

THE BOWED LYRE OF ESTONIA'S SWEDES: ORIGIN, DIFFUSION, DECLINE, REVIVAL

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Abstract: Once played across Northern Europe in the Middle Ages, as early as the Viking Era, the bowed lyre has survived in an unbroken tradition in the Baltic region. The traditional playing method uses a loosely strung bow to stroke drone and melody strings simultaneously, while pressing the latter with knuckles or fingernails through a handhole. Iconographic, archeological, and ethnographic evidence points to the likely derivation of the bowed lyre from the bowed lute of Moorish Iberia or the Byzantine Empire. After a long decline in popularity, revivals occurred in Sweden (1970s), Finland (1980s), and Estonia (1990s). Focusing on the last case, the analysis shows how international contacts led to the bowed lyre's emergence and diffusion, as well as to its decline and revival. Traditional designs, tuning schemes, playing styles, and repertoire are still preserved today, though the social function, lore transmission, and performance settings of the bowed lyre have changed.

Keywords: bowed lyre, bowed harp, bowed lute, Swedes in Estonia, Baltic string instruments

INTRODUCTION

The bowed lyre is a musical instrument traditionally played by pressing the left hand's fingernails or knuckles against strings stretched across the handhole (Fig. 1), while the right hand bows two or more strings simultaneously. Once widespread in Northern Europe, it came very close to extinction. Interest was rekindled in recent decades in several countries around the Baltic Sea. The focus here is on the Swedish-Estonian bowed lyre, put into a broad geographic and historical context through comparisons with other relevant traditions. This involves clarifying the relationships between the oldest types of string instruments in the Baltic region, exemplified by the reproductions shown in Fig. 2. With this context in mind, this study considers the bowed lyre's likely origin and routes of diffusion and explains the reversal of a long decline in popularity via a recent revival movement.



Figure 1. Hand position in handhole for Swedish-Estonian bowed lyre. The left hand typically presses with knuckles or fingernails, mostly against the first string (closest to the player's body), with occasional pressing of the second string.



Figure 2. Reconstructions of archaic-style northeast-European string instruments. From left to right: 1. bowed lute (gudok), Novgorod, NW Russia, 10th century; 2. plucked lyre, Nerevsk site, Novgorod, NW Russia, 13th c.; 3. modern bowed lyre (jouhikko) from Finland; 4. bowed lyre (talharpa), Nuckö/Noarootsi, NW Estonia, mid-18th c.; 5. plucked Baltic psaltery (kannel), Rõngu, SE Estonia, from c. 1820. All but the jouhikko made by the author.

Much information on bowed lyres can be found in several works of Finland's Swedish ethnomusicologist Otto Andersson (1879–1969). His dissertation (1923) and book (*The Bowed Harp*, 1930) report on his fieldwork among Swedish-speaking Vormsi (Ormsö) Islanders of Estonia in December 1903 and January 1904. Finnish ethnographer and ethnomusicologist Armas Otto Väisänen (1890–1969) covers the Finnish/Karelian tradition in a 1928 monograph. He was in the border area in 1912 and 1916, which Andersson also visited in 1922. Finnish folk music researcher and instrument maker Rauno Nieminen examined the history, repertoire, and playing technique of the bowed lyre in *The Bowed Lyre: Jouhikko* (2007) and wrote a report on instrument construction (2008), both for his dissertation project at the Sibelius Academy. Estonian researcher Janne Suits wrote a master's thesis on Estonian playing techniques (2010). Other information came from museum specimens, archives, musicians and descendants, training workshops, performances, recordings, and films.

GEOGRAPHIC DISTRIBUTION

Some aspects of the instrument's distribution are puzzling. Finland's Swedish minority lacked it, but in Estonia the Swedish minority was initially the main base – on the northwest islands of Vormsi (Ormsö), Hiiumaa (Dagö), Saaremaa (Ösel), Noarootsi (Nuckö, now a peninsula), and the nearby coast.¹ The bowed lyre was not played by Swedes on the islands of Ruhnu (Runö), Pakri (Rågö), Naissaar (Nargö), Osmussaar (Odensholm), or in Estonian towns. Some Estonians near Swedish areas made and played it.² It was not played in most parts of Estonia, nor in the adjacent lands of Latvia and Russian Ingria.

The bowed lyre was played in southeastern Finland and adjacent southern Karelia. Both Finns and kindred Karelians played it. Swedes and Russians in these areas were not known to have done so. Such activity was concentrated on Lake Ladoga's north shore, now a Russian territory.

How and when the bowed lyre arrived in the Baltic area is undocumented. Andersson (1904: 168–170, 174–175; 1930: 132–134) noted the predominance of simple rhyming songs among Estonia's Swedes, plus a lack of ballads, other song types, and instruments that spread in mainland Sweden in the thirteenth century or later. He concludes that settlers left Sweden before such musical innovations appeared there, and stayed isolated from such trends in Estonia. Jonathan Lindström (2015: 249) also thinks the bowed lyre arrived with Swedish settlers, during a crusade to convert Estonia to Christianity in the early thirteenth century.

The bowed lyre's arrival in Finland/Karelia may also be linked to a Swedish enclave, such as the Baltic port of Vyborg (Viipuri) in Karelian territory, now in Russia. A bowed lyre player with a Finnic surname performed there in 1859 (Nieminen 2007: 23). The instrument could have arrived much earlier, perhaps via another thirteenth-century crusade or Hanseatic League trade. Hanseatic-Novgorod treaties of 1262 and 1270 mention a long-established pattern of visits by Swedish merchants from Gotland Island to Karelian settlements via the Vyborg area (Ruuth 1906: 5).

Scandinavian sagas hint at an even earlier Viking base on this Karelian shore (Ruuth 1906: 3). This may explain why bowed lyres had a greater geographic range in Finland/Karelia than in Estonia and involved more players of the aboriginal population (see maps in Andersson 1930: 257a; Nieminen 2007: 14; 2008: 104). This would also give Finnish/Karelian instruments more time to develop features like narrow or double handholes (Figs. 2(3), 3, 4), to diverge from the oldest images of bowed lyres, dated to the eleventh century (discussed below). The latter are symmetrical, with a wide handhole and a separate peg-yoke, like Swedish-Estonian specimens (Figs. 2(4), 5–11).

In Sweden, bowed lyres were collected from the regions of Småland and Dalarna. The bowed lyre may have spread to Småland and other parts of southern Sweden from Denmark, which had the earliest image of bowing in Scandinavia, dated to the twelfth century (Panum 1971 [1939]: 345). By the thirteenth century, Southern Swedes settled on Vormsi Island, probably from Öland Island (Lindström 2015), and on the Karelian coast, where Vyborg's founders and early leaders came from Småland (Carlsson 1927: 46). In the sixteenth–seventeenth centuries, some Southeastern Finns relocated to central Sweden (including Dalarna) to help in forest clearing and mining (Montelius 1960). By then they were probably familiar with the bowed lyre via contacts with Karelians or Vyborg Swedes. This may explain why the Dalarna bowed lyre has a look and name evocative of Finnish/Karelian tradition.³ Elsewhere in central Sweden, the bowed lyre was apparently never adopted or soon replaced by other bowed instruments.

Long before the Forest Finns went to Dalarna, settlers from central Sweden had arrived on the Ahvenanmaa/Åland Islands (now a Finnish territory). They spread to the western and southern coasts of Finland at an accelerated pace after the Swedes' crusades began in Finland in 1157, and thence reached Estonia's northern coast (Rußwurm 2015 [1855]: 80–83; Lagman 1979: 4, 59, 85), some decades after the initial migration from southern Sweden to Vormsi. Absence of bowed lyres in some Swedish enclaves of Finland and Estonia may thus simply reflect the situation in the region of Sweden whence the colonists or their ancestors came.

INSTRUMENTS AND PLAYING STYLES

Nieminen (2008) lists 49 bowed lyres in collections in Finland, Estonia, Sweden, Russia, Germany, and the USA. These were made between the mid-eighteenth and mid-twentieth centuries. Two more are now known in Latvian and Lithuanian museums.

The 23 instruments from Finland/Karelia, known as *jouhikko* or *jouhikantele* 'horsehair/bow psaltery', have 2–3 strings, an asymmetrical shape, a narrow handhole, and one-piece (monoxylic) construction of the handhole's frame, so the soundbox and peg-holding yoke are of the same block of wood (Figs. 2(3); 3). Some specimens have a second hole (Fig. 4).

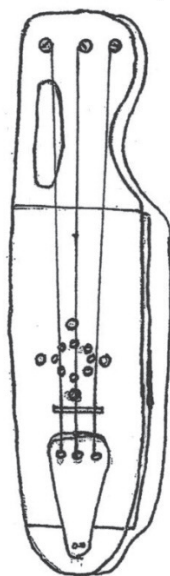


Figure 3. Karelialan *jouhikko* of Matti Koikkalainen, Sortavala, Lake Ladoga, Russia (item K1855:30, obtained 1877, Finnish National Museum, Helsinki).

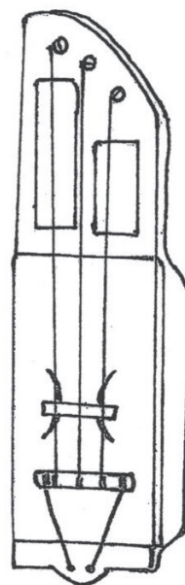


Figure 4. Two-holed Finnish *jouhikantele* of Juho Villanen, Savonranta, Finland (item 89, obtained 1915, Sibelius Museum, Turku).

The average size of Finnish/Karelialan specimens is 58 x 15 x 7 centimeters – longer, narrower, and deeper than the 51 x 19 x 6 cm for specimens from Estonia. Both types weigh an average of 0.8 kilograms. Calculations are based on Nieminen's data (2008: 189) and the author's measurements of three Estonian specimens.

The 26 specimens from Estonia are called *talharpa* ‘horsehair harp’ by the local Swedes,⁴ *tagelharpa* in standard Swedish, and *hiiu kannel* ‘Hiiu Island psaltery’ or *rootsi kannel* ‘Swedish psaltery’ by Estonians. (Nieminen lists 24; two more found by the author in Riga and Kaunas, are shown in Figs. 5–7.) They have 2–4 strings, a symmetrical shape, a wide handhole, usually a two-piece design, with a peg-yoke attached to arms projecting from the soundbox (Figs. 2(4), 8–10). Some late specimens are made of joined boards, not hollowed out (Figs. 11, 12). The latter type often has a broad soundbox, dovetail or box joints, and sometimes an arched peg-yoke (Fig. 11). Some late models have a waisted violin-style soundbox (Figs. 12, 13) and strings of metal rather than spun horsehair or gut.



Figure 5. *Hiiu* (Dagö) talharpa, late 19th or early 20th c., item 253155 in Latvian National History Museum, Riga. Its unique features include the insertion of (now missing) pegs upward from the handhole, a piece of horn on the peg-yoke’s edge with slots for strings, and carved serpentine sides of the handhole frame.



Figure 6. Enlarged detail of *Hiiu* talharpa, side view of handhole frame, showing archaic Viking-style decoration and newer type of assembled soundbox.



Figure 7. Hiiu kannel made by Elmar Luhats of R pina / Tartu in 1958, played by son Toivo Luhats, item LTMM 192 in Folk Music Branch, Kaunas City Museum, Lithuania. The bisected peg frame is unique.



Figure 8. Vormsi bowed lyre (talharpa), obtained in 1857, item SU 734:1 in Finnish National Museum, Helsinki. Typical features include attachment of string through split ends of pegs and nailing of arching soundboard to soundbox.

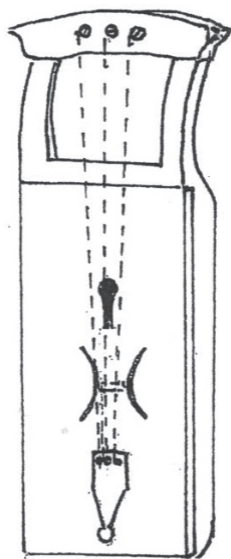


Figure 9. Three-string talharpa, Nuckö/Noarootsi, Estonia (item N104366, made ca. 1750, Performing Arts Museum, Stockholm).

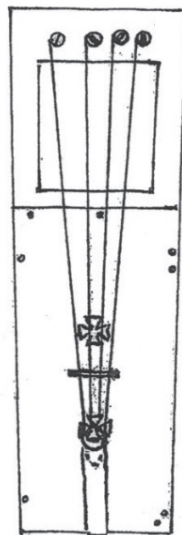


Figure 10. Four-string talharpa by Hans Renqvist, Borrby, Vormsi, Estonia (item 1962-07-00036, obtained 1903–1904, Mathers Museum, Bloomington, Indiana, USA).

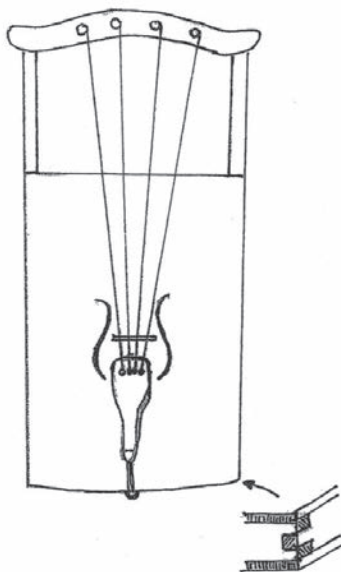


Figure 11. Wide bowed lyre with box joints, of Jurri Bruus, Hiiumaa, Estonia (item 180, obtained 1908, Sibelius Museum, Turku).

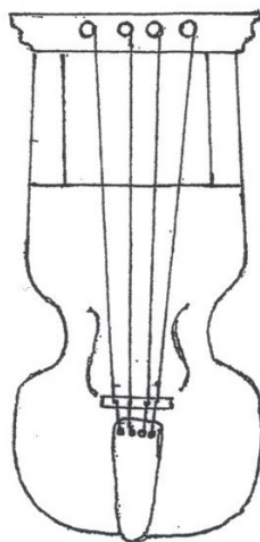


Figure 12. Violin-shaped rootsi kannel of Aadu Volberg, Lääne-Nigula, Estonia (item A348:9, early 1900s, Estonian National Museum, Tartu).



Figure 13. *Vormsi talharpa with violin-style soundbox, by Hans Renqvist of Borrbj, obtained in 1903 by Otto Andersson, item 179, Sibelius Museum, Turku.*

Sweden's two specimens are starkly different from each other. One is like a wide-holed instrument of Estonia's Swedes (Fig. 14), only 47.5 cm long. The other is much larger and of the narrow-holed Finnish/Karelian type (Fig. 15), 77.8 cm long.

Andersson (1930: 117) and Bergelt (1986: 230) see the Swedish-Estonian design (Fig. 2(4)) as a later development, but it is consistent with the oldest images of bowed lyres and with relics of plucked lyres (Fig. 2(2)), from which bowed lyres apparently evolved. The Finnish/Karelian design (Fig. 2(3)) may be a result of later simplifications of construction, to reduce labor or avoid peg-yoke breakage. Some Swedish and Estonian instruments also have a one-piece design. Totally independent invention of the two regional types of bowed lyres is implausible, as the traditions have so much in common.

The playing method and tuning are quite similar in the Finnish/Karelian and Swedish-Estonian traditions. The seated player may hold the instrument vertically between the knees, with the bow over the left knee (Fig. 16), or horizontally across the thighs, with the bow between the knees (Fig. 17). In both cases, the left hand's nails or knuckles press against the melody string(s) (Fig. 1).

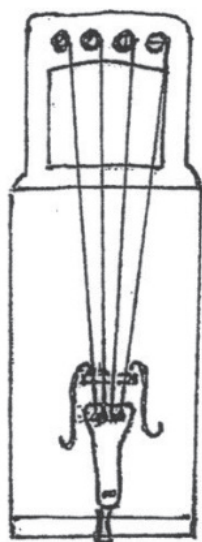


Figure 14. Småland bowed lyre, Sweden (item M448, obtained 1912, Performing Arts Museum, Stockholm).

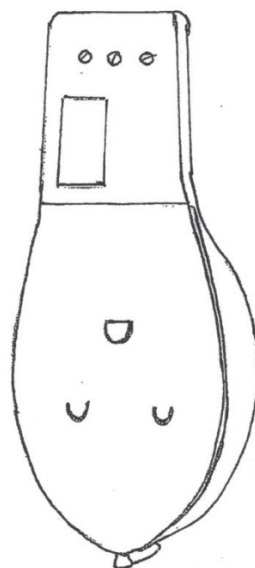


Figure 15. Dalarna sotharpa, Öje, Sweden (item N9757, obtained 1869, Performing Arts Museum, Stockholm).

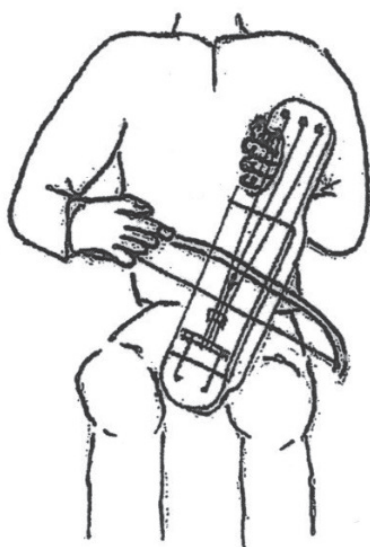


Figure 16. Karelian jouhikko, vertical position.

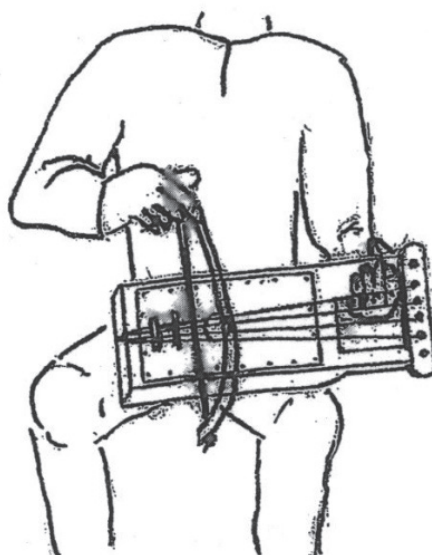


Figure 17. Estonian hiiu kannel, horizontal position.

In Finland/Karelia, the melody tends to be played on the string nearest the player, at the narrow handhole. This string is tuned one note above the tonic note, thus D in the key of C. (All tunings are given in the key of C, to facilitate comparisons.) Pressing the D-string with the index finger close to the peg yields E, the middle finger placed a half-step higher or just beside the index finger makes F, the ring finger makes G, the little finger makes A and with stretching even a high C. The second string is a low drone, at the dominant tone (low G). The tonic note (C) comes from pressing the drone string with the ring finger, and/or from the open third string (if available), tuned higher or lower than the open drone.⁵

Swedish-Estonian bowed lyres typically have the same set-up, plus a fourth string at the low tonic note (low C).⁶ In this tradition, both the first and second strings are used for melody (Fig. 1). Pressing the second string (low G) with the index finger near the peg yields low A, the middle finger yields low B natural, and the ring finger yields C when placed a half-step higher or just beside the middle finger.

THE TRADITION AMONG ESTONIA'S SWEDES

The bowed lyre was especially popular on Vormsi Island. In the mid-nineteenth century, Carl Rußwurm noted that virtually all men there knew how to play it, taking turns during all-night dancing at wedding feasts. He presented a transcribed tune played on it, plus an 1854 lithograph of a Vormsi player at a wedding dance (2015 [1855]: 427, 462, 750, 783). The instrument was also used for entertainment in homes, especially in winter, at young folks' gatherings in summer, and at alehouses (Andersson 1930: 116).

A religious revival on Vormsi Island in the 1870s led to widespread rejection and even burning of bowed lyres, leaving only a few active players (Andersson 1930: 112). Johannes Österberg recalled hearing from his instructor that this happened in 1875 (on tape from 1974–1975), but the first revival was in 1876, followed by others in 1878, 1879, 1881 (Österblom 1927: 26, 33, 35; Carlsson 2019: 63, 69, 71, 78, 124). Lindström (1977: 141) reports the year as 1876. A student wrote vividly of a bonfire of such instruments, based on his father's childhood memories of Hullo village on Vormsi Island (Söderbäck 1964: 262–263). The pastor who reportedly sparked the fervor was sent from Sweden by a new evangelical organization, but may actually have tried to dissuade zealots from destroying instruments seen as tools of the Devil (Aman 1992: 58). The pastor's efforts to promote education, hygiene, and morality made a strong impression on worshippers, receptive to trying a new way of life because of increasing burdens imposed by estate owners. From the late sixteenth century, the village

lands the islanders had occupied for centuries under the relatively benign rule of bishops⁷ were claimed for large estates, whose owners were pressed to contribute to the coffers of the Swedish king and later the Russian tsar. By the 1870s, Vormsi Swedes' long legal battle to defend their historic exemptions and privileges had ended with the ruling that their only special right, compared to Estonian peasants, was the right to leave (Kanarbik 2003). This context makes it understandable why desperate, overworked islanders abandoned old lore and artifacts to try something new. A resident of the nearby mainland district of Riguldi (Rickul) reported the memory of his mother (born 1859) about a similar bonfire of "sinful" bowed lyres during her youth (Söderbäck 1964: 263). A century earlier, dance instruments (bowed lyres and bagpipes) were reportedly burned on Hiiumaa Island (Utas 1969: 61); Norrman (1986: 7) refers to an unspecified form of destruction there.

During an expedition to collect Swedes' folk melodies in Estonia in late 1903 and early 1904, Otto Andersson spent four weeks on Vormsi Island, where he unexpectedly came upon the bowed lyre. He found only two players willing to perform traditional tunes: Hans Renqvist (1842?–1906) and Anders Ahlström (1873–1959), both in Borrby village.⁸ Two others refused to do so on religious grounds (Andersson 1904: 199). A few more Vormsi players were found by later researchers (Andersson 1930: 113, 116–117; Nieminen 2008: 184; Suits 2010), but little is known about them or their repertoire. Nieminen (1984, 2007) presents transcriptions of 20 Renqvist and 10 Ahlström tunes Andersson sent to the Swedish Literary Society in Finland (SLS), which funded his expedition. Some transcriptions diverge a bit from fieldnotes at the Sibelius Museum in Turku, where there is an extra Renqvist tune, omitted from the report to the SLS.

Per Söderbäck from Sweden thought the bowed lyre might no longer be heard after his visit to Vormsi in the 1920s. He bought the instrument of Anders Vaksam, who found it hard to play at the age of 84 (1964: 263–265). Yet the island's tradition lingered until World War II, when it was transplanted to Sweden by refugees.

Andersson solicited lore about the bowed lyre in the February 18, 1920 issue of the newspaper for Estonia's Swedes, *Kustbon* (Coastal Dweller) (Andersson 1920). Teacher John Berggren sent his grandparents' stories and other reports from Vormsi. Berggren was even inspired to learn to play on a bowed lyre his students had rescued from a trash pile. Tragically, he was among the first deported in 1941 after the Soviet invasion of Estonia, and died in Russia two years later.⁹

Another external stimulus contributing to Vormsi Islanders' renewed appreciation of the bowed lyre was an invitation from Stockholm to reenact an old-fashioned Vormsi-style wedding at Skansen, the Swedish ethnographic

open-air museum, in 1930. A new bowed lyre was made for the event, and a knowledgeable (unnamed) player from Borrby was enlisted to tune and play it (Lindström 1977: 142). A Vormsi choir also went on a tour to Sweden, so islanders from other villages saw the Borrby player's art. This could explain why youths elsewhere (at least in Kärrslätt, as detailed in endnote 21) took up the instrument around then.

The bowed lyre tradition endured surprisingly long also among Hiiumaa Islanders, under most adverse conditions. Andersson found Jurri (Georg) Bruus of Hiiumaa playing the bowed lyre at Helsinki harbor in 1908, after Bruus sailed there to deliver cargo. Andersson even recorded six tunes by Bruus – the earliest audio recordings of folk music from Estonia.¹⁰ Bruus could not speak the language of his Swedish parents, but by 1894 had learned to play the bowed lyre from the “almost centenarian” Swedish sexton/cantor of the Lutheran church of “the Swedish village”, presumably *Rootsi küla* (Andersson 1921: 120; 1930: 117–118).

Most Swedes of Hiiumaa had been deported to Ukraine by tsarist officials in 1781, to end a long dispute with estate owners. Their deportation took nine months, and barely a tenth of the thousand exiles survived a year after arrival in Ukraine (Utas 1959: 39, 208; Hedman & Åhlander 2003 [1993]: 26–31, 40–46). Somehow the bowed lyre passed through this ordeal, as well as the abovementioned destruction of instruments before deportation and an 1835 firestorm in the new settlement beside the Dnepr River in Ukraine (Norrman 1986: 7, 17).¹¹

The bowed lyre endured for over a century there, surviving even longer among the descendants emigrating from Ukraine to British Columbia in Canada. Bowed lyre player Andreas Hindriksson Sigalet (1844–1913) arrived in Canada in 1889. His instrument inspired Johannes/John Simonsson Hoas (1895–1969), who arrived from Ukraine in 1913 to work first as a farmhand at Sigalet's farm, to make and play a copy in the 1950s. Side-by-side photos in the December 2002 issue of *Kustbon* (Hedman 2002: 5) reveal a striking resemblance between Hoas' bowed lyre from the 1950s and the one Anders Vaksam had at Vormsi in the 1920s, despite lack of contact between their communities since 1781. Both instruments had a narrow, rectangular four-string design, with a pair of S-shaped soundholes plus a heart-shaped one (Figs. 18, 19).

Hoas' correspondence with a nephew in Sweden suggests that Sigalet made his instrument in Ukraine and Hoas did not learn of it until his marriage to Sigalet's granddaughter around 1918, years after the elder musician's death (Jörgen Hedman's e-mails of August 18, 2018, and April 17, 2019). Whether Hoas had access to Sigalet's instrument or relied on a description or drawing of it is unknown. The former seems more likely, since Hoas worked on Sigalet's farm (Hoas 1962: 6) and married into Sigalet's family. How Hoas learned to

play is also a mystery. The published accounts about Hoas' *talharpa* and his correspondence archived at the Institute for Language and Folk Memories in Uppsala do not mention his exposure to any research on the instrument. He notes that all men in the Sigalet family were good musicians (Hoas 1962: 4), so one of them might have shown him how to play the bowed lyre. In a 1960 photo, Hoas' fingers reach toward the third and fourth strings, traditionally left open.¹²

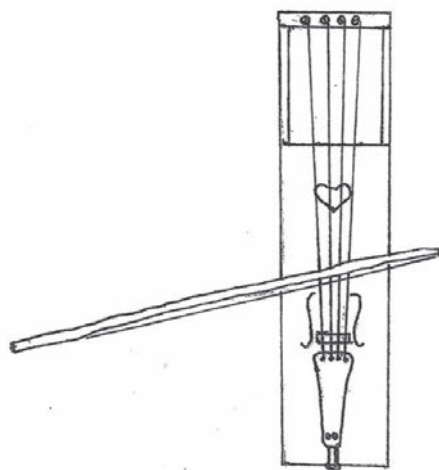


Figure 18. Bowed lyre of Johannes Hoas, Vancouver, Canada, made in the 1950s.

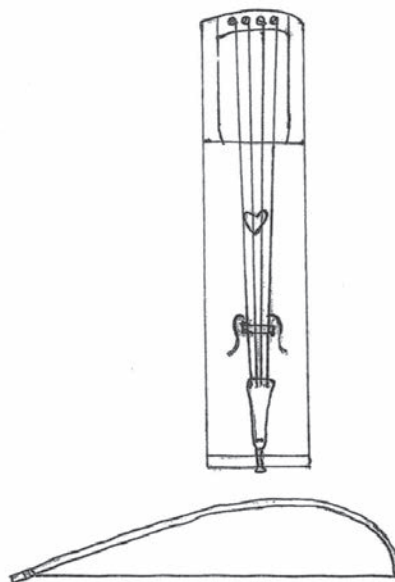


Figure 19. Talharpa and bow of Anders Vaksam, Vormsi, Estonia, obtained in the 1920s.

Some of the bowed lyre repertoire of these migrants may have survived. On a tape of Swedish folk music from Canada (Norrman 1986: 22, 51–54), Hoas plays two tunes reputedly from Hiiumaa, including one with “a ceremonial character”.¹³ The latter could be a wedding tune. Several tunes attributed to Sigalet, including a wedding march, were transcribed by Olof Andersson from Swedish refugees allowed to leave Soviet Ukraine in 1929. Although Sigalet left Ukraine under duress four decades earlier, after tsarist officials closed his family's tavern and his windmill was torched in a religious dispute (Utas 1959: 115, 140), he was recalled as the community's last master of old tunes (Norrman 1986: 13, 21, 40–42). Though both Sigalet and Hoas were also fiddlers, the limited range of notes and ceremonial nature of several of their tunes make it likely that these were once played on the bowed lyre.¹⁴

EVOLUTION OF THE INSTRUMENT

The earliest bowed instruments in Europe were in Moorish Iberia in the southwest and in the Byzantine Empire in the southeast. In both cases, instruments of the fiddle or lute type, with necks instead of handholes, were depicted with bows in the tenth century. This was shortly after the documentation of bowing in the Turkestan Basin in Central Asia in the ninth century (Bachmann 1969: 24–43, 47–53, 136–137).

By the eleventh century, bowing had spread across Europe, and was used even on lyres. The practice could have spread to Viking ancestors of Estonia's Swedes via Celts of Western Europe or Slavs of Eastern Europe. Direct contacts with Moors, Byzantines, and Central Asians were also possible in Vikings' extensive travels. There are no images of bowed lyres in Viking art. Remnants of instruments and references in folklore are ambiguous as to how strings of their "harps" were activated (Andersson 1930: 144–166). Yet at the Vikings' settlement of Dublin in Ireland, a bow was found, dated to the mid-eleventh century, decorated with a Viking-style dragon-like animal's head (Homo-Lechner 1996: 98; Buckley 2000: 173). Was it used on a lyre or something else?



Figure 20. Bowed lyre player, eleventh-century painting, Saint Leopold's prayerbook, Kloster Neuberg, Austria.



Figure 21. Bowed lyre player, painting in eleventh-century psalter, Werden Monastery, Germany.

The earliest proof of bowed lyres may be in a painting in the eleventh-century prayerbook of St. Leopold at Kloster Neuberg in Austria (Andersson 1930: 231–234; Panum 1971 [1939]: 222–224; Bachmann 1969: xiv, Plate 89; Seebass 1973: Plate 100). Three players have bowed lyres, with a waisted form (like the number 8) and rounding of both the soundbox and handhole frame, plus a visibly separate arched peg-yoke in two cases. One instrument has a cross-shaped soundhole (Fig. 20), also seen on some Baltic bowed lyres. Strings (3) are seen on only one instrument.

Another eleventh-century painting, from Werden Monastery in Germany's Ruhr Valley (Fig. 21), shows the back of a figure-8 instrument, with three strings clearly visible and hints of two more. The left hand grasps a side of the handhole's frame. Its nails or knuckles reach toward the nearest strings, as in the later Baltic traditions.

A rectangular shape, like the Swedish-Estonian type, is another early form. One example is in a bas-relief at St. Finan's Church on Church Island in south-western Ireland (Fig. 22). It has been dated variously – to the end of the first millennium AD (Leisiö 1997: 105), no later than the eleventh century (Panum 1971 [1939]: 226–227), and ca. 1200 (Andersson 1930: 242, 250; Bachmann 1969: xiv, Plate 93). The musician uses his right hand to bow four strings spanning a wide handhole. Another rectangular example, dated ca. 1200, is a sculpture at Grossmünster Church in Zürich, Switzerland (Bachmann 1969: xiv, Plate 96; Seebass 1973: Plate 127). It shows right-handed bowing on a lyre with four strings and an indistinctly demarcated handhole (Fig. 23).

Other early images of bowed lyres are from France (eleventh century), Italy (twelfth), England (eleventh/twelfth–fifteenth), Scotland (twelfth), Germany (thirteenth), and Norway (fourteenth century) (Andersson 1930: 167, 213, 228, 235, 239, 242; 1970: 4–5; Panum 1971 [1939]: 224, 228, 231; Bachmann 1969: ix–x, xiv; Plates 23, 90, 91). Some show a fingerboard or neck across the handhole. Others show a playing position unknown in the Baltic region: the instrument held upside-down (pegs below), or the tailpiece end against the chest or under the chin, violin-style.

These images do not prove the bowed lyre was played at a particular time or place. The artwork or artist could have been brought from elsewhere. The images do establish some exposure of the local population to the concept of a bowed lyre.



Figure 22. Bowed lyre player, tenth–thirteenth century bas-relief, Saint Finan’s Church, Church Island, County Kerry, Ireland.



Figure 23. Bowed lyre player, sculpted ca. 1200, Grossmünster Church, Zürich, Switzerland.

AMBIGUITIES

There are ambiguous cases whose classification as bowed lyres can be questioned. For example, a small, 5-string, thirteenth-century instrument from Gdansk, Poland, with an oval handhole, was called a *Streichleier* ‘string/bowed/struck instrument’ by Ernst Emsheimer (1964 [1961]). No bow, stringholder, or bridge was found with it, and there are no images of bowing of this type of asymmetrical instrument. It may actually represent a forerunner of the Baltic psaltery, a plucked instrument of a similar shape, minus the handhole (Fig. 2(5)).

An instrument with a vestigial handhole may belong to the lyre family morphologically, but not functionally. In Figures 20 and 23, strings are pressed from the front, and the handhole is unused. A functional handhole (Fig. 24) also becomes irrelevant with a neck for all strings to be pressed against (Figs. 25, 26), creating a fingerboard instrument with expendable bracing. These cases are still deemed lyres here, because they clearly derive from lyres and could yield versions where the handhole is again used to reach a string. The latter outcome occurs when some strings are offset from the neck, as on the modern Welsh *crwth*¹⁵ (Fig. 27).

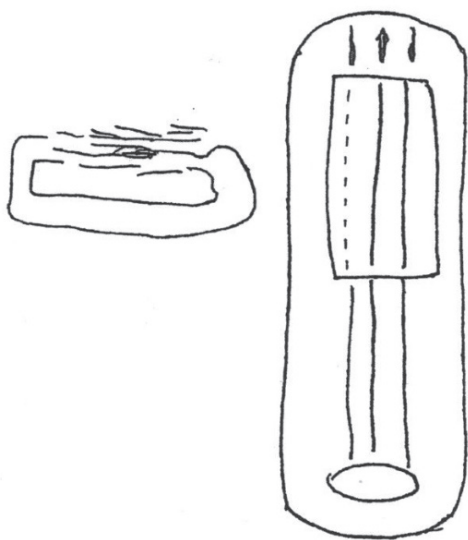


Figure 24. Welsh crwth with a bow, undivided handhole, 1605-10 (after Crossley-Holland 1948: 18).



Figure 25. Bowed crwth-like instrument with a neck, from a painting in an eleventh-century verse-book, Saint Martial Abbey, Limoges, France (Bachmann 1969: Plate 91).

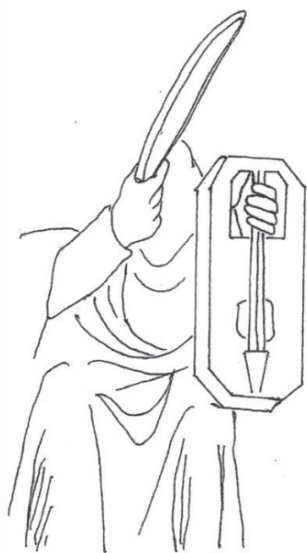


Figure 26. Three-string bowed lyre with a neck, fourteenth-century fresco, Westminster Abbey, London, England (Panum 1971 [1939]: 231).

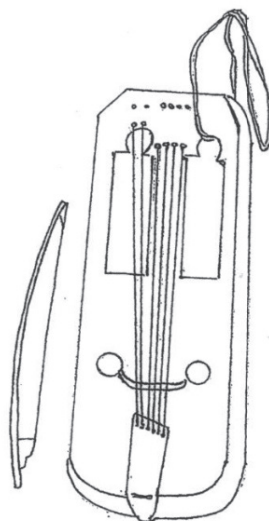


Figure 27. Modern Welsh crwth from 1770 and 1784 sketches (Andersson 1930: 215).

There can also be ambiguity in depictions due to artistic license. For example, Nidaros Cathedral at Trondheim in Norway has a puzzling sculpture of a bowed lyre player (Fig. 28), dated to the second quarter of the fourteenth century¹⁶ (Andersson 1930: 167; 1970: 4–5; Bachmann 1969: Plate 97). The instrument of 3–4 strings, depending on interpretation of lines or bands by the player's knuckles, lacks pegs and a recognizable stringholder. The stylized depiction leaves unclear whether the handhole is narrow or wide.

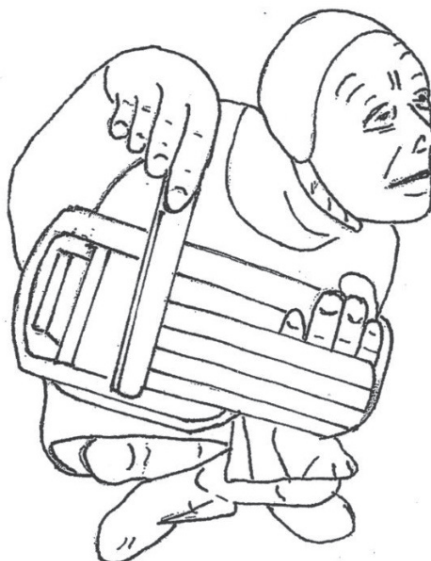


Figure 28. Bowed lyre player, fourteenth-century sculpture, Nidaros Cathedral, Trondheim, Norway (reproduction in Nieminen 2008: 46).

THE BOWED LUTE

Both of the likely sources of European bowing (Moorish and Byzantine realms) had a small instrument known as *rebab* or *lyra*, respectively, later called *rebec* / *rubebe*. Originally plucked but bowed by the eleventh century (Panum 1971 [1939]: 342–344), it had no handhole, so it does not qualify as a lyre, but this type of bowed lute probably inspired the development of the bowed lyre. A sculpted two-string version at the twelfth-century Gamtofte Church at Funen (Fyn) Island in Denmark (Fig. 29) is the earliest known image of a bowed instrument in Scandinavia (Panum 1971 [1939]: 345). The bowed lute disappeared from most of Europe long ago, but is still played in the southeast, among South Slavs, Greeks, Cretans, and Turks.



Figure 29. Bowed lute, twelfth-century stone carving, Gamtofte Church, Funen (Fyn), Denmark.

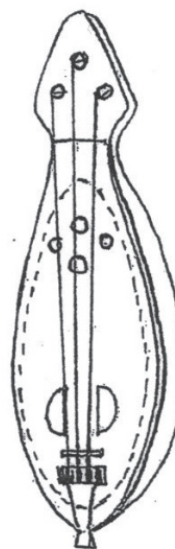


Figure 30. Novgorod gudok, tenth-fourteenth century, Russia (from a sketch and photo in Povetkin 1982: 313).

A Polish version may represent the longest survival in Northern Europe. It is known from Martin Agricola's 1545 treatise, later drawings and paintings, and even twentieth-century recollections (Panum 1971 [1939]: 361, 472–473; Dahlig-Turek & Pomianowska 2014; Knast n.d.). This wide-necked knee-fiddle, called *suka*, had a waisted violin-like body and 3–4 strings, widely spaced for lateral pressing (Dahlig-Turek & Pomianowska 2014: 24, 36, 44, 169–171).

The Russian *gudok* (Figs. 2(1), 30) also had room for lateral pressing, until the fifteenth century (Morgenstern 2018: 110–112).¹⁷ Its other features typical of medieval European bowed lutes included a pear shape, minimal neck, and sagittal pegs, inserted from the back rather than sides of the peg-holder. Archeological specimens date back to the tenth century in Novgorod (Povetkin 2007: 376–380).

An even earlier find of this type is from the ninth century, in the Danish town of Hedeby/Haithabu, now on the German side of the border (Lawson 1984: 151–153). This specimen lacks a soundboard and peg holes but does have a hole for the tailpiece. The unfinished state suggests it was not an imported curiosity but being made locally.

The dating of the Hedeby and oldest Novgorod specimens may seem too early. Bachmann (1969) finds that bows did not arrive in Europe until the tenth century. Yet the varieties of instrument designs, bow shapes, and playing positions in the earliest depictions across Europe hint at an earlier period of unrecorded diffusion and experimentation.

The earliest lutes were perhaps played with a proto-bow. Implements that could get prolonged tones from strings, but were unsuited for picking individual strings, include a fan-shaped pick in a fifth-century Byzantine mosaic, an S-shaped one in a tenth-century German painting, and short friction sticks in paintings from Italy in the tenth and from France in the early eleventh century (Bachmann 1969: Plates 16–20). The latter case is most interesting, involving a small instrument just like those of Hedeby and Novgorod (and southeast Europe today), held vertically on the left knee, with fingers positioned for lateral pressing.

It is easy to imagine the invention of the bowed lyre in a place where both the bowed lute and plucked lyre were known. This seems likeliest where ethnic diversity and mercantile activity promoted cultural borrowing and experimentation. Someone curious about how a bow would sound on a lyre would have had both inspiration and freedom to innovate in such a setting.

Among the reasons to think the bowed lute provided inspiration for the bowed lyre are structural similarities. Both commonly have three or four radiating strings, wider apart at the sagittal pegs than at the bridge, and a hollowed-out body. A Swedish bowed lyre even has a lute's spoon shape (Fig. 15). Vestiges of this shape may also be seen in the curved backs or rounded corners of other bowed lyres. For both types of instruments, the bow is typically curved, with loose horsehair strands tightened by the right hand's grip (Panum 1971 [1939]: 339–340).

There is also a basic similarity in how strings are stopped to change tones. For both instruments, the left hand's curled fingers straighten somewhat to press sides of strings with nails or knuckles (Panum 1971 [1939]: 245), whether fingertips rest atop the lute's neck or reach through the lyre's handhole.¹⁸ In both cases, the left hand's wrist stays near the pegs, in violinists' so-called first position, rather than shifting along the strings.

In an eleventh-century Austrian painting (Fig. 20), a bowed lyre player's left hand reaches around the handhole's frame on the far side, rather than through it. A Swiss sculpture of ca. 1200 (Fig. 23) has the player's left hand in a similar position. So a playing style reminiscent of the bowed lute's, where the left hand's fingers stretch around the far side of the neck, was tried on bowed lyres, before reaching strings through the handhole became standard.

Tuning schemes for bowed lyres and bowed lutes are similar. For both, the gap between the main melody string and the next is a fifth, and the next gap is also commonly a fifth: D G C for the bowed lyre and the reverse C G D for the bowed lute.¹⁹ (In the case of a fourth string on a bowed lyre, it is usually an extra C, as noted above.) This enables droning or continually bowing two or more strings, as opposed to episodic harmonization on the violin.

TRANSITION TO BOWING

To spread so quickly and widely across Northern Europe after the tenth century, the innovation of bowing a lyre must have had some really appealing aspect(s). The new instrument's timbre was quite unlike the plucked lyre's. A bow rubbing a string makes a steady buzzing and rustling sound, unlike the sharp plink and quick fade of a struck string. Interest in prolonged tones is shown by the early use of proto-bows (noted above). Bowed instruments evoke the human voice, in terms of sustained sounds and sliding effects, making them eminently suitable to accompany singers (Bachmann 1969: 56–57, 137). However, a bowed lyre's tone is less predictable in comparison with fingerboard instruments, varying with the pressure on the string in open air.

The novelty of a drone was surely appreciated. The medieval era in Europe was a time of experimentation with bourdons on a variety of string instruments, as well as on bagpipes.²⁰ Yet this meant a loss of rich and varied chords, which require more strings than bowed lyres tend to have.

Bowing promoted modification of the lyre, from a design suited for plucking. The latter technique gets only one clear note per string. Shortening a plucked string's vibrating section yields other tones, but these are muffled without a hard fingerboard to press against. Finger-stopping during bowing yields multiple clear notes per string, so complex melodies fit onto just one or two strings. This favored reduction of the number of strings, a narrower shape, and a curved bridge to raise strings to different heights for selective bowing. A twelfth-century Freiburg sculpture illustrates the process: its lyre is set up for eight strings (Seebass 1973: Plate 31; six strings in Andersson's drawing, 1930: 228), but only four pegs hold strings; the player's scepter may be a proto-bow.

The changes may not have been immediate, as a lyre could be alternately plucked and bowed. Bergelt (1986: 230–232) offered a plausible scenario, where some strings became inaccessible to the bow by being wound lower around pegs. This would prevent cacophony from bowing all strings simultaneously, without impeding access to any string for plucking.

Bowed instruments' names among Finnic peoples suggest diffusion from Swedes. As noted above, Estonians usually call their bowed lyre *rootsi kannel* 'Swedish psaltery' or *hiuu kannel* 'Hiiumaa psaltery', after the large island where many Swedes once lived and played it. Finns may have applied the term *harppu* to the bowed lyre, derived from the Swedish *harpa* 'harp'. Unlike Väisänen and Andersson, Nieminen (2007: 19) thinks this loanword applied to the Finnish bowed zither (with a fretboard, no handhole), but it is still noteworthy that Finns linked a Swedish word to bowing and to an instrument having a melody and a drone string (Panum 1971 [1939]: 274–275). In both Finland and Karelia, the implement for stroking strings could be called *roka* (Andersson 1930: 62–64), evidently a Finnicized version of the Swedish *stråke* 'bow'.

DERIVATIVE INSTRUMENTS

Why did the bowed lyre generally decline in popularity after the Middle Ages? It was at a disadvantage against similar-sounding instruments offering more volume from a larger soundbox, greater range from a long neck, and more precision via wooden keys pressed against strings (hurdy-gurdy, keyed fiddle). Such instruments used tangential string-stopping and supplementary (drone or sympathetic) strings resonating along with the melody string(s), so basic features of the bowed lyre and bowed lute remained in vogue.

A likely derivative of the bowed lyre is the Icelandic elongated *gigje* or *fiðla*, with 2–4 strings of horsehair or metal. Lacking a handhole, the design was influenced by the Norwegian *langeleik* (like the Swedish *hummel* or German *Scheitholt*), a plucked trough-shaped instrument to which Icelanders applied the bow and evidently the string-stopping technique from a lost form of the bowed lyre. To play the form that survived in Iceland (Fig. 31), the back of the left hand rests on the soundboard's edge, and curled fingers rise to press knuckles against the elevated melody string (closest to the player) in open air, while the right hand bows melody and drone strings simultaneously (Panum 1971 [1939]: 269–270; Heimisdóttir 2012: 11–13). The left thumb is not needed to hold the instrument, which rests on the knees or on a table, so this digit can be used for string-stopping. An extra-long melody string also enables surpassing the bowed lyre's range.

The trough-like version of the Latvian two-string *giga* closely resembles the Icelandic *gigje* in name and appearance. Used for bass accompaniment, it is played by pressing strings down against a fretboard, however. Its playing style suggests derivation from something other than a bowed lyre, like the Swedish *psalmodikon*.

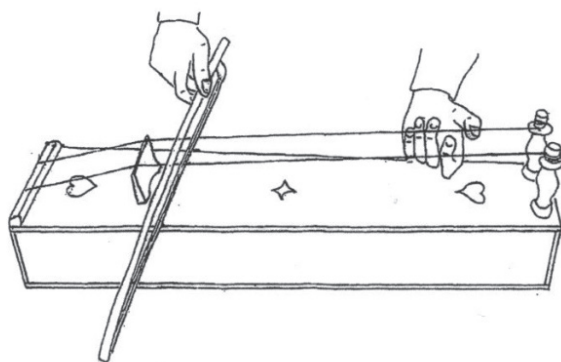


Figure 31. Icelandic fiðla reconstructed by Chris Foster, traditional hand positions (from a photo in *Heimisdóttir* 2012: 13).

REVIVAL IN SWEDEN

During World War II, most Vormsi Islanders evacuated to Sweden, mainly to the Stockholm area. The few bowed lyre players among them left their instruments behind. A quarter century passed before bowed lyres appeared at gatherings of the refugee community. This began with a 1968 presentation of two bowed lyres, representing Vormsi and Nuckö, that Anders Westerberg (1912–2000) had just made. Johannes Österberg (1919–1975) and Johan Ahlström (1901–1989) soon followed his example, each making two instruments.

Virtually no one outside their transplanted group knew of the tradition until 1975, when Swedish Television 1 showed Johannes Österberg playing *talharpa* in the program *Visor kring Östersjön* (Tunes around the Baltic Sea). He recounted how he had learned to play as a lad at Vormsi, when an old man (probably Anders Appelblom)²¹ decided he did not want to die with the secret of how to play. Two of three parts of the medley Österberg performed were variations of tunes Hans Renqvist played in 1903–1904, and Anders Ahlström played another version of one of these back then. This suggests considerable stability in the bowed lyre repertoire of Vormsi.

Swedish amateur musicologist Styrbjörn Bergelt (1939–2006) learned to play the traditional way, mostly from Österberg.²² Inspired by Andersson's research, Bergelt had already made a bowed lyre in 1971, but was unsure about how to play until he saw Österberg perform (Leydon 2006). Bergelt published transcriptions of bowed lyre tunes with his phonograph record *Tagelharpa och*

videflöjt (Bowed Lyre and Willow Flute) (1979) and in the music newsletter *Sörmlandslåten* (Sörmland Melody) (1982) (Suits 2010: 30). He also taught courses in instrument-making and playing, and shared his knowledge through articles, compact disc (CD) booklets, concerts, and radio programs.

Among Bergelt's students were two prominent descendants of Swedish refugees from Estonia. Svante Lagman of Linköping (born 1955, with ancestral roots in Estonia's mainland district of Rickul/Riguldi) played radio duets with Bergelt and still performs for the refugee community. Sofia Joons Gylling (born 1972, with roots on Naissaar/Nargö Island) took instruction from Bergelt after moving from Sweden to Estonia in 1994 and getting a replica of a bowed lyre she measured at the Estonian National Museum in Tartu, from restorer and instrument maker Roland Suits. During 19 years of study and work in Estonia, she produced CDs featuring bowed lyre music, helped organize instruction camps and an international bowed lyre video project, and directed the August Pulst School (headquartered in Viljandi), for tutorials on folk instruments. After moving back to Sweden and later to Finland, she kept up ties with musicians in Estonia and still performs there.

Bergelt expressed disappointment that the bowed lyre did not get more attention in Sweden (Leydon 2006). He noted that the *nyckelharpa* (keyed fiddle) is much more popular there. But his legacy also includes his impact on musicians and researchers in Finland and Estonia.

EAST BALTIC REVIVALS

After wartime evacuation of Swedish-Estonian players and deaths of the last prominent Estonian ones in the 1950s, no active musician familiar with the bowed lyre tradition remained in Estonia. In the 1970s, Toivo Luhats of Tallinn (born 1938) taught himself to play a *hiiu kannel* made by his father Elmar Luhats from southeast Estonia. Toivo Luhats decided to tune his four-string bowed lyre like a violin, with the farthest string tuned the highest (rather than the closest string, as was traditional on the bowed lyre). He found it natural to press strings with fingertips, as on a violin. His televised performance in 1983 reveals other non-traditional aspects of his playing, including general neglect of the first string for melody and use of a thumb sling of leather in the nearest corner of the handhole.²³ Traditional aspects include a rectangular-shaped instrument, a loosely strung bow, and steady droning. Promoting the bowed lyre as an integral part of Estonia's folk music heritage, Luhats taught his style at the Piibarid Hobby Center for youths' folk music education in Tallinn and performed with the Leegajus ensemble. He oversaw the production of 15 bowed

lyres by music teachers at a camp at Leisi on Saaremaa Island (telephone interview of October 30, 2012, in Tallinn).

A larger revival began in Estonia in the early 1990s. Ain Sarv (1948–2006), a bagpipe and *kannel* player in the Leegajus ensemble and a founder of the Swedish-Estonian Culture Association (in Estonia) in 1988, met Styrbjörn Bergelt in 1985 and received two bowed lyres made by him and one by Anders Westerberg. Sarv did not become a bowed lyre player himself, but his daughter Maarja did.

Sarv loaned one instrument by each maker to Raivo Sildoja (born 1970), studying at Viljandi Culture College (now Academy) in the early 1990s. After making repairs, Sildoja copied Bergelt's lighter and more sonorous instrument, made of thin pieces of wood, with a soundpost and bass bar under the soundboard, as on violins. He respected Sarv's insistence on using horsehair instead of metal strings. Sildoja became the main producer of bowed lyres in Estonia, having made some 75 so far. He has performed with his family ensemble and the folk-rock group Oort. His wife Krista (née Kaljumäe, born 1973) has performed in several ensembles and became an instructor for bowed lyre and violin at the Estonian Music and Theater Academy, at Viljandi Culture Academy, and at the Folk Music School of Mooste in eastern Estonia.²⁴

Bowed lyre instruction is included in the folk music program of Viljandi Culture Academy, an institution of higher learning affiliated with the University of Tartu. Joining Sarv to lobby effectively for such a curriculum in the early post-Soviet era (1990s) was Anneli Kont-Rahtola (born 1964) of the Sibelius Academy, today part of the University of the Arts. She had gone to Finland from Estonia to study violin in the late Soviet era, and learned to play *jouhikko* and *talharpa* in 1990 from Maija Karhinen, who was taught by Rauno Nieminen. Kont-Rahtola made bowed lyres for herself and Viljandi's new academy (e-mail of Dec. 12, 2012).

In Finland, decades of decline in bowed lyre playing had ended by the 1980s. Leading the revival there was Rauno Nieminen (born 1955).²⁵ He learned to play from folk music professor Martti Pokela and other self-taught players, but credits Jouni Arjava of Helsinki (born 1930) most for showing him the traditional style, with constant droning and a tightening grip of the bow. The latter had learned the art from his father Väinö Arjava/Lamberg (1899–1976), son of renowned *jouhikko* player Pekka Lamberg of Sortavala in Karelia (1863–1929). Jouni Arjava first performed at a school event in 1945/1946, on his grandfather's *jouhikko*, as reported by Nieminen in an interview on June 3, 2024. The violin-maker Carlo Bergman (1938–1989) was the foremost *jouhikko* maker in the early years of the revival, crafting some 100 instruments from the 1950s to the 1980s.

Nieminen began making *jouhikkos* in 1977, and has helped some 300 people make their own, mostly at the College of Craft and Design in Ikaalinen. As a member of Primo (Primitive Music Orchestra), Jouhiorkesteri, and other ensembles, he has popularized the bowed lyre through many radio and television broadcasts. He was inspired to do research on the instrument by Bergelt, with whom he exchanged visits and information. Demand for bowed lyres has grown significantly in recent years. Nieminen now makes even Swedish-Estonian *talharpas*, for players in Finland who opt for a wider handhole, so they can play the melody on two strings.

A noteworthy Karelian customer was Leo(nid) Sevets (1965–2016) of Petrozavodsk, in the Lake Onega area in northwest Russia. He played *jouhikko* in the ensembles Talvisovat and Myllärit, also as a soloist. At Nieminen's home in Finland in 1990, Sevets took lessons, and two years later got a *jouhikko* from his host.

The Karelian visitor already knew about the bowed lyre, perhaps via Ruth Niskanen, of the Kantele Ensemble of Petrozavodsk from 1939 to the 1950s (Nieminen's e-mail of December 4, 2018). It is unclear how she and another violinist in the group (Lili Rautanen) learned to play the *jouhikko*. They may have used *jouhikkos* solicited by the ensemble's founder Viktor Gudkov through a newspaper ad in 1935. When Niskanen arrived in Karelia in 1932 as a youth from Minnesota in the United States, the *jouhikko* was still being made and played in the Karelian countryside, e.g., by Semoy Tupitsin (Semyon Vasilyevich) at Tulomajärvi in the Aunus/Olonetsky district, as late as 1943 (Nieminen 2007: 35–36).

MOMENTUM IN ESTONIA

Encouraged by both Bergelt of Sweden and Nieminen of Finland, Janne Suits (Mängli) (née Tamm, born 1980) became the foremost researcher of the bowed lyre in Estonia. She was among the first Estonian students to study the instrument at Viljandi. She organized an international bowed lyre conference at Vormsi in 2005, and with Sofia Joons arranged a second one in Viljandi in 2008, resulting in the film *Talharpa* (2009). At Rauland Folk Culture Institute of Telemark University in Norway, Suits wrote a master's thesis (2010) on the Estonian bowed lyre. At the Traditional Music Center in Viljandi, she has directed the music library and the August Pulst School for folk instrument tutorials.

Vormsi's bowed lyre workshop is held every summer for several days, usually at Hullo. Instructors have included Janne Suits (Mängli), Krista Sildoja, Sofia

Joons Gylling, and others from Finland and Sweden. Bowed lyre making has been taught there by Mart Aardam, Mihkel Soon, Rauno Nieminen, and local crafts teacher Algor Streng. Learners include local residents, music teachers and musicians from across Estonia, and foreign visitors. The instrument is being heard again at local festivities, and lore about it has spread far beyond Vormsi. Participants have arranged bowed lyre tutorials, jam sessions, and concerts elsewhere in Estonia.

Dozens of players often meet to upgrade skills and learn new tunes. Respect for tradition is evident in their interest in tunes from over a century ago, including Finnish/Karelian ones. Players generally avoid applying violinists' effects, such as glissando, vibrato, staccato, prolonged trilling, not traditionally used on the bowed lyre. Players generally do not use sheet music to learn tunes, or written instructions to pick up new techniques. Instead, they rely on watching and listening to others, with some attention to audio tracks and video/film clips. So the process of transmission is semi-traditional, based on observation and imitation in intimate settings but not in the family and village contexts of yore.

There is a major departure from tradition in fingering style. Some players with violin experience press the first melody string with the fingerprint side, while using nails or knuckles on the second string. This mixed method is popular and efficient, enabling very fast movement between strings. Some Finnish players also use this ergonomic style.

The number of players in Estonia is greater than at any time since the instrument-burning fervor of a century and a half ago, yet small enough to raise concern about the long-term viability of the tradition. Bowed lyre makers are really rare. Yet several developments justify optimism. Interest in the instrument has spread far beyond the areas of Swedish settlement in northwest Estonia. The bowed lyre is widely accepted even by ethnic Estonians as part of their own folk music heritage. Young musicians are proud to show mastery of an archaic instrument, not just for domestic audiences but for tourists and listeners abroad. The social base of the bowed lyre has shifted from isolated rural settings to urban areas, where it is easier to meet other enthusiasts. Once played only by men, the bowed lyre now has many female players, especially prominent as leaders of the revival in Estonia. A new institutional base promoting the bowed lyre includes the Viljandi Culture Academy, Folk Music Heritage Center in Viljandi, Folk Music School at Mooste Manor, the Swedish-Estonian (Rannarootsi/Aiboland) Museum in Haapsalu, a non-profit association called Iiu Kintsuviul (Hiiu Thigh Fiddle) in Käina on Hiiumaa Island, workshops and camps for learning how to make and play the instrument. More Estonians than ever now know of the bowed lyre, which has an image of being both ancient and "cool" or intriguingly fashionable. No longer restricted to traditional folk

music, it appears in new contexts such as performances of the folk-rock group Oort, heavy-metal rock group Metsatöll, Estonian-Welsh duo Sild, and experimental duo Puuluup, featuring looping and other surreal effects. The latter group's combination of traditional playing style and innovative choreography was featured in the internationally televised Eurovision Song Contest of 2024, as part of the act that first won the national competition in Estonia. What better evidence that the bowed lyre has come to draw unprecedented attention?

CONCLUSION

The development, spread, decline, and revival of the bowed lyre were all profoundly affected by international contacts. Inspiration for applying a bow to a lyre probably came from North Europeans' exposure to bowed lutes of Moors and/or Byzantines, possibly via Celtic or Slavic intermediaries, respectively. In the two countries where bowed lyre traditions are most viable today, Baltic Finnic groups (Finns and Estonians) have linked bowing with Swedes, a hint that bowed lyres arrived via Vikings, Crusaders, or traders from Sweden.

The relative isolation of the Swedish-Estonian islands and Finnish-Karelian frontier favored the preservation of bowed lyre traditions, against pressures and temptations to convert to new instruments with stabler tuning, louder volume, and wider ranges of notes. Yet severe outside threats to such endurance eventually extinguished bowed lyre playing in Estonia by the mid-twentieth century, as had happened in Sweden and elsewhere earlier, and nearly did so in Finland/Karelia. Imported religious fervor led to bonfires of instruments linked with secular pleasures – at least thrice among Estonia's Swedes. Invaders' interference led to deportation and exile of players in both tsarist and Soviet eras. Exposure to new instruments (e.g., via military service and radio) made the bowed lyre seem *passé*.

The recent revival of bowed lyre traditions in Estonia is due to transfer of instruments, information, and encouragement from Sweden (where Swedish refugees from Estonia helped rekindle interest) and Finland (where the bowed lyre tradition still flickered). Foreign museums, archives, publications, recordings, and researchers provided important resources. Bowed lyre enthusiasts are now linked to a wide network, with modern methods of electronic communication and rapid travel facilitating exchanges and visits. This makes the bowed lyre's extinction less likely, in any land where it is now played, and even favors its spread to other lands where it was once known or where immigrant groups want to reconnect with their ancestral musical heritage.

NOTES

¹ Archeologist Jonathan Lindström (2015) found in a Danish archive the earliest documentation of Swedish colonization of Estonia on Vormsi Island in 1206, during a Crusade led by the Archbishop of Lund (southern Sweden, then under Danish rule), with support from both Danish and Swedish kings. The migrants evidently came from Sweden's southeastern isle of Öland (Lindström 2015: 16–18, 189, 198–201, 224, 262–263, 371–372, 382–386, 396–397).

² Players of Estonian ethnicity appear in the memoirs of August Pulst, who organized tours of folk musicians in the 1930s to fund the Music Museum he founded (Sildoja 2014). These include Aadu Volberg (1851?–1923?+; he was reportedly 72 years old in 1923), Mart Kaasen (1870–1955), Anton Proos, Peeter Piilpärk (1872–1948), and Johannes Rosenstrauch (1891–1958). The last two did not live in areas with bowed lyre traditions but learned to play from others on tour.

Kaasen played in a 1938 film clip, at the Estonian National Studio (see <https://www.youtube.com/watch?v=DQHAFhIjP5M>). Eight of his recorded tunes are included on the CD that Nieminen added to his 2007 book. Two of Piilpärk's tunes are also found there.

³ Andersson (1930: 171) points to similar narrow handholes of the Dalarna specimen and Finnish/Karelian ones. Bergelt (1986: 232) links the Swedish term *sotharpa* 'soot-harp' to the Finnish/Karelian word *soitto* 'musical instrument'. The Swedish term dates from the late sixteenth century (Andersson 1930: 191), when Forest Finns began relocating to Sweden.

⁴ Larsson (1977: 7) reports that variants of the word *talharpa* were used on the islands of Vormsi and Hiiumaa. That this meant 'horsehair harp' (*tagelharpa* in standard Swedish) and not 'pine harp' (*tallharpa*), both meanings offered by Rußwurm (2015 [1855]: 462), is clear from the form *tageL-harpa* used by Pakri Islanders, who did not play it themselves.

⁵ Väisänen (2002 [1928]: L) and Andersson (1930: 64, 68) report the D G C tuning, with the lowest note as G or C. Andersson gives a reportedly older tuning of C low-G low-C, noted by Väinö Salminen in Karelia in 1906–1908. This is suitable for minor-key (Cm) melodies, where fingers press the melody C-string to get D Eb F G.

The tuning of two-holed *jouhikkos* is unknown. One player said the second handhole was just a way to reduce weight (Nieminen 2008: 79–82). Another used it for fingering the third string (Andersson 1930: 69, 96). A two-holed design allows quick transitions between tunes/passages in different keys or octaves, with the middle string over the dividing pillar providing the same drone note for both of the other strings. The player can move his left thumb so that it grasps the middle pillar, so the other fingers do not need to stretch so far to play the melody through the far hole.

⁶ The tonic note (C here) can be obtained on a 4-string *talharpa* by shortening the drone string (from low-G to C) or bowing the open third and fourth strings (also C's, but typically an octave lower). Johannes Österberg and Johan Ahlström, both of Vormsi and Stockholm, did this on tapes obtained from their descendants – son Kenneth Österberg and granddaughter Monica Ahlström, respectively. The same move is seen in Johannes Österberg's 1975 televised performance, in Styrbjörn Bergelt's film (Leydon 2006), and among current players in Estonia. One could leave the drone string open and the first string unbowed, to get a G C C chord; adding an E on the first string yields a full chord.

Recordings, transcriptions, and string thicknesses reveal that the tuning scheme of Jurri Bruus of Hiiumaa (D low-G C low-C) was like the typical Finnish/Karelian

one, with a bass tonic string added as the fourth string. Mainland Estonian players Mart Kaasen and Peeter Piilpärk also used that scheme.

Rußwurm (2015 [1855]: 462) and Andersson (1930: 119 re Bruus) report that the *talharpa* was tuned in fifths, like a violin, which would mean D G C F (in descending order) for the four-string version. This is plausible with metal strings, but not with horsehair or gut strings, as the lowest string (F) is too slack and weak-sounding. Such a note is not heard on old recordings. When instrument maker Raivo Sildoja tried the all-fifths tuning with horsehair strings, he was disappointed, and arrived independently at the Österberg/Ahlström tuning (D low-G low-C low-C).

- ⁷ The bishop of Ösel-Vik (Saaremaa Island and Läänemaa County) saw the Christian settlers from Sweden on Vormsi Island as allies in the mission to convert Estonian pagans, so Vormsi Swedes had a rather light burden to carry for their bishop-landlord. Local lore about the medieval era recalls Vormsi's obligation to provide a couple of maidens to tend the bishop's gardens at Haapsalu Castle in summer (Rußwurm 2015 [1855]: 141). When the Swedish king created estates on Vormsi from the 1580s and made islanders answer to lords of the new manors, ever-increasing demands for tax payments, grain deliveries, and labor obligations – enforced by flogging and eviction – eventually made Vormsi Swedes as poor as Estonian serfs (Kanarbik 2003: 12, 26–27, 48–49; Rußwurm 2015 [1855]: 84).
- ⁸ Ahlström is also called Urbas Anders, after the name of his farm. Andersson (1970: 8) reports 1842 as Renqvist's birth year, but an age of 62 is given in fieldnotes of December 1903 or January 1904. The birth year could thus have been 1840, 1841, or 1842. Nieminen first reports 1840 (1984: 57), then 1849 (2007: 98). In the register of persons at the Cultural Association of Estonia's Swedes in Stockholm, Sven Ahlström found Renqvist (spelled Rönkvist) with an 1840 birth year (undated letter to *Kustbon's* editor prior to the December 2007 issue, obtained from his daughter Monica Ahlström). The same database currently shows 1842 as the birth year.
- ⁹ Berggren's learning to play the bowed lyre was recalled by his daughter Ingrid Berggren Samson, interviewed by Lena Weesar in Stockholm (e-mail of October 23, 2015). His deportation is noted by Sven Ahlström (2000: 5). Weesar reports his place of death as Irkutsk, Russia. Ironically, shortly before his deportation, the Communist Party in Läänemaa County expressed appreciation for Vormsi's preservation of folk songs and *talharpas*, in the face of religious opposition to "sinful" traditions (see N. 1941).
- ¹⁰ The recordings were neglected for almost a century. *Jouhikko* player Pekko Käppi found a taped copy at the Sibelius Museum in Turku in 2004. Phonograms then turned up in archives in Berlin and Stockholm. Nieminen's book (2007) has a disc with all six tunes Bruus recorded.
- ¹¹ The earlier fire is noted in a photo caption by Jan Utas (1969: 61). The 1835 fire was accidental, due to thatched roofs catching fire during a windstorm (Utas 1959: 73–74).
- ¹² This is atypical, but not unique. Anders Ahlström of Vormsi (in transcription from 1903–1904) and his son Johan in Stockholm (on tape) both pressed the third string to get a rare low-E, in different melodies. Johan also got low-F from pressing the third string, which made low-C when left open.
- ¹³ Village leaders (priests, sextons, teachers) suppressed the community's secular musical culture, except for old ceremonial music and "harmless" song- and dance-games (Norrman 1995: 113). Nevertheless, Hoas learned from Sigalet some waltzes the latter said were from Hiiumaa (Hoas 1962: 4), and these are on the tape Norrman analyzed. It is unclear whether Hoas played the bowed lyre on the tape.

¹⁴ Some of their tunes are unsuited for the bowed lyre, due to overly high notes, a key change, or an awkward grace note, on a different string than the next note.

¹⁵ The archaic form of the Welsh *crwth* is seen in a drawing from 1605–1610 (Fig. 24), with no neck and a wide handhole, like a Swedish-Estonian bowed lyre (Andersson 1970: 7, 31–32, Plate IIIa; Crossley-Holland 1948: 18). The modern *crwth* (*crout*, *crouth*, *crowd*) (Fig. 27) is a 6-string hybrid instrument. Some strings are pressed against the neck spanning the handhole; others are plucked by the thumb in open air or bowed as drones (Panum 1971: 241–242). The tuning recalls Baltic bowed lyres: an octave pair for each of the three notes C G D or G C D (Andersson 1930: 226).

Plucking (not bowing) of a fingerboard lyre is shown in the ninth-century Bible of Charles the Bald, ruler of the Franks and Holy Roman Empire (Andersson 1930: 227–228). The neck was evidently adopted for the lyre, perhaps from the lute, before bowing arrived in Western Europe.

¹⁶ Andersson first dates the sculpture to the twelfth century (1921: Plate VI, Fig. 1; 1930: 166–167), then the fourteenth, due to new information (1970: 4–5).

¹⁷ Whether to call the medieval Russian instrument *gudok* is debatable. The term is not documented until the late fifteenth century (Morgenstern 2018: 110–111).

¹⁸ Andersson (1930: 138) credits Swedish musicologist Tobias Norlind (1922: 117–118) for drawing attention to this, as well as to similar nail-stopping techniques. Neither scholar is explicit about how the two types of instruments might be linked.

The bowed lute's main melody string is the outermost one, while the bowed lyre's is the innermost one, for an ergonomic reason. Playing the melody is easiest on the string closest to the instrument-grasping hand's fingers.

¹⁹ The C G D tuning was noted by Martin Agricola for sixteenth-century bowed lutes, including Polish ones (Panum 1971: 361; Knast n.d.), and by Bachmann for current ones in southeastern Europe (1969: 97–98). Morgenstern (2018: 118–119) notes a G G D tuning for Russian *gudoks* in the eighteenth-nineteenth centuries, congruent with the G D on a two-string *rebec* noted by Jerome of Moravia in 1250 (Panum 1971: 360–361). Like the D G C (C) of Baltic bowed lyres, these set-ups allow droning, with chord accents from three or four strings. This could involve the *dubbelgrepp* (double-grip or -stop) Bergelt saw in photos of Estonia's Swedish players (Suits 2010: 39–42) and can be inferred from some transcriptions (Nieminen 2007: 112–142). Clear evidence of stopping two strings simultaneously can be found in the 1938 film of Kaasen.

²⁰ Droning with a crank was done on the *organistrum*, a two-man guitar-shaped wheel-lyre for sacred music, depicted in Western Europe in the twelfth century. It was analogous to the one-man hurdy-gurdy from the thirteenth century (Panum 1971: 292–300). Bagpipe drones first appeared in thirteenth-century England (Allmo 1990: 411–412, citing Fritz Schneider's research).

²¹ Bergelt (1979: 4) calls Österberg's instructor Mas-Anders, born in 1862. This is the same man Lindström 1990 [1967] calls Mas-Bill, as confirmed by Lena Weesar (e-mail of June 30, 2022). Mas is the name of her great-grandfather's farm, and Bill means 'childless married man', so Mas-Bill is a nickname. Anders Appelblom (1861–1939) held his bowed lyre for a 1930s photo, but could no longer play due to illness (Suits 2010: 27). He lived at Mas farm in Kärrslätt village, and was a farmhand at nearby Smenes farm, where young Österberg lived. Both monikers Mas-Anders and Mas-Bill applied to Appelblom. Another Stockholm player, Anders Westerberg, grew up on nearby Kampesa farm in Kärrslätt, and may also have been taught by Appelblom. The third Vormsi player in Stockholm, Johan Ahlström, presumably learned to play in Borrby from his father Anders.

²² Bergelt was a hospital photographer, renowned for his knowledge of folk music. He received Swedish government grants for research and recording, designation as a national folk musician (*riksspelman*) and prestigious Zorn prizes for performing on the bowed lyre and other folk instruments, commendations from the Swedish Music Museum, invitations to present at ethnomusicology meetings and to write about the bowed lyre for the *New Grove Dictionary of Music and Musicians* (1999). He prepared and narrated radio programs about the bowed lyre in 1980/1982 and 1988.

One report (H.M. 1983) says Bergelt took up the bowed lyre after finding a damaged one among the effects of his father, a friend of Otto Andersson. Actually, Bergelt credits getting Andersson's book (titled with the name of the instrument) from his father in 1970 as his source of inspiration (Sjöberg 1982: 8–9).

Bergelt usually reports first meeting Österberg in 1974 (1979: 1; n.d. (in his undated and archived musical autobiography for a grant application); Allmo & Bergelt 1995: 70). In Leydon's film, he mentions that the 1974 meeting came after seeing Österberg's televised performance in a program led by Olle Adolphson. The only such broadcast in the Swedish Media Database, at the Royal Library in Stockholm, was on May 21, 1975, with a slightly longer version on July 19, 1976. Bergelt's earliest report (1979: 5, 8) presents the initial 1974 meeting and the 1975 TV show as unconnected events.

²³ Luhats' televised performance is available online at <https://arhiiv.err.ee/vaata/59759>. A thumb sling is also seen in photos of Piilpärk, Kaasen, and Rosenstrauch, while Proos has his thumb atop the peg-yoke, instead of grasping the side of the handhole's frame (Nieminen 2007: 138; Sildoja 2014: 23, 116, 136, 160, 163, 291).

²⁴ Information from e-mails by Maarja Sarv (July 30, 2017), Anneli Kont-Rahtola (December 21, 2012), Raivo Sildoja (October 15, 2015; February 12 and 19, April 1, 2019; February 23, 2024), Krista Sildoja (October 9, 2012), and the Sildojas' segment in the *Talharpa* film (2009).

²⁵ The information in this paragraph is from Nieminen's undated manuscript, "My Jouhikkohistory".

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