The Swedish Nyckelharpa in Its Historic Context

A presentation for the Fylgia Lodge, San Francisco, CA

by Karen Myers

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Organistrum

Organistrum, from the Chapel of Boscherville Musée des Antiquités-Rouen

Organistrum, from the Church of San Miguel de Estella, (Navarre), 12th century

From the "Portico della gloria" of the Cathedral of Santiago di Compostela, Spain

Modern reproductions of instrument illustrated on the left.

1 http://www.instrumentsmedievaux.org/pages/organistrum.html
2 ibid
3 http://www.organistrum.net/
4 ibid
Musical Fashions Shape Musical Instruments

Some discussion of the early history of Western music is necessary in explaining the ancestry and origin of the Swedish nyckelharpa.

In the early Middle Ages, vocal music was performed as a single melody line (monophony). Gregorian chant (or plainsong) originated circa 800-1000 AD, from an older tradition of sacred singing in the early church. This musical style was based on scale arrangements called modes which have a theoretical basis going back to Classical Greece via Jewish and Byzantine religious traditions. Our modern major and minor scales are a weak bi-modal descendent of this system. Modern Western classical music developed in a different direction: that of harmonic modulation.

One of the musical innovations of the Middle Ages was the introduction and development of polyphony, the singing of two musical lines simultaneously. This began as singing in simple octave intervals for mixed choirs of men and boys. Later, melodic lines based on intervals of parallel fifths or fourths developed. This style of singing, called organum, was first described around 895 AD. Organum was not true polyphony, featuring an independent melodic part. It was instead a reinforcement of the main melody, typically sung as the highest line. The first reference to organum describes a well-established practice, so the actual date it became popular is not known. True musical notation only began around 900 AD, so earlier history remains obscure.

The practice of organum singing created a parallel fashion in musical instruments, in which continuous sound either in parallel to the melodic line or as a fixed drone became popular. Pipe instruments (in the form of organs and bagpipes) and stringed instruments were particularly well suited to this style.

The organ originated with the Romans. The name derives from the Greek for “instrument”, and it gives its name to the organum style of singing above. It developed from a single pipe per note to registers of pipes per note. One medieval version, the positive organ, required 2 people sitting side by side, one to work the bellows, and the other to pull (or push) the stops to allow air to flow through each group of pipes. Pipes were typically arranged in octaves or fifths.

The analogous stringed instrument of this period was the organistrum, which may have originated in the 11th century. Because of its size, the organistrum was played by two people, one of whom turned the crank, while the other pulled the keys upward. Pulling keys upward is a cumbersome playing technique, and consequently only slow tunes could be played on the organistrum. In the 13th century, however, the organistrum was modified into a portable instrument which could be operated by one person. This led to its widespread adoption by traveling musicians, who helped spread the instrument throughout Europe.

The wheel was rosined, and operated against the strings like a bow. The player pressed stops against the strings to shorten their effective length, and so alter the pitch. The direct descendent of the organistrum was the hurdy-gurdy. One indirect descendent was the nyckelharpa.

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5 Much of this history is usefully encapsulated here: [http://en.wikipedia.org/wiki/Organum] and in related topics.
6 See [http://www.ptloma.edu/music/MUH/early/Positive_Organ/Positive_Organ.html]
7 [http://en.wikipedia.org/wiki/Organistrum]
Hurdy-Gurdy

Modern Hungarian hurdy-gurdy

Hurdy Gurdy Player, by Georges de la Tour

Cathédrale de Burgos, 13th century

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9 http://en.wikipedia.org/wiki/Organistrum
10 http://www.geocities.com/Vienna/Strasse/1558/instrumentarium00.html
11 http://www.mezzo-mondo.com/arts/mm/france17/latour/TOG002.html
12 http://www.instrumentsmedievaux.org/pages/vielroue.html
The *hurdy-gurdy* is a single-player version of the organistrum. It retains the same rosin wheel, as well as the same alteration of pitch by keys bearing tangents pressing against the strings; but in the hurdy gurdy, the keys are pushed up against the strings by the fingertips, rather than pulled from above, and the hurdy gurdy is consequently a much more nimble instrument.

As you can see from the illustrations for both the organistrum and the hurdy-gurdy, individual keys often had multiple tangents to press against more than one string at a time, creating parallel lines of melody. Some strings were unstoppable and functioned as drones.

The hurdy-gurdy in various forms spread widely across Europe and survived as a professional instrument well into the Renaissance. When the fashion for continuous sound and parallel melodic movement died out, as harmonic modulation rose in popularity, the hurdy-gurdy descended in status to an instrument of folk music, and remains popular down to the present day in the folk traditions of several countries, particularly France and Belgium.

Twelfth-century crusaders brought the family of bowed instruments back to Europe from the Middle East and North Africa. The ancestor of our modern violin family, the *rebec* (pronounced "reb-beck") was originally an Arabic instrument - still made today - called the "rabab". Unusually, its sound box was made from a gourd. The body of the European rebec had to be made from wood, since the northern European climate is too cold and wet for that particular gourd to be grown.\(^{13}\)


http://www.luminarium.org/medlit/lyrics.htm

http://www.thecipher.com/viola_da_gamba_cipher-4.html

\(^{16}\) ibid
Different kinds of nyckelharpa. A silverbasharp (Silver-drone harpa), two Chromatic nyckelharpas with three rows of keys (tréradig kromatisk nyckelharpa) – one of them suited for left handed players. They are made by Esbjörn Hogmark’s hands. The older type on the right is made by Hasse Gille.\textsuperscript{17}

The oldest surviving example of the \textit{enkelharpa} is from 1777. The \textit{mixturharpa} is similar to the \textit{enkelharpa}, except that 2nd string also has tangents (on the same key at the tangent for the 1st string) that stop the string and produce the notes.\textsuperscript{19}

\textsuperscript{17} Photo: Esbjörn Hogmark. nyckelharpaforum.net/global/types.htm
\textsuperscript{18} http://www.instrumentsmedievaux.org/pages/nyckelharpa.html
\textsuperscript{19} http://www.nyckelharpa.org/resources/history.html
\textsuperscript{20} www.guitarmaker.ca/nyckelharpa.html
The Development of the Nyckelharpa

The early history of the nyckelharpa is poorly documented. Some unknown innovator(s) combined the principle of one or more ranks of keys with tangents stopping strings, as in the organistrum, with the use of a bow to produce sound instead of a wheel. This modification of the method of producing sound was very much in accordance with the fashion of the period, when guitar and viol-like instruments were alternatively plucked or bowed.

Just as in the rebec, a flat bridge ensured that several or all the strings would be sounded, even when using a bow instead of a wheel. As in the organistrum and later hurdy-gurdy, early nyckelharpas had drone strings and multiple strings stopped by single keys with multiple tangents for parallel melody.

The earliest representation of a nyckelharpa is in a relief on one of the gates to the Källunge church on Gotland from about 1350 depicting two nyckelharpa players. Other images of angels playing the nyckelharpa survive.

There are three surviving examples of the medieval nyckelharpa: one found in the town of Mora in Dalarna, Sweden; one found in Vefsen, Norway in the collection of the Musik Museum in Stockholm, and one found in Esse, Finland. The Moraharpa is dated 1526, and is on display in the Zorn Museum in Mora. These instruments have one row of keys (although some keys stop two strings, making them a mix of melody and drone strings) and two drone strings.

Note that the Moraharpa is shaped like an organistrum, while the Vefsenharpa and the Esseharpa are shaped more like the modern nyckelharpa.

21 http://www.instrumentsmedievaux.org/pages/nyckelharpa.html
22 Photo: Gunnar Fredelius. nyckelharpansforum.net/global/types.htm
23 ibid
25 http://www.nyckelharpa.org/resources/history.html
26 Photo: Per-Ulf Allmo. http://www.nyckelharpa.org/resources/history.html
27 http://www.nyckelharpa.org/resources/history.html
**Sympathetic strings**

Viola d’amore
Southern Germany, 17th century

Hardanger fiddle / **Hardingfele**

Reproduction by Ferdinand Wilhelm Jaura of a baryton after Simon Schodler, 1782

Baryton Viol. 7 fretted strings plus additional sympathetic or thumb plucked strings (running under the widened neck)

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30 www.touristphoto.no/ullensv5.htm
31 http://www.mdw.ac.at/I105/orpheon/Seiten/Instruments/other/baryton.htm
At some point in the late Renaissance or early Baroque sympathetic strings were added. This was a fashionable innovation for many stringed instruments, allowing sound to be both continuous and resonant. Not many types of instrument survive with sympathetic strings, but the \textit{viola d’amore} is one of the better known examples. At the time this was a broad trend encompassing members of the viol family, and folk instruments like the Norwegian \textit{hardingfele}.

The apotheosis of this development was the \textit{baryton}, an instrument derived from the bass \textit{viola da gamba} which included bowed strings, sympathetic resonant strings, and a hollow back through which ran strings which could be plucked by the thumb of the player. The fortunate circumstance that Prince Nicholas Esterhazy, an enthusiastic amateur player of the baryton, was also the patron of Franz Joseph Haydn from 1761-1790 resulted in 126 Trios by Haydn for baryton, viola, and cello, written 1765 to 1775, 25 baryton duos, and a dozen miscellaneous compositions for baryton.

\footnotesize{Tenor nyckelharpa sympathetic strings\footnote{Johan Hedin. \url{http://www.nyckelharpa.se/en/images/thetenornyckelharpa.pdf}} \quad \textbf{Viola d’amore sympathetic strings}\footnote{\url{http://www.fiolinmaker.no/vdab.html}}

\textit{Hardingfele sympathetic strings}\footnote{\url{http://www.siegelproductions.ca/fiddlefarmers/unusualinstruments.html}} \quad \textbf{Baryton peg box: bowable strings, pluckable strings, sympathetic strings}\footnote{\url{http://www.mdw.ac.at/I105/orpheon/Seiten/Instruments/other/baryton.htm}}

\textbf{Even the hurdy-gurdy developed sympathetic strings}\footnote{\url{http://www.richard-york.co.uk/past/hurdy pics.html}}

\footnotesize{33 Johan Hedin. \url{http://www.nyckelharpa.se/en/images/thetenornyckelharpa.pdf}} \quad \footnotesize{34 \url{http://www.fiolinmaker.no/vdab.html}} \quad \footnotesize{35 \url{http://www.siegelproductions.ca/fiddlefarmers/unusualinstruments.html}} \quad \footnotesize{36 \url{http://www.mdw.ac.at/I105/orpheon/Seiten/Instruments/other/baryton.htm}} \quad \footnotesize{37 \url{http://www.richard-york.co.uk/past/hurdy pics.html}}
Building a nyckelharpa

Esbjörn Hogmark’s workshop

http://www.nyckelharpansforum.net/2004b/06.htm
The nyckelharpa underwent numerous transformations as a folk instrument. Most of these focused on the development of more flexible melodic and harmonic techniques.

The *kontrabasharpa* had one row of keys but had two tangents on many of the keys, one for the melody string (1st string) and one for the 2nd melody string on the opposite end of the bridge. Between them was a drone string and about a dozen resonance strings. One played either the high melody and drone strings together, or the second melody and drone ("bass") string together, producing a characteristic sound.39

Around 1810-1830, some of the pegs on the second string were placed on a second row of keys41, and the *silverbasharpa* was created, named for the use of a silver-wrapped gut string for the bass string (to give it more sound).

Both the *kontrabasharpa* and the *silverbasharpa* descended from the *mixturharpa*, along parallel lines of development.

Soon after the advent of the *silverbasharpa* it was found that certain ceremonial tunes were not easy to play with the second melody string tuned to a C, and the *kontrabasharpa med dubbellek* was invented. It has two rows of keys: the lower row stops the second string (tuned to a C), but the upper row has tangents that stop both the first melody string and the opposite bass string (tuned to a D), as in the *kontrabasharpa*. Thus you could pretend it was an old-fashioned *kontrabasharpa* and play the required tunes, or you could pretend it was a new-fangled *silverbasharpa* and play the newer tunes in C and F.43

This is a modern 3-row chromatic nyckelharpa, made by Eric Sahlström in 1980. August Bohlin made one of the first 3-row nyckelharpas in 1926, after being frustrated that he couldn't play along with the fiddle players he was meeting down at Skansen in Stockholm, where he worked during the summer of 1925. Eric Sahlström continually experimented with the design, adding among other things a bass bar and making the top less arched, to make it sound more "pleasant", more like a violin. Note also the move from round sound holes (*oxögon*) to f-holes. It has 16 strings: three melody (keyed) strings (G-C-A), one drone string (C) and 12 resonance strings.44

39 [http://www.nyckelharpa.org/resources/history.html](http://www.nyckelharpa.org/resources/history.html)
40 nyckelharparforum.net/global/types.htm
41 nyckelharparforum.net/global/types.htm
42 [http://www.nyckelharpa.org/resources/history.html](http://www.nyckelharpa.org/resources/history.html)
43 *ibid*
44 *ibid*
The next generation

**Visiting ESI, the Eric Sahlström Institute in Tobo, the Crown Princess of Sweden was given a nyckelharpa. Esbjörn Hogmark and Sture Sahlström built it for her.**[^1]

**Bronwyn Bird’s nyckelharpa pumpkin**

Bronwyn lives in Pennsylvania and started playing nyckelharpa three or four years ago.

* **A healthy living tradition**: The American Nyckelharpa Association ([http://www.nyckelharpa.org/](http://www.nyckelharpa.org/)) has over 150 members, and there are over 25,000 players in Sweden, with more in Denmark, Finland, Norway, England, France, and Germany. The bushes at the festivals are awash with new young players.

[^1]: Photo: Esbjörn Hogmark. [http://www.nyckelharpansforum.net/2004b/06.htm](http://www.nyckelharpansforum.net/2004b/06.htm)

[^2]: Photo: Chris Leydon. [http://www.nyckelharpansforum.net/2004b/06.htm](http://www.nyckelharpansforum.net/2004b/06.htm)

What Lies Ahead for the Nyckelharpa?

We’ve been calling the Sahlström ‘harpa the “fully chromatic modern nyckelharpa” since the 1940s, but recent generations of musicians and builders have been unwilling to stop there.

One logical next step has been to add a 4th key row to the lowest drone string. This modification has not yet gained wide acceptance.

Another very interesting development has been the recent creation of nyckelharpa families or consorts, like the violin and viol families, with treble and bass members. These are being used for both classical and folk music.

And, of course, as the nyckelharpa reaches a wider audience one inevitable direction has been towards electric instruments for performance, following the model of electric violins.

What will be next?

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48 nyckelharpansforum.net/global/types.htm
49 http://www.burg-fuersteneck.de/folk/nyckelharpa_se.htm
51 http://www.nyckelharpansforum.net/2004b/06.htm
52 ibid
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Piles of nyckelharpa

1st photo: Esbjörn Hogmark, http://www.nyckelharpansforum.net/2004b/06.htm;
2nd photo: http://www.burg-fuersteneck.de/folk/nyckelharpa_se.htm

Cover: Eric Sahlström, maybe the greatest nyckelharpa player and builder of his time. Or of all times! Drawing by Margareta Nordqvist i Tobo from an Esbjörn Hogmark photo.
http://www.nyckelharpansforum.net/2004b/06.htm

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