

The Gdańsk *gusli*.

Among the multitude of archaeological discoveries, certain exceptionally rare finds deserve to be called “scientific puzzles”. Unsurprisingly, such finds lead archaeologists into probing research that usually points to one unequivocal answer. In reality, however, this is not necessarily the case. As far as musical archaeology is concerned, one discovery which has almost completely stumped scientists is the “Gdańsk *gusli*”. In Summer 1949, the remains of an instrument were unearthed from a depth of about three metres at a dig site in the old part of Gdańsk. This instrument turned out to be rather difficult to label, which stirred up quite a commotion in the scientific community.

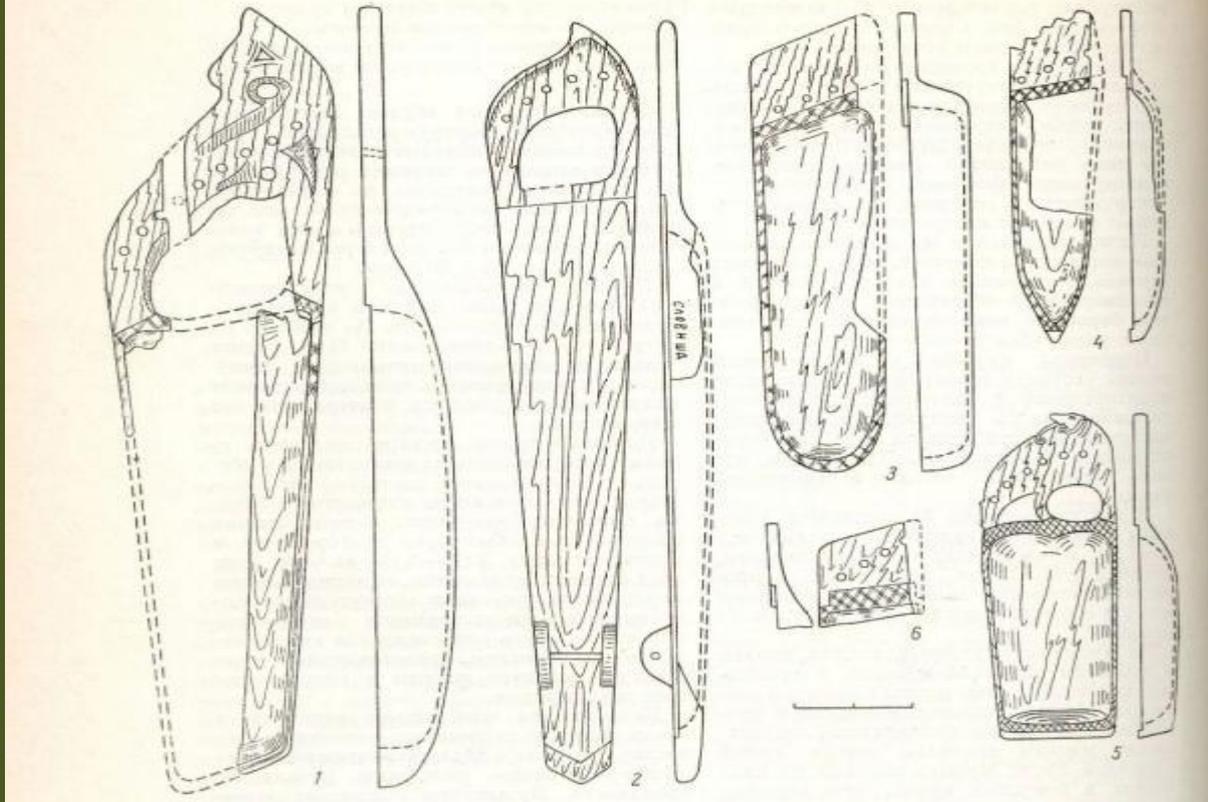


The find was unique because it resembled two independently-functioning types of instruments from the chordophone family.

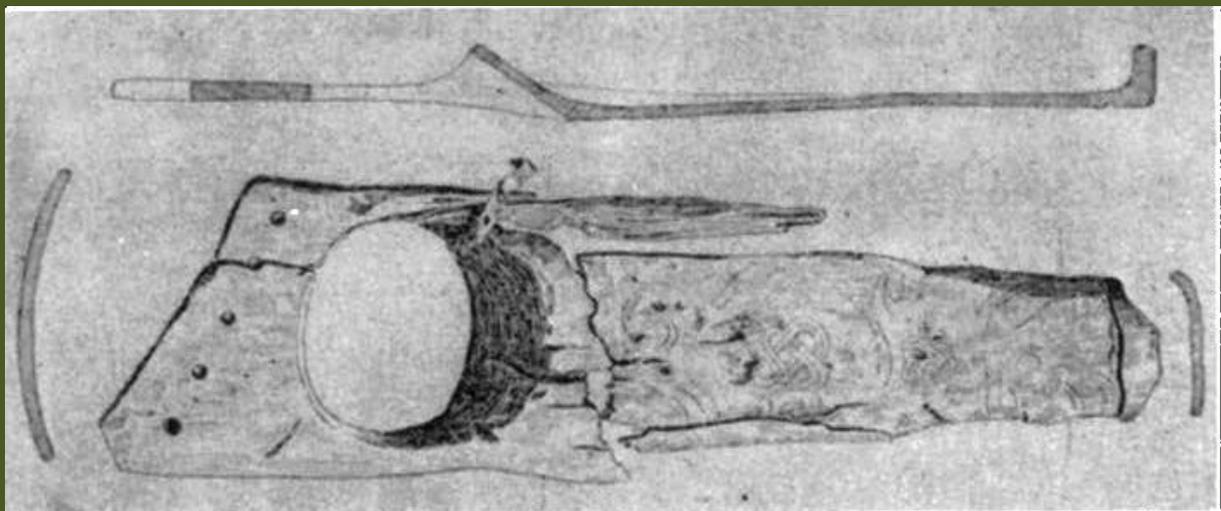
At first sight, it seemed to be a basic trapezoidal psaltery seen previously in Eastern Baltic countries, but it also looked like a bowed harp which was mostly used in Northern Europe.

The first information about this discovery came from the chief archaeologist, Konrad Jażdżewski. Then followed a report by Alicja Simon, which also relied on Jażdżewski's findings. Jażdżewski dated the instrument back to the 12th century, but later research placed the instrument to the period between 1255 and 1275.

Polish experts refer to other medieval Slavonic chordophones as *guslis*, *mazankas* and *pramazankas*. Russian archaeologists use the terms *gusli* and wing-shaped *gusli*. The only other instruments of similar design were a few *guslis* dating from the 11th-13th centuries that had been discovered in Velikiy Novgorod.



Since all the specimens found previously hinted that it was a plucked instrument, the Gdańsk *gusli* caused “scientific agitation” due to a lack of certain small parts that would have made it possible to determine exactly how it was played. It was a small instrument. The instrument’s trapezoidal sides were 35cm and 40cm in length. The width of the shortest upper and lower parts of the instrument were 6cm and 15cm. The instrument had five tuning peg holes of 5mm in diameter, each about 2cm apart. The best-preserved parts of the instrument were the upper part of the headstock, which was split near one of the holes, and what remained of the sound box. No tuning pegs, strings, tailpiece, or any kind of bridge were found.





There were two schools of thought as to how the instrument was played: the same bowing technique used with Northern European bowed harps (lyres), or the plucking technique used with all *kantele*-like Baltic instruments.



Of course, the Scandinavian school was inclined to suppose the instrument was another variation of the bowed lyre, as can be seen in Otto Anderson's attempts to classify the *gusli* as part of the bowed lyre family. The terms *lyre* and *harp* are used interchangeably in relation to this group of instruments.

Anderson divided the classification of Northern European lyres into three basic categories:

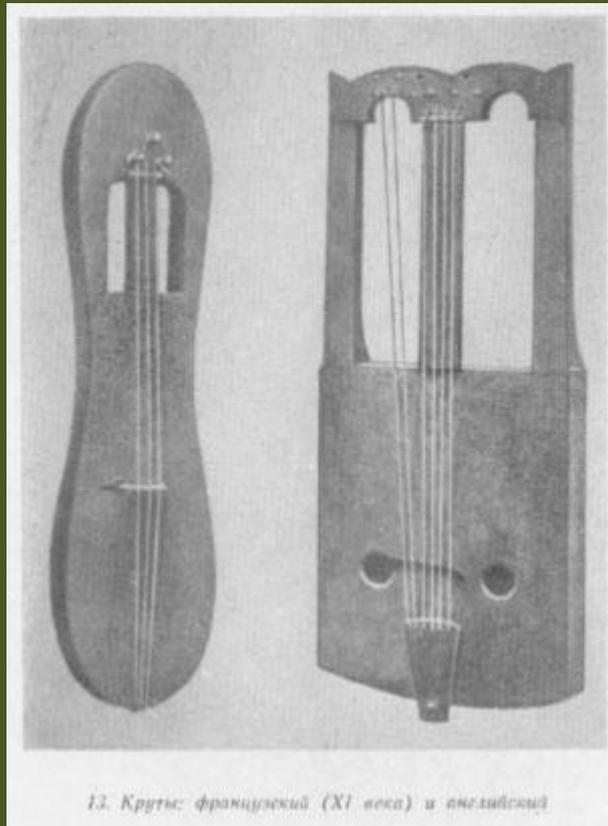
1. Bowed lyres with a narrow hole on the right-hand side of the instrument, found mainly in Karelia and occasionally in Sweden and Norway.
2. Bowed lyres with a wide rectangular hole found mainly in Sweden and the formerly Swedish Western Estonia.



3. Bowed lyres with two holes separated by a wooden crosspiece, found mainly in Karelia,

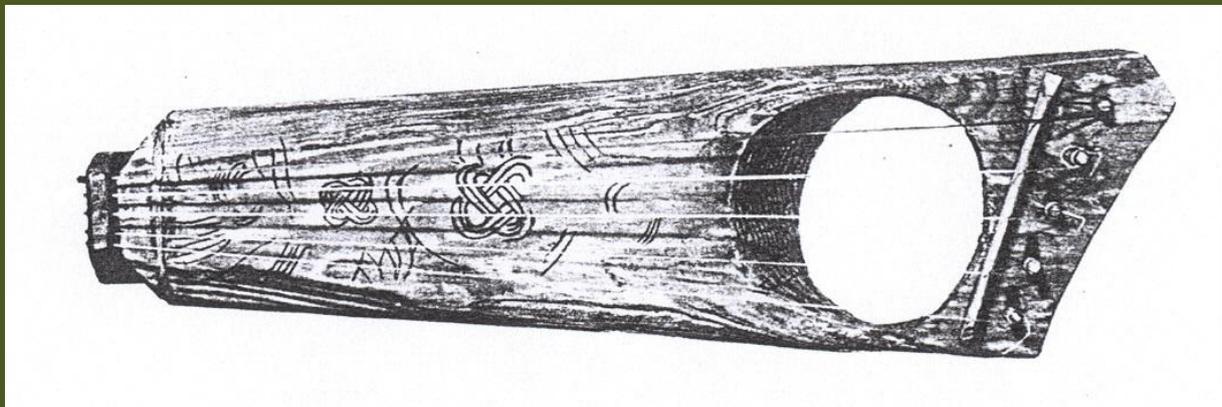


and similar Welsh instruments known as *crwth*.



13. Крутье: французский (XI века) и английский

Unfortunately, the Gdańsk instrument does not fit into any of these categories... It has a hole in the upper central part of the instrument, and has come to be regarded as a link in the transition from plucked to bowed lyres. Certain historical texts mention that proto-Slavs used to have a stringed instrument which was presumably plucked. Both Jażdżewski and Simon concluded that it was a rustic type of psaltery of Slavonic and Finno-Baltic origin.



Zdzisław Szulc's theory approached the matter differently. He tended to agree with Anderson's criteria, but went even further, suggesting that the instrument had been made by one of the first Polish musical instrument makers.

Szulc's searching observations proved that the instrument bore no signs of wear from pegs that should have been in the tuning peg holes. Since no pegs were found, one may conclude that a local resident started to make the instrument, but did not necessarily finish it. So, in fact, it might have been something like a prototype.

Based on what we know of instruments made by our Baltic neighbours, such as the Lithuanian *kankles*, the Latvian *kokle*, the Estonian *kannel*, or the Finnish *kantele*, Szulc affirmed that, according to his experience of making *kantele*-like instruments, the instrument maker may have adopted a bowing technique he knew or had seen before.

The history of Gdańsk may also be significant in this context. In those days, the area comprised a fishing village and a trading settlement, which were not yet officially regarded as a city community. However, since it was a prominent local site, it could also have had economic relations with other, similar centres all around the Baltic basin. After Duke Świętopełk II came to power in Pomerania, the region started to gain autonomy from other centres of power in Poland. The trading settlement was incorporated in 1263, but Pomeranian and Old Prussian (Aesti) populations continued to inhabit the old fishing area for a long time. According to Konrad Jażdżewski, the Gdańsk *gusli* was found in the corner of a house belonging to a local fisherman. Consequently, one can conclude that the instrument maker could have been either a Pomeranian trader or an indigenous Prussian (Aesti), or even both.

By way of comparison, Truso (a Baltic port near Elbląg on the Vistula estuary, active from the late 8th until the early 11th centuries, which was eventually superseded by Gdańsk, founded in the latter half of the 10th century) was mostly inhabited by Scandinavians trading between Prussian and Slavonic tribes.

Therefore, one can undoubtedly affirm that the Gdańsk *gusli* was an instrument similar to Finno-Scandinavian bowed harps (lyres), and that it also resembled a Baltic plucked psaltery that was typical in Eastern Europe.

According to the parameters of existing folk instruments of this type, as well as somewhat less reliable iconographic sources, it transpires that such psalteries were made in a variety of sizes, ranging from soprano to almost basso registers. Since they were fairly quiet, with a limited range of sounds, they were used to accompany songs or melodeclamations, for example, and so were most probably chamber instruments. Smaller instruments could also have been used as musical toys, or ceremonially, as funerary accessories. However, if one accepts that the remains of the Gdańsk *gusli* were once an instrument with a practical use, then the most suitable playing technique would have been plucking.

<https://www.youtube.com/watch?v=sDj6m9ApYa8>

This is suggested by the instrument's relatively small dimensions and design, which includes a short strap for attaching it to one's hand.



In a way, the hole on the headstock dictated how this instrument should be played. The strings could be plucked with the fingers of one hand, or with a plectrum.

Meanwhile, when placed underneath the hole, the left-hand fingertips or fingernails were free to touch the strings in order to damp their vibrations. The instrument was most probably held vertically, or at a slight angle. However, by holding the instrument horizontally on one's palm and gripping the sides of the headstock between the thumb and little finger, while resting its end on the forearm (just below the elbow), one could have simply played it with a bow, using two or three left-hand fingers to shorten the strings. Although possible, this hypothesis is less likely, however.

Some depictions from the period show bowed instruments together with Northern European plucked lyres.



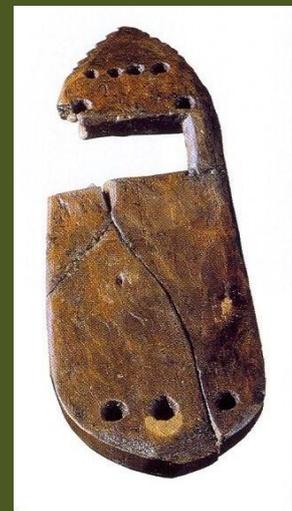
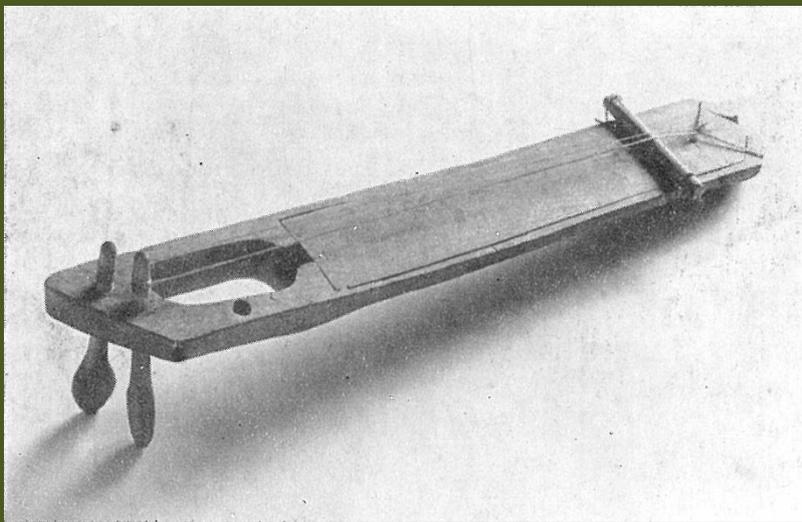
A three-string bridge belonging to a bowed instrument dating from the mid-10th century was discovered in Velikiy Novgorod; and the *rebek* (*gudok*) was a bowed instrument that definitely appeared in Europe after the 11th century. Therefore, one can accept that bows could already have been in use in that area at the time.

The above information also corroborates the theory that the Gdańsk *gusli* could have been a bowed instrument, even though it is less likely.

Naturally, both theories had their devotees:

Zdisław Szulc (1953) and Ernst Emsheimer (1961) were supporters of the bowed technique. Władysław Kamiński (1971) preferred the plucked technique, and Konrad Jażdżewski (1966) was in favour of both.

Assuming that bows were used to play a similar instruments from Opole, which archaeologists have dated to the 9th century, then one can undoubtedly accept both theories as plausible.



One medieval Russian source warns us: “... *But the Devil deceives us with assorted rites, drawing us away from God with all manner of trickery, horns, wandering minstrels, guslis, and Rusalia festivals...*”

But perhaps that is just a simple sign of those times, and should not be taken too seriously ☺

Medieval charms and superstitions notwithstanding, new light has been shed on the issue of bowing the Gdańsk *gusli* by a reconstruction (or rather a new, larger form of the instrument) designed by the author of this text in 2008.

Taking into account the original shape of the Gdańsk *gusli*, I designed an instrument with dimensions which depended on the size of the headstock hole. It was customised to the dimensions of a viola, and of a size that would allow it to be played with a violin/viola tuning (like that used when playing those instruments in first position).

The instrument I designed is much larger than the original, with space left over to accommodate an extra sixth string.



The instrument's trapezoidal sides are 62cm and 67cm in length. The width of the shortest upper and lower parts of the instrument are 11cm and 20cm.

By adding an extra fret onto the upper part of the headstock, I was able to obtain a fixed distance between the fret and the bridge.



By holding the instrument horizontally (ideally using a neck-strap), it is also possible and easy to play it with a bow.



I call the instrument the “bowed *gusli*”.