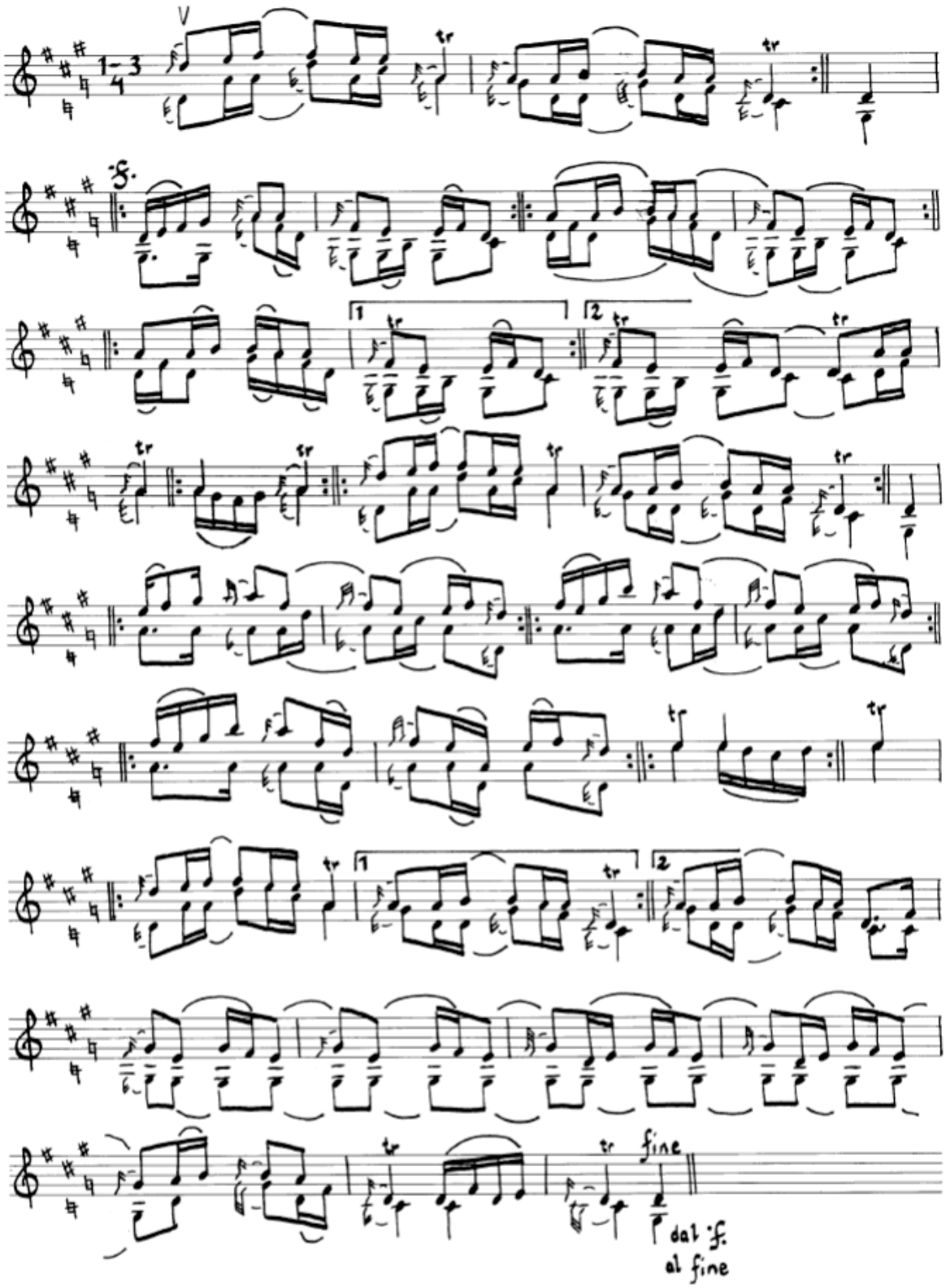
WORKING TRANSCRIPTION, GII:GB-2 a = a ♩. = 85

Norafjells-trall by Gro Heddi Brokke, from Levy '89, III p.122

24) Sordølen



7) Skuldalsbrura ette' Borjaen

16) Kjempe-Jo

17) Bestelanden

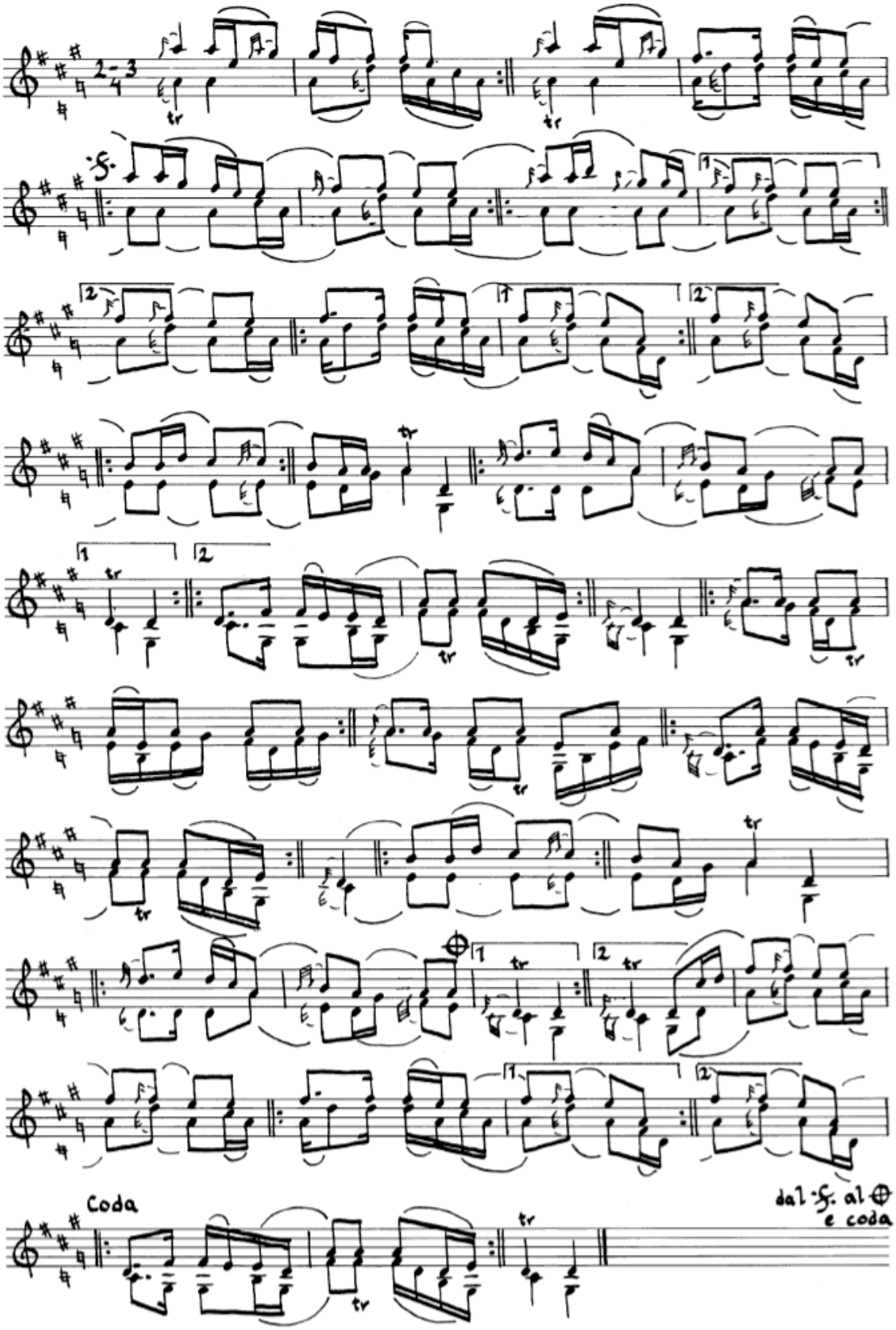
8) Ola Monen

47) Dolkaren

18) Frøyrakjen (Gravbakken)

27) Den kaldsteikte

23) Fanten



Grottasongr

Fafnirsmál