

Archaic Aerophones and Idiophones in Modern Russian Culture

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Abstract—Such archaic aerophones and idiophones as horns and vargan (jew's harp) play important role in both traditional and modern Russian culture. The scientific interest to this problem is characterized by the archaeomusicology, ethnomusicology, musical anthropology and sociology. The article is dedicated to research in a comparative way the aspects of the traditions with their different styles according to the geographical regions. Tver and Vadimir horns', Altai and Sibir vargans' playing is usually used in festivals, concerts, scientific studies and domestic musical practice. A special research area is the reconstruction of ancient instruments with new manufacturing technologies and materials.

Keywords—*Russian folk music; aerophone; idiophone; horn; jew's harp; vargan; khomuz; homuz*

I. INTRODUCTION

In the second half of the XX century all over the world and in Russia the interest in the musical traditions of the Antiquity, the Middle Ages, the Renaissance and the era of the New Age was revived. Elements of ancient rites and rituals with musical instruments playing were used in modern forms.

The craftsmen who reconstructed ancient musical artifacts (sound and musical) instruments as well as made the replicas / copies, together with the performers returned ancient sounds to create new ones for the new conditions. Numerous festivals were and are held in different countries of the world with their participation. In Russia the festivals are held in accordance with the classes and traditional kinds of aerophones, chordophones, idiophones and membranophones.

In modern Russian culture, there are the horns' and the vargans' (jew's harps') musical practices as two main traditions of ancient musical instruments playing.

Horn is one of the oldest and most popular musical instruments in the world. Horns were the signal instruments in pastoral and hunting activities, ritual practice in different national traditions since ancient time.

According to the archaeological excavations and studies, two main kinds of the aerophones were the curved, twisted animal horns, ceramic and metal aerophones with horns'

shape in Eurasia and trumpet with direct shape in America. The sounds of twisted horn shofar that was used in Ancient Israel (XV – XIV centuries BC) can be listened now in synagogues in different countries.

Neolithic culture is represented by ceramic horn Taotszyao with the bull horn' shape from Linyanhe (III millennium BC, Shandong Province, China) (see "Fig. 1"). In the Bronze Age the horns were made of bronze (XII – VI centuries BC, Scandinavian bronze lurs; one of them is in Hermitage, St.-Petersburg) (see "Fig. 2"). The horns which were depicted on the Bonampak frescoes (I millennium BC – I millennium AD, Mexico) resemble about direct tubes (see "Fig. 3").



Fig. 1. Ceramic horn Taotszyao (III millennium BC), Linyanhe, Shandong Province, China.

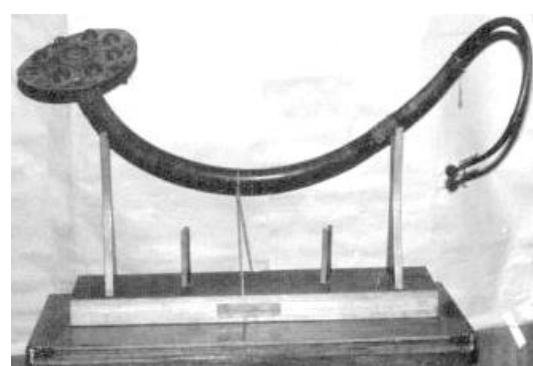


Fig. 2. Scandinavian bronze lurs (XII – VI centuries BC), Hermitage, St.-Petersburg.



Fig. 3. Direct tubes (I millennium BC – I millennium AD), Bonampak fresco, Mexico.

Vargan is a kind of jew's harp and is one of the oldest instruments in the world. Many of its varieties became integral part of both traditional music and mass culture.

According to organological classification, idiophone jew's harp is named trump, jaw's harp, mouth harp, jew's trump, guimbarde, gumbard, gewgaw, maultrommel, crembalum, mungiga, ribeba, birimba, trompa, vargan. Its number in the Classification by C. Sachs and E. Von Hornbostel, which revised by MIMO is 121.221. It is lamellaphone or plucked idiophone in the form of a frame. Lamellae, i.e. elastic plaques, fixed at one end, are flexed and then released to return to their first position. Single heteroglot guimbarde (trump, also known as jew's harp) that depends on the player's mouth for the resonance; a lamella is attached to a frame.

II. RUSSIAN HORNS IN HISTORY AND MODERN TIME

In Russia one of the first ancient bone horns as ritual artifact was excavated in Old Kashira settlement (Dyakovo archaeological culture, Iron Age, VIII c. BC – VII c. AD, Upper Volga, Valday and Oka River areas, Finno-Ugric traditions) (see "Fig. 4").



Fig. 4. Ritual bone horn (8 c. BC – 7 c. AD), Old Kashira settlement, Dyakovo culture, Russia.

In the Middle Ages, the Renaissance and the Age of Enlightenment the Western European and Russian horn musical instruments were varied. In Hermitage collection there are three ancient horns made of the elephant bone (see "Fig. 5").



Fig. 5. Ancient horns, Hermitage. St. Petersburg, Russia.

In the XVIII century the first Russian court horn orchestra consisting of hunting horns was created. The orchestras or "horn choirs" had existed in Russia until 1910s. The instruments of the Russian Coronation Horn Orchestra were made in Moscow N.N. Fedorov factory in 1882. Now they are in St. Petersburg State Theatre and Music Museum [1] (see "Fig. 6"). In 2002 and in 2006 the horn orchestras have been reconstructed in St. Petersburg. Modern Russian Horn orchestra is conducted by Sergey Polyanichko.



Fig. 6. Horns of the Russian Coronation Horn Orchestra. State Theatre and Music Museum, St. Petersburg, Russia.

The research of the folk musical instruments and horns in Russian history of XVII – XIX centuries were presented in the works "Russian Folk Musical Instruments" [2] and "Russian Horn Music" by K. Vertkov (1948) [3].

The pastoral tradition of the horn-playing existed in Russia in XIX – XXI centuries as a parallel world of traditional and court cultures. Both in ancient and modern Russia shepherds have used animals' horns for the contact with cows, luring or scaring them. They could pass the information to each other over long distances with special rhythmic phrases, syllables, intonations and short song melodies-invocations ("Kirila", "Tyola", "Tyulinka" etc.) [4].

The horn sound is like the cow voice, so the cows perceive it as a natural sound. Shepherds (and ethnographers, researchers) believed that the horn playing has onomatopoeic origin, its model was the treatment of animals and sound communication with them.

Regional traditions of the Russian pastoral horns playing were developed in the period from the beginning of XIX to the middle of XX century. In northern Russia the wooden horns were wrapped with birch bark.

Two main pastoral horn-playing schools existed in Central Russia.

The Vladimir's horns (see "Fig. 7") or "rozhok" (the word means "small horn") were used in Vladimir (Vladimir, Kovrov) and Yaroslavl (Nerechta) districts. The Vladimir's horns are presented in ensembles in three kinds according to their sizes. The first one is largest "Bass", the second one is "Half-Bass" ("Polubasock") and the third one is "Whistling" ("Vizgunok" means "small squeal") [5] [6] [7].



Fig. 7. Vladimir's horns.

In XIX century the best musicians in Vladimir's horns tradition were the shepherds of Kovrov district. In 1850s N.V. Kondratiev created the winter chorus of horn-players consisting of more than one hundred musicians-shepherds (see "Fig. 8"). It existed for about forty years and played concerts with the great success in Nizhny Novgorod Fair (1865), Moscow (1883), Paris (1892), St. Petersburg (1896).



Fig. 8. Winter chorus of Vladimir's horn-players conducting N. V. Kondratiev.

The Tver's horn or "zhaleika" was typical for the Upper Volga areas, including Volokolamsk, Klin, North-West Moscow, Rzhev, Zubtsov, Staritsy districts, in Kursk region (see "Fig. 9"). Shepherds from the Tver region have never used the dogs for the cattle grazing. They grazed cattle using the horn and the whip only [8] [9] [10]. The origin of the name "zhaleika" is associated with Russian verb "to regret" ("zhalet"), but there is a connection with the names of the Near Eastern "Schalmei", "Schalmay", "Schalmey" or a word "Schalomey" which was used in "Lexicon" by H. Riemann.



Fig. 9. Tver's horn.

In traditional culture, the main manufacturing materials were rosewood from American, Asian and African tropical countries for the Vladimir's horns, cow's horn and birch wood for the Tver's horns. Such instruments were made with only one way (the holes were drilled in the horn and the tip of the horn was cut).

The structures of the Vladimir's and Tver's horns are different. The Vladimir's horns belong to the embouchure aerophones and Tver's horns are reed ones. The Vladimir's horns are made from one piece of wood, the Tver's ones consist of two pieces (a part of cow horn and wood). Both the Vladimir's and the Tver's horns have playing holes, but the Vladimir's and the Tver's horns of different sizes can be used in ensembles.

Modern performers hold acoustics, sound producing and playing technique of the Vladimir's horns. The sound of Vladimir's horn is soft and warm, the main scale is Mixolidian, and the musician can use the overtones technique during playing [11].

The sound of Tver's horn has more hard but natural timbre, and can imitate the cow's voice. The signal is spread over a distance of three, four or five kilometers; good hearing is along the river especially. Last centuries ten – fifteen shepherds could transmit the information (for instance, about the danger) over fifty kilometers' distance for five minutes. Several (two, three or four) shepherds can play together in ensembles. Everyone has own scale, it depends of the positions of the fingers, the distance between the holes and the length of the horns [12].

The main learning method of the playing was the imitation in the ensemble practice. The professional musicians taught young boys to play the signals and to communicate with the shepherds and the animals. The musical repertoire consisted of the signals and lyrical songs ("Night", "Oh, you're garden, you're my garden", "In the wild steppes of Zabaikalia", "Canary" [4].

A long period the Vladimir's and Tver's horn-playing was the Russian pastoral professional tradition. Shepherds (only men) worked since the end of April and beginning of May until October. They got extra payment for the perfect art of the horns playing. The horn's playing helped to increase milk yield of the cows. It was the main reason to pay to the shepherds who were horn-players more than to ordinary shepherds.

In the late 1940s – early 1950s, after the death of the majority of the male population during Second World War, women began to graze cattle in Russian villages. Since playing the horns required considerable physical effort, and female performance was forbidden by tradition, they imitated the sound of the horns with their voices [9].

The Vladimir's and Tver's horns traditions were supported in living shepherds' practice in Soviet period.

In 1960-1970s horn player and master manufacturer of Vladimir's horns Vasiliy Borisovich Shilenkov worked in Yuriev-Polsky. The horns made by the master were played in twenty ensembles including "Rus" in Vladimir, the Orchestra of folk instruments of the Pyatnitsky choir, folk ensembles of the Gnessin Institute in Moscow, the Rodnikovo's Music and arts schools in Ivanovo region, folk ensembles and groups in Yaroslavl, Novosibirsk. Vasily Alexeevich Kolpakov, Vyacheslav Ivanovich Sarin and Pavel Ivanovich Syomin (Nerechta, 1975) were famous shepherds and horn-players in Vladimir's tradition. Shepherd and musicians Vladimir Kirillovich Rudenkov was one of the last horn-players of the tradition in 1980s (Yuriev-Polsky).

In XX century the best musicians of Tver's tradition were in Zubtsov and Staritsa districts. Sergey Osipovich Krasil'shchikov became the last shepherd and horn-player in Russia (1980s).

In modern Russian culture pastoral horns are known both as solo and ensemble instrument. They form the basis of the relevant concert instrumental ensembles. Modern traditions of the Vladimir's and Tver's horns playing develop in concert practice and festival activities. In 1990-2010s in Moscow, Belgorod and other cities there are concert performances of ethnographer, folk musician, horn player and researcher of

the tradition Sergey Nikolayevich Starostin [10] (see "Fig. 10").

The learning to horn-playing is important part of the modern musical education in Russia. The ensemble "Play, Horn!" (Obninsk, Suburbs of Kaluga) consists of young musicians who study the Vladimir's horn tradition with professional musicians [12].



Fig. 10. S.N. Starostin. Concert performance in Belgorod, 2009.

III. VARGAN'S PLAYING TRADITIONS IN MODERN RUSSIAN CULTURE

In Central Russia in XVIII – XIX centuries, vargans were favorite instruments. V. Odoevsky wrote that, in XIX century in Russia, vargan made up the fun of almost every commoner [13].

In Soviet period (1960-1980s) special interest in vargan was a part of interest to world and national ethnic music, especially traditions of Siberian ("khomus") and Far Eastern peoples.

In the 1990s, vargan became a popular musical instrument due to the emergence of neo-religious, including neo-shamanic practices. That time famous yakut master S.I. Gogolev made more than two thousands khomuses. Since 1990 a fashion on jakut vargans is in Russia. His experience was adopted by V.P. Potkin (Mountain Altai), who in 1993 changed manufacturing technology (Mountain Altaic "komuses" could be adjusted). Now Altaic vargans are popular in European area of Russia as well as Jakut instruments [14].

In 1985 Soviet folklorists discovered unique tradition of wooden "kubyz" in Volga region (Mrs. Kafia-abi and other musicians, Duvan-Mechetlino, Bashkortostan) [15]. It was interesting that in Past Bashkir mothers sang lullaby songs to their children with kubyz music and young girls could say to their boy-friends "I love You" only with a help of kubyz melodies. Modern Khanty-Mansi people in Sibir region use similar bone or wood jew's-harps "tumran" (see "Fig. 11").

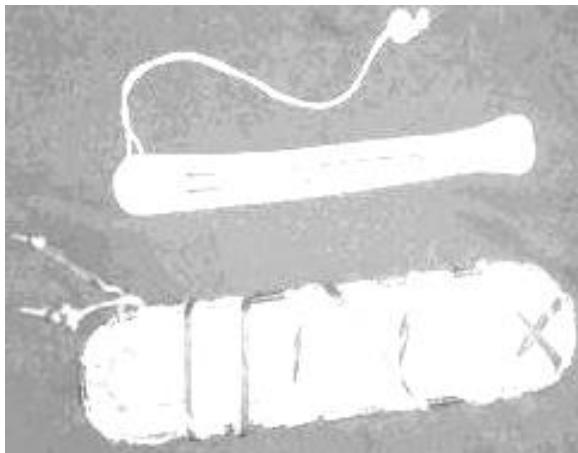


Fig. 11. Jew's-harps "tumran", wood, bone. Sibir region. Khanty-Mansi.

Usually women play tumran for themselves. During a long period researchers knew nothing about origin of this regional tradition; they connected it with austroasiatic world because the same instruments are wide spread in South-East Asian and Australian cultures. Altai always was an area of many Asian peoples' and ethnic groups' cultural contacts so its different traditions were influenced and developed according to the influences.

In 2001-2004, several copper and iron jew's-harps were excavated in ancient Mangazeya city (Northern Siberia, XVII century). In 2017, ancient jew's harp made of bone (a part of horn) was found in Mountain Altai (Iron Age, I millennium BC, the Scythian-Sarmatian period; research of V. Borodovsky, Institute of Archeology and Ethnography, Siberian Branch of the Russian Academy of Sciences) [16].

The First vargan's festival was organized by famous musician, teacher and researcher from Iowa Frederic Crane in USA in 1987. He has presented his own vargans' collection to Museum of vargans which opened in Jakutsk in 1991. That year the Second International Festival of Vargan Music was organized here, and later such events in Russia become regular. By 2000s jew's-harp was not only cult (Siberian, Far Eastern shamanism) and everyday (mountain-altaic women's home music) but concert instrument. Now the instrument is used in amateur music, usually young, middle-aged and older people have personal ones. Now the jew's-harps of foreign origin are famous: Murchunga (Nepal), Mungiga (India), Dan Moi (Vietnam), Mukkuri (Vietnam), Mungigor (Slovakia), Jew's-harp (England; Northern Europe).

But in the context of intensive development of vargans traditions in Sibir (khomus) and Volga region (komus, kubyz) ancient Northern-Western Russian jew's-harps were known for a long time as archaeological museum artifacts only. Eleven jew's-harps "zubanka" were excavated in Novgorod region (XI – XV centuries), found in Tver and Pskov regions (XVI – XVII and XIX – XX centuries) too (see "Fig. 12"). And one iron jew's-harp (Novgorod, XIV century, excavations were in 2014) was added to the collection [17].

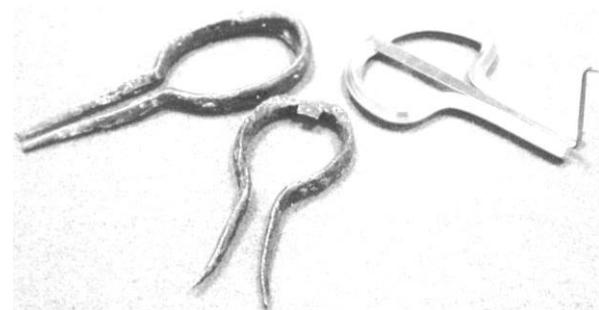


Fig. 12. Jew's-harp "zubanka". Tver and Pskov regions, XVI – XVII centuries (1, 2), XIX – XX centuries (3).

The main aim of modern masters was experimental reconstruction of the West Russian ancient vargans. As a result of the work in 2017, Internet Forum "Russian Vargan" was held. Forum included both competition of masters of experimental reconstruction of vargans of X – XVII centuries and experimental playing. The organizers were musician, master Vladimir Markov, his pupils and followers. For the reconstruction V. Markov chose jew's harp of late XIV and XV centuries [18].

The first problem of the reconstruction was an absence of old materials for the work. Metallurgic manufactures appeared in Russia in XVIII century during Tsar Pyotr First epoch. The iron vargans (zubanka) in Northern-Western Russia were of foreign origin. Novgorod was a big commercial center and the vargans could be produced in foreign Northern countries. In Novgorod district jew's-harps were found in Kirovskiy (middle XIV century), Partizanskiy (XII – XIII centuries) and Nikitinsky (late XV century) excavations (see "Fig. 13", "Fig. 14", "Fig. 15").

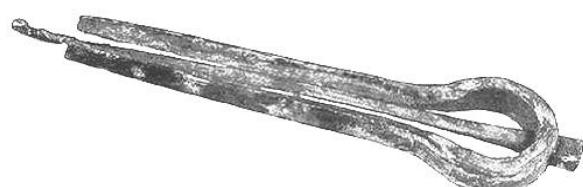


Fig. 13. Jew's-harps (middle XIV century), Novgorod, Kirovskiy excavation.

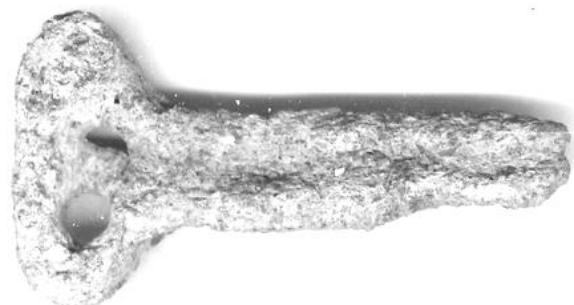


Fig. 14. Jew's-harps (XII – XIII centuries), Novgorod, Partizanskiy excavation.



Fig. 15. Jew's-harp (late XV century), Novgorod, Nikitinsky Excavation.

IV. MARKOV AND OTHERS USED THE IRON OF XVIII CENTURY

He proposed the following sequence of the production process: 1) to make a forged square frame without one side, about 4x4 mm in size; 2) to process the middle part of the frame with hammer blows in order to reduce its thickness to about 2.6 mm; 3) to bend the details including ring [ibid.].

The second problem was the restoration of the original shape and thickness of the frame (the original artifact had corosions of different sizes in different places). However, careful analysis of caverns allowed assuming the initial sizes of the cross sections.

The third problem was connected with the repertoire of vargan music in Novgorod of XIV – XV centuries. Musicians play music (songs melodies) of XVII – XIX century [19].

What are the reasons for the popularity of vargan in modern Russia? The main reasons are as follows:

- Instrument has simple construction; in practice it can be used by everybody;
- It possible to play without a long period of study and even without a teacher;
- It's vibration is good for health, it gives feelings living biological processes as in another events with corporomusic;
- It's overtones, multiple tones and sound waves create acoustic stereo effects of space even in a small room; give possibility to feel forces and power, to imagine spiritual level of music;
- One man can play vargan as an ensemble;
- Both solo and ensemble playing are used during meditation (semi-meditation – semi-transe), meeting of friends, holiday, concert, regional and international festivals;
- It's one of the best methods to keep quiet condition and feelings against different private and social problems.

V. CONCLUSION

In modern Russian culture, such archaic musical instruments as horn and vargan / jew's harp play a special role. They are moved from the traditional music field to the popular culture sphere. At the same time, they retain the main features of traditional musical instruments. Horn and vargan playing develop their main features in living musicians practice.

REFERENCES

- [1] Findeyzen NF. Russian horn music. Essays on the history of music in Russia. Volume 2, issue. 4. M.L.: State Publishing House, 1928. p76-92.
- [2] Vertkov K. Russian folk musical instruments. L., 1975. p 280.
- [3] Vertkov K. Russian horn music. L. M. : Muzgiz, 1948. p 84.
- [4] Kiryushina T. Traditional Russian Instrumental Culture. Lecture on the course "Folk music creativity" for students of musical universities. M.: Gnessins SMPI, 1989.
- [5] Efremov B. Vladimir's Horns. Craft 57: Shepherds musical instruments. YouTube <https://www.youtube.com/watch?v=z5kuHnptulM> 26'01 (appeal date 05/15/2016)
- [6] Bromley K.M. Vladimirskiy horn // URL: <https://bigenc.ru/music/text/1918394> (appeal date 04/17/2018)
- [7] Smirnov B. Art of Vladimir Horn-players. Moscow, 1965. p 232.
- [8] Starostin S. Musical Instruments of the Upper Volga Region Shepherds. Male collection. Iss. 1. The Man in Traditional Culture. Moscow: Labirint, 2001, pp. 184-193.
- [9] Starostin S.N. Tver's Horns. Interview by V.I. Lisovoi with S.N. Starostin 06/11/2016.
- [10] Materials of the concert-presentation by S.N. Starostin and ensemble "Tver's horn" on Tverskoy Boulevard in Moscow. 06/14/2016.
- [11] Fatyanov's songs — in an unusual performance. URL: vladtv.ru/culture/99448/ (appeal date 04/12/2019)
- [12] Materials of the concert-presentation by ensemble of folk music "Play, horn!" in Obninsk, artistic director L. Reznikov // URL: <http://playhorn.obninsk.ru> (appeal date 05/18/2016)
- [13] The Vargan. Brief history, conjectures and facts // URL: [vargan_samara https://vargan-samara.livejournal.com/17249.html](https://vargan-samara.livejournal.com/17249.html) (appeal date 03/13/2018)
- [14] Altai Vargan. Google Sites <https://sites.google.com/site/varganaltajskij/> (appeal date 03/03/2018)
- [15] Bashkir kubyz. Maultrommel // URL: bash-portal.ru/news/newskulturna/1106-bashkirskij-kubyz.-maultrommel.html (appeal date 03/23/2018)
- [16] The most ancient musical instrument in Eurasia was found in the mountains of Altai // URL: <https://www.vladtime.ru/nauka/610301> (appeal date 03/10/2018)
- [17] Russian Vargan. Russian music out of time - the project // URL: varganist.ru/2.html (appeal date 03/05/2018)
- [18] Russian Vargan. Reconstruction of the Novgorod Vargan 14th century // URL: varganist.ru/23.html (appeal date 03/05/2018)
- [19] Reconstruction of the Novgorod Gusli and the 14th Century Vargan // URL: https://www.youtube.com/watch?v=_nbpQktAuX4 (appeal date 03/17/2018)