How to Cite:
Zinkiv, I. Y. (2021). Academization of bandura by bandurism exponents in Ukraine. *Linguistics and Culture Review*, *5*(S4), 269-288.
https://doi.org/10.37028/lingcure.v5nS4.1582

Academization of Bandura by Bandurism Exponents in Ukraine

Iryna Ya. Zinkiv
Lviv National Music Academy named after Mykola Lysenko, Lviv, Ukraine

***Abstract*---**Ukrainian bandura underwent a long and difficult evolutionary path. Its academicization process took place in the XX-XXI centuries. The impact of prominent bandura craftsmen O. Korniievskyi, V. Tuzychenko, I. Skliar, and V. Herasymenko on the process of the Ukrainian bandura academization was studied. The authors devoted their work to historical assessment in the affirmation of the academized instruments of Chernihiv (or Kyiv-Chernihiv) and Kharkiv types. The specifics of the creation of the academized instrument in 1920–2010 by leading Ukrainian designers – bandura craftsmen became a purpose of the study. The abovementioned bandura craftsmen made a significant impact on the academization of diatonic banduras, their transformation into the instrument with a double-diatonic tuning system and bringing it closer to European trends. The particular roles of O. Korniievskyi, V. Tuzychenko, I. Skliar, and V. Herasymenko in this process were characterized. It was noted that the Kyiv method of play on an academic instrument is much more popular than Kharkiv-type which is why the latter needs additional attention.

***Keywords*---**bandura craftsmen, development, lute-like instruments, Ukrainian music.

Introduction

Bandura is a nation-formation component of the spiritual culture of the Ukrainian people. During the XVIII – first decades of the XX centuries, it underwent a long and difficult evolutionary path, from a diatonic to a "chromatic" academized instrument with a double-diatonic pitch. By the beginning of the XX century, the Ukrainian popular professional tradition had several established methods of playing the diatonic traditional instrument, associated with the specific development of the Northern (Chernihivshchyna) and South-Eastern (Slobozhanshchyna) regions of the national musical and epic tradition development. Since the Middle Ages the *psalter culture* dominated in the North of

***Corresponding author**: Zinkiv, I. Y.; Email: zinkiv5907-7@lund-univer.eu*
Manuscript submitted: 27 June 2021, Manuscript revised: 09 Sept 2021, Accepted for publication: 18 Oct 2021

Ukraine, which replaced the *culture of lyres* (medieval lyre-like gusli), while the *culture of lute-like instruments* "kobza" –dominated in the South (Amerta et al., 2018; Nehru, 2016).

In Ukraine, as well as in the neighboring European countries, a regular academicization process of traditional culture musical instruments takes place in the XX century in order to standardize them under conditions of mass production and their further introduction to the various, often artificially created orchestras of Ukrainian folk musical instruments (after all, bandura in the folk music practice was a rare component in a musical ensemble, since it was positioned by the people as an instrument of the solo epic tradition of the Ukrainians played exclusively by male, kobza-bandura players). As a result, the use of different bandura playing methods in the academic tradition was "reduced" to two main ones – Chernihiv (which later became known as Kyiv) and Kharkiv. The Kharkiv method of playing diatonic bandura, introduced in the academic tradition by Khotkevych (2007), failed to develop in the Motherland due to the tragic death of a prominent bandura-player, it was maintained and further developed by his students and followers in the Western Ukrainian Diaspora. Chernihiv, a more accessible playing method to master the instrument, which was implemented for a long time in the performing practice of Ukrainian bandura players from Soviet times, has come to dominate in Ukraine. It has been rooted so deeply that it dominates in the performing practice till present (Park & Lesselier, 2009; Bailey, 1983).

In addition to many others, four prominent bandura craftsmen – O. Korniievskyi, V. Tuzychenko, I. Skliar, and V. Herasymenko – were also involved in the Ukrainian bandura academization, some of them were prominent bandura players. Therefore, this paper is devoted to their activity specifics study and historical assessment in the affirmation of the academized instruments of two types – Chernihiv (later Kyiv-Chernihiv) and Kharkiv types. The purpose of this paper is to highlight the activities of leading Ukrainian designers – bandura craftsmen in the creation of the academized instrument in the 1920–2010, which became part of the performing practice of various groups in Ukraine and became the main instrument in the educational process at different levels of the national music education system (Accreditation Levels I – IV). The publication attempts to present a holistic picture of their activities in the Soviet period and in the first decades of Ukraine's Independence (Suwija et al., 2019).

Chernihiv bandura: Oleksandr Korniievskyi's instruments

Chernihiv bandura development in the XX century is associated with the name of the prominent bandura craftsman Oleksandr Korniievskyi (1889–1988), who is considered the creator of the Chernihiv academic bandura. His design activity is a separate page in the history of Chernihiv-type instrument's evolution. Korniievskyi, who first acquired the specialty of mahogany worker craftsman, is the author of more than 180 banduras, which he mainly crafted (Roi, 1967). According to the craftsman himself, his first banduras were made on the models of the banduras made by the popular Chernihiv craftsman P. Bondar (Danylivka village near the city of Mena). Korniievskyi made one of his first banduras at the age of seventeen (1906); it was made for the Chernihiv kobza-player T.

Parkhomenko, as an imitation of his old banduramodel, which had 6 bass strings (*bunty*) and 16 short melodic strings (*prystrunky)* (Shudria, 2006). According to the craftsman Cherkaskyi (2003), himself, in 1908, producing two instruments for the bandura class at the M. Lysenko Musical-Dramatic School Shudria (2006), he elongated the body of traditional instruments, replaced the wooden pins with metal ones, increased the number of short strings (up to 16) and basses (up to 12 – 14 vs. 6 – 8).

The diligent elaboration of exterior instruments decoration was a special craftsman's feature (Pavlenko, 2006). Korniievskyi was the first among craftsmen to attempt partial scale chromatization of the Chernihiv bandura in 1910 by adding switches for halftones on degree VII in all octaves. At the same time, he expanded the instrument range to five and a half octaves – from *G* subcontraoctave – to g^3 (Humeniuk, 1967). These instruments were used by participants of the First Kyiv Bandurists Chapel (Kobzar Choir), which performed in 1918–1919 under the leadership of V. Yemets, on the basis of which the First Ukrainian Kobzar Chapel was subsequently established. In the 1920s Korniievskyi was making many diatonic banduras for local kobza-players from Chernihiv region (P. Kulyk, S. Vlasko) and numerous amateurs, including participants of the kobza classes at the Poltava Music and Choral Association. In 1923, the members of the First Male Bandura Chapel of Kuban (director – S. Zharko) played his diatonic banduras. Kuban craftsmen made their instruments following his Chernihiv bandura design (Nyrko, 1994). In parallel, the craftsman worked on the pitch chromatization of the instrument and, by 1922, created a partially chromatized instrument with five halftones on the short strings (Roi, 1967).

In the 1910–1920s, in addition to the traditional "*Chernihivka*", Korniievskyi also produced many torban-shaped banduras, referencing, probably, to the known models of similar banduras by A. Paplynskyi; at the same time the craftsman furnished them with metal string holders. Several torban-shaped banduras by Korniievskyi have been preserved – 1910, 1912, 1927, 1928, 1929 and 1930. All the banduras of the 1920s (MMTC, inv. no. 4499, 4358, 1615) have different dimensions (length – 1075-1140 mm, width – 410-480 mm, body depth – 75-100 mm). Inventory numbers are given in accordance with the place of storage of the instruments (SMMTC – State Museum of Music, Theater and Cinema of Ukraine) (Smolen et al., 2002; Standley, 2002).

The bodies were produced by the ancient folk method of incavation and were made of nutwood or maple, sounding board – of spruce. The instruments had 52-53 strings (14-15 long and 38 short), metal string holders with monograms on them. Korniievskyi's early bandura of 1912 has 10 long strings (6 bass and 4 aliquots) and short melodic strings (stored in the holdings of the Museum of Folk Architecture and Household NANU). The exterior decor of 1929's bandura (Inv. No. 4358) is presented with dominating intarsia, that is, uniform material inlay, located at the edge of briamka [*Ukrainian*] and around the sound hole. The sound hole of 1927's bandura is decorated with a hexagonal star (dimensions 1075/460/97 mm), the neck – with a carved floral ornament, which is a characteristic feature of Korniievskyi's bandura. 1929's bandura has three sound holes located at the bottom of the body, the sounding-board itself being decorated

with note marks, which indicated the pitch of each string) (Vereshchahina-Biliavska et al., 2021; Hlebova et al., 2021).

The torban-shaped instrument of 1930 has 14 long (7 aliquot and 7 bass) strings, and 38 short melodic strings. The long strings are evenly distributed between two pin boxes. The bandura body is asymmetrical, made by incavation method. The head of the fingerboard is decorated with T. Shevchenko bas-relief (about 600 mm high). String holder cast in stainless steel, with engraved monogram of "O.S. Korniievskyi". The total length of the instrument is 1,060 mm, width – 410 mm, the depth of the body – 100 mm. In order to achieve the best acoustic performance O. Korniievskyi used often the metal stamped pins and string holders of stainless steel, brass, occasionally of silver made by the casting method. The craftsman's improvements expanded greatly the technical and acoustic capabilities of the Chernihiv bandura. From 1922, the First Ukrainian Kobza-Players Chapel (Kyiv) started using his banduras with partially chromatic melodic strings (without switches), and continued using them in the early postwar years, until the early 1950s (Skliar, 1971). According to I. Skliar, the halftone short strings located on the rib came above the basic tone short strings, preventing free play of the left hand throughout the entire range of the instrument (Brockhoff, 1992; Bohm & Russell, 1985).

In the 1930–1940s, in Kyiv, the Chernihiv banduras (mostly modelled after Korniievskyi's banduras) were produced by craftsmen. In the postwar period they worked at the Chernihiv Factory of Musical Instruments. The repression of O. Korniievskyi with exile to the Siberian camps of the Gulag for almost a quarter of a century held back the development of the Kyiv-Chernihiv bandura. In the 1940s, a musical instrument workshop operated in Kyiv, first headed by G. Paliivets, after his arrest by V. Tuzychenko (from 1937), and since 1951 – by I. Skliar. The workshop produced instruments for the Kyiv bandura players chapel and various amateur bands. In the post-war period the craftsmen moved to Chernihiv (to the Chernihiv Music Factory), where there were suitable conditions for wood storage and drying to make instruments.

After return from the twelve-year exile (1937–1949), Korniievskyi worked for some time in the city of Biisk (Altai Territory, Russian Federation) as musical instruments production and repair craftsman. Back then, he plans to create a bandura of a slightly smaller size with a "harp" method of sound production and scale switching mechanism inbuilt into the string holder. However, the craftsman failed to implement this idea. After return to Ukraine (1952), he continues improving the Chernihiv banduras in terms of design. In the early 1950s O. Korniievskyi chromatized completely the short strings, and following his models of completely chromatized banduras, the Chernihiv Music Factory started serial production of 52-string instruments (14 bass and 38 short strings), produced by craftsman I. Hladylin. In the pre-war and early post-war years (until 1952), the Chernihiv Factory produced two or three completely chromatized instruments without switches, a need for which was growing rapidly in Ukrainian society. In 1954, the production of bandura reached 100 instruments per month (Larionova, 2005). Although their production was not focused on quality of each individual instrument, but on mass "replication", Korniievskyi's banduras were in high demand. A sufficient galaxy of Kyiv and Chernihiv craftsmen joined the

Chernihiv bandura production – M. Martynchuk (1940–1950), O. Kilochytskyi, O. Shchuliakovskyi, Ya. Storochev, O. Shlionchyk, and from the 1950s – I. Hladylin (1952–1954), V. Tuzychenko, I. Skliar, I. Kezlia, Y. Mentei (Deko, 1968).

Korniievskyi's instruments were distinguished by impeccable exterior craftsmanship, rich decoration (mostly floral ornamentation), and clear sound. Craftsman put his own monogram, number and date of manufacture on each instrument. In 1954 Chernihiv bandura by O. Korniievskyi was exhibited at the Exhibition of Achievements of the USSR National Economy in Moscow. In the 1950s and 1960s, the craftsman made several more copies of the lyre-like that is, two-neck banduras. In 1950, Kharkiv craftsman S. Holiivets made an experimental lyre-like bandura, on which mechanical chromatization of the instrument with moving levers was introduced, based on Khotkevych idea. Currently, this tool instruments stored with the exposition of MMTMiK Ukraine). One of these is kept in the private collection of bandura-player O. Nyrko (Yalta), the other three (1957, 1962 and 1968) – in the collections of the Museum of Folk Architecture and Householdof the National Academy of Sciences of Ukraine (Shudria, 2006). One of them – "Yuvileina", kept in the National Open-Air Museum (No. 154-2) – made to the order of M. Rylskyi, the second one belonged to the kobzar-player I. Panchenko. Korniievskyi's lyre-like bandura shave three sound holes: in addition to the central large resonator of petal-like, rarely – circular shape, two more were added (circular, elongated, or star-shaped) at the bottom of the sounding-board. All of them (except for bandura of 1928) are decorated with rich floral ornaments.

Korniievskyi was one of the first to carry out a radical *experiment on hybridization of the Chernihiv bandura with other zittern-like instruments*. The experimental *banduryna* (instrument was named so thanks to the journalists) model he designed is a unique type of zittern-like hybrid instrument of quite considerable size. In appearance, it resembles a large medieval psalter of rectangular shape, with a smaller trapezoid-shaped zitter attached to it. In form, it is reminiscent of ancient Ukrainian medieval psalter, depicted on a fresco of 1037 "The Musicians" from the Cathedral of St. Sophia in Kyiv (Zinkiv, 2021). The instrument of alike shape is carved on a figure in the hands of a musician cut out on the top of a household ear-cleaning item that was found on a child of Novohrudok, a city of Polotsk principality subordinated to Kievan Rus (Nonaka & Bril, 2012; Crank, 1990).

Apparently, Korniievskyi consciously focused on the image of the medieval Ukrainian fresco with a musical plot, which is the oldest in the Slavic world. Banduryna design, according to the craftsman himself, combines two banduras (i.e., zittern-like instruments – *I.Z.*) and an accordion (? – *I. Z.*). During play, the performer sits perpendicularly to the bandura (like playing a harp) and has bilateral access to the long and short strings. They are attached on both sides of the sounding-board body (16 long on its right side and 31 short on the left side – 27, 33 and 9 medium, respectively). It should be noted that the instrument does not need, like bandura, a hand support, as its body rests on the floor, like a psalter depicted on the ancient Ukrainian medieval fresco "The Musicians". The craftsman has placed bass strings at the bottom of the banduryna body case, which is a large-sized zitter. Their lower ends are fixed on a separate cleat-

stringholder, fixed to the bottom of the sounding-board. This sounding-board is common to both zitterns, combining their design (Granger, 1988; Toya & Skidmore, 2007).

The upper ends of the bass strings of the larger zittern are fixed to the oval cleat-stringholder, which seamlessly goes into the upperrib of the second smaller zittern. Smaller zittern has short strings on both sides (at a slight angle, about 20°) relative to the bass strings. The total number of strings on a banduryna is 116 (!). Below the short melodic strings of a smaller zittern there is a circular resonator. The larger zitternsounding holes are located at the bottom of the banduryna body, within the standarea. In fact, *banduryna cannot be classified expressly as bandura (lute-like zittern), because it does not even remotely resemble an academic instrument in form or design.* This experimental Korniievskyi's hybrid model is formed by combining two zitterns: one of a large rectangular shape that rests on the base of the body, and a smaller trapezoidal zittern attached to the upper part of the larger zittern. At the bottom of the instrument dampfer is fitted on both sides of the sounding-board body, each of which is actuated separately. Korniievskyi clearly borrowed the idea of damping muting from the harp damping mechanism. The instrument became an experimental model and is stored now in the collection of the State Museum of Music, Theater and Cinema of Ukraine (Kyiv). Since 1952, the Chernihiv Factory started producing chromatic banduras without O. Korniievskyi's design switches. Since the mid-1950s to the end of his life, the craftsman continued experiments with the production of different types of bandura (including lyre-like), many of which were produced under individual orders.

Kyiv bandura by Volodymyr Tuzychenko

The activity of the prominent Ukrainian musical instruments craftsman V. Tuzychenko (1906–1975) in the field of making Kyiv and Chernihiv types of bandura was focused, mainly, on the application to it of piano production principle (Cherkaskyi, 2003). This was reflected in the interpretation of the lower part of bandura body (*koriak*) as a frame for sounding-board (Mishalov, 2010). The craftsman started introducing partial scale chromatization in 1936. However, he soon chromatized the whole scale using a piano keyboard. The attempt to "pianotize" bandura, from which H. Khotkevych had warned in his time, had an effect on the appearance of this eclectic hybrid instrument, and its timbre characteristics were adversely affected. Keyboard-percussion sound production on bass disharmonized in terms of timbre with the plucked method of sound production on the short strings, and actually compromised the instrument's timbre perfect sound.

In 1938 V. Tuzychenko designed a totally chromatized bandura of Kyiv-Chernihiv type. In doing so, he changed the orientation of the sounding-board layering, having positioned it perpendicularly to the bass strings. In the prewar years, Tuzychenko brought to life his own idea of creating a family of orchestral banduras – piccolo, prima, viola, bass and double bass (with a total sound range from a subcontraoctave to c^5). The bandurist chapel under the direction of O. Minkivskyi used the craftsman's orchestric banduras.

In the postwar years, Tuzychenko's searches were crossed often with those of I. Skliar. In particular, the latter joined the improvement by Tuzychenko of bandura family, which since the pre-war years was used in the State Honored Bandura Chapel of the USSR, and since 1963 was replaced by the family of I. Skliar's orchestric banduras. Tuzychenko's bandura primas and bandura altos were used in orchestras of folk instruments. In the second half of the 1940s, at the initiative of Yu. Bartoshevskyi (teacher of the bandura class at Lutsk Music School), the craftsman developed and applied the mechanics of rearrangement (halftone up) of the Kyiv bandura using six large levers on all melodic strings (*prystrunky*). It was similar to the principle of rearranging strings on a harp. The craftsman placed this system in the instrumentbody, which affected the nature of the timbre. At the same time, Tuzychenko adjusted the keyboard mechanics, this time – separately on the bass and short strings. The craftsman's innovation coincided with the new search by I. Skliar.

Refining H. Khotkevych's invention, namely his "swivel-type bridge", Skliar designed a multi-step roller that served as a string support. The rotation of this roller in different positions rearranged the instrument to the desired scale. However, Skliar's steel roller, as well as H. Khotkevych's "swivel-type bridge", did not address the problem of the bandura's scale purity, since the excessive weight of the roller impaired the sounding-board pitch. Subsequently, Tuzychenko replaced it with a more sophisticated mechanism for tonation switching, when turning one of the six levers to a certain position changed the pitch throughout the range (in all octaves) halftone up or down. It was a major technical breakthrough. By turning a certain number of levers one could switch quickly to the required scale. Banduras fitted with Tuzychenko's lever mechanism in the early 1950s were used in the State Bandura Chapel of Ukraine under the direction of O. Minkivskyi (Cherkaskyi, 2003). A certain inconvenience of the mechanism, which did not ensure the scale purity, as well as a massive body with holes placed on the back side, produced a dull sound. Playing the instrument was also complicated by too wide fingerboard, which caused rapid fatigue of the left hand due to the high setting. The acoustic characteristics of the instrument had many drawbacks, which affected the difficulty of tuning and rapid purity of sound imbalance.

Although Tuzychenko failed to address ultimately the chromatization issue, at that time it was an extremely important invention that stimulated the Bandura players' development level of technical freedom. The chromatic banduras made using V. Tuzychenko's technology were fitted with an additional cleat to cover pins. Craftsman's Kyiv concerto bandura was first used in 1946 in the Kyiv State Bandura Players Chapel, and since 1953 the Chernihiv Factory of Musical Instruments introduced it into serial production. In 1954, several banduras were made using V. Tuzychenko's technology under order of the Lviv Conservatory Rectorate in connection with bandura class opening headed by V. Herasymenko). Before 1960's, Chernihiv Factory produced Tuzychenko-designed banduras with chromatic switches in small batches.

Tuzychenko's instruments were too massive, of considerable size. Their weight ranged from 10-12 to 16 kg and was of some inconvenience for the performers. Some elements of his bandura design served as a model for the first chromatic

banduras made by V. Herasymenko (in the early banduras of the 1950s V. Herasymenko uses, among othes, the shaped form of the Tuzychenko's bandura handle). After 1964, professional bandura players ceased using V. Tuzychenko's instruments, which were completely supplanted by Kyiv banduras made by I. Skliar's design, and from the 1970s – by V. Herasymenko (in the territory of the Western Ukraine). In 1950, Tuzychenko developed an instrument of a spired design with dampfer ("moderator", see more details hereafter). His banduras are stored in the State Museum of Theater, Music and Cinema of Ukraine and the Museum of Kobza Play of Crimea and Kuban at the Crimean State Humanitarian Institute, as well as in private collections.

Kyiv type banduras by Ivan Skliar

Ivan Skliar (1906–1970) is considered the creator of the Kyiv (Kyiv-Chernihiv) academic bandura of two types – chromatic (with no mechanics) and with the scale switching mechanism. He is also the author of the Kyiv-Kharkiv bandura model, which he worked on in the last years of his life. Craftsman and bandura-payer made hisfirst attempts to improve bandura in 1923. According to Skliar himself (native of the city of Myrhorod, Poltava region), he borrowed the shape of his first bandura body from the instrument of his countryman O. Slastion, a famous expert in the kobza epic and instruments. In 1928, working as a bandura player at the Myrhorod Bandura Chapel, I. Skliar made a diatonic bandura based on A. Slastion's drawings, taking the traditional Poltava instrument as a basis. He made it under order of the prominent Ukrainian historian Dmytro Yavornytskyi. Currently, this instrument is kept in the Dnipropetrovsk Historical Museum named after D.I. Yavornytskyi (Cherneta, 2013).

In the late 1930s, Skliar applied a system of strings rearrangement to the Kyiv bandura using levers located on all short melodic strings by increasing the pitch of their sound, which is similar to the rearranging strings on a harp. However, while there is a double action lever on the harp coupled with a pedal (foot) mechanism, Skliar used a single action mechanism on his bandura, which was switched not by the pedal mechanism, but by hand. The craftsman mounted it on the top of the bandura body. On the left edge of the body (its backside) seven metals mall levers were located, ending with spherical heads (One of the seven heads is missing on the bandura kept with MMTKM (Museum of Music, Theater and Cinema of Ukraine)). While rotating each, the performer pressed a small lever, which clamped string thus inceasing its pitch halftone. In the process of alternate pressing on each of the mechanism heads, the diatonic scale rearranged into seven additional tonations – three flat and four sharp. Kyiv bandura chromatization by Skliar simplified substantially the modulation from one scale to another. The war interrupted craftsman's creative search.

During the postwar period (from the mid-1940s), at the request of the Kyiv Bandura Players Chapel, Skliar designed a new system of bandura rearrangement using a metal roller (based on H. Khotkevych rotating type). Scale chromatization attempts were not limited to small melodic strings. They also extended to the bass strings, which increased their number and enhanced their tension force. In order to protect the lateral walls of the instrument from tears, a need inevitably arose to *increase the size of the instrument body* and strengthen its resistance. As is

known, the search for a new perfect sound is often accompanied by changes in the instrument shape, and sometimes – materials replacement, of which it is made. Even in diatonic banduras of the 1920s, some craftsmen used the oblique orientation of the sounding board layering, which did not completely coincide with the direction of strings (except bass ones) (on other stringed instruments, the vertical direction of the sounding-board layering is exactly the same as that of the strings). This principle subsequently became dominant in the manufacture of academic instrument sounding-boards.

Total bandura scale chromatization resulted in a significant increase in the total number of strings and their tension force. At the same time, that part of the sounding-board surface, on which the short melodic strings were located, remained unchanged, which caused disproportions in sound strength of different instrument registers, disturbed its monotembrality, caused imbalance in the sound of bass and melodic strings. In order to achieve timbre balance throughout the bandura range, preserve its timbre uniformity, Skliar continued to work hard to change the stratification orientation of the sounding-board. Subsequently, he directed it at an angle of 70°, and this experiment provided positive results. Already in 1950-1951, due to a positive feedback with regard to the timbre-acoustic and technical bandura parameters designed by I. Skliar, which was provided by the Department of Folk Instruments of the Kyiv State Conservatory named after P.I. Tchaikovskyi, the craftsman received a patent for its serial production, and in 1953 Chernihiv Factory of Musical Instruments named after P. Postyshev set up production of “chromatic” Skliar-based technology banduras. Until 1950 Chernihiv Factory named after P.P. Postyshev produced exclusively the folk string-plucked instruments.

Skliar successfully adjusted the chromatization of the bandura scaleusing a cymbal-like method of string fastening, which was first proposed by H. Khotkevych, and applied it on the Kyiv-Chernihiv type banduras. The strings that formed G-dur tonality scale in a diatonic sequence were placed at a slight angle relative to the sounding-board surface in one direction. Whereas, the strings that formed their chromatic varieties – at the opposite angle and in the opposite direction. To avoid contact between the “crossed” strings (subject to their “two-tier” arrangement), they were pierced through small bone column-stands that had different heights and were fixed on metal studs. When pulling the small strings on the body at different angles, this Skliar’s invention made it possible to differentiate them into diatonic ones, fixed on the lower columns, and “chromatic” (more precisely, chromatic varieties of diatonic ones), which were fixed on the higher columns. As a result of this invention, Khotkevych’s academic bandura was transformed into a double-diatonic one (Hubiak, 2006; Khotkevych, 2007).

In 1954, the banduras under his design with a cross-chromatized scale were introduced into serial production (they were manufactured until 1989). The craftsman, on one of the models of chromatic bandura, trying to achieve the best acoustic parameters, transferred the sound hole (in the form of ovally arranged honeycomb-like holes with a diameter of 8 mm) from the sounding-board to the skirt (lower part of the body). However, this acoustic experiment did not produce the desired effects. I. Skliar made an unique experimental bandura at the order of S. Bashtan. It is smaller than conventional academic instruments, but very loud.

Mechanics was designed individually by contrast with serial instruments, too complex for series production, which lifted the strings up. Instead of the usual chromatic order, the bass strings were tuned according to the quarto-quintic principle. Acoustic pick-up mounted by V. Honcharenko, son of the craftsman P. Honcharenko (USA), was mounted into the body detachable from the sounding-board (Mishalov, 2010). Skliar's major achievements in improving the "chromatic" instrument of the Kyiv type included:

- Creation of a compact mechanism for switching tonations due to the doubling of individual small strings (on the III and VII degrees of the major scale).
- Introduction of the upper "snare head" for the small melodic strings of the main scale and lower – for halftone small strings.
- Transfer of strings fastening to the lower end of the body.
- Introduction of two snare heads (separately for bass and melodic strings).
- Use of metal stands near the upper string holder.
- Widening the range of the instrument (from *C* contraoctave to g^3).
- Total scale chromatization on the last model (Bashtan, 1998).

Skliar's Kyiv Type Academic Bandura became in Ukraine the main instrument in the performing and pedagogical activity of academic bandura players (except for the Western Ukrainian region), stimulated the increase of their professional level, the emergence of a new concert repertoire, new genres of bandura artistry, new genres of bandura creativity (fantasies, poems, sonatas, suites, concerts). In the late 1950s, Skliar was particularly interested in the *idea of Kharkiv type bandura,* which after the death of H. Khotkevych did not obtain further development in Ukraine. On its basis, the craftsman devoted the last years of his life to the creation of the Kyiv-Kharkiv type instrument. He designed two types of Kyiv-Kharkiv bandura – chromatic with no mechanics and with a switching mechanism. Taking advantage of Khotkevych's drawings of the bandura reconstruction, preserved by the Kharkiv bandura player P. Ivanov (P. Ivanov is a follower of H. Khotkevych and L. Haidamaka), the craftsman, refining them, designed and implemented a mechanism for total tonalities switching. His first diatonic Kyiv-Kharkiv bandura appeared in 1959 at the Chernihiv Factory of Musical Instruments, a year later, with the appearance of P. Ivanov's Kharkiv-Bandura with nomechanics Ivanov (1981), and combined the best qualities of the Kyiv and Kharkiv type instruments (Kovalenko, 1959).

The length of the asymmetrical body was 1,020 mm, width – 500 mm, depth – 700 mm. Having chosen the Kyiv type bandura of its own design as a template, Skliar made significant structural changes thereto. *Within a year (1960) the craftsman made the Kyiv-Kharkiv type bandura with the tonalities switching mechanism,* which had a reduced body size and neck with the head, changed snare head structure. Its design specifics involved the release of the upper rib from the pins to allow full access of the left hand while playing on the small melodic strings by attaching them to the upper end of the body, changing the design of the main snare head, introducing additional first – third octave for halftone small strings. Tonalities switching mechanism was mounted into the pin block, with seven switching levers on the back of the body. The length of the Kyiv-Kharkiv type bandura was 1,010 mm, width – 480 mm, body depth – 80 mm. The

instrument had 64 strings – 14 bass and 50 melodic strings. Tonalities switching mechanism did not interfere with the free body resonating. The pins were located in the "niche" of the upper rib. The stand was figured, "double": separately for bass strings and separately for melodic strings, range – from *Cis* to g^4 (Skliar, 1971).

The tension pins for tones small strings and halftones melodic strings were moved from the upper rib to the lower one (similar to Kyiv-Kharkiv type bandura by P. Ivanov and Kharkiv type bandura based on Honcharenko brothers design). Stands for the halftones melodic strings were moved to the junction of the upper rib with the body. Strings – tones and halftones, abruptly refracting on their stands, passed through the holes to the back side of the upper rib and were fixed there on (Skliar, 1971). The first copy of the Kyiv-Kharkiv bandura with the mechanism was not introduced into serial production and remained an experimental model (currently stored with DMTMK of Ukraine, inventory no. 2581).

In 1960, the Chernihiv Factory of Musical Instruments produced the first Skliar's Kyiv-Kharkiv type bandura with tonalities switching mechanism. In the following years, in order to improve the acoustical and technical qualities of the instrument, the craftsman produced four models of the Kyiv-Kharkiv type bandura, the latter of which became a turning point in the development of an academic type bandura with a mechanism for rearranging into different tonalities using a lever system (Skliar, 1971). Model of 1964 is the last craftsman's piece of work. It was exhibited at the EXPO-1968 International Exhibition in Japan (Osaka) in the Culture and Art segment and was awarded the first prize in this nomination. Extremely expertly crafted, it was acoustically inferior to the standard Kyiv type bandura due to an extremely heavy snare head that "hampered" the sounding-board vibration. It was quite difficult to play it using the Kharkiv type. According to V. Mishalov, not quite satisfactory acoustics of the instrument, too dense mensuration of the melodic strings prevented its establishment in the performing practice (Mishalov, 2010). The production of the Kyiv-Kharkiv type bandura started in 1967 only; eight instruments were released (with no tonalities switching mechanism), but after the craftsman's death their production terminated, and the Kyiv-Kharkiv type bandura (as well as the Kharkiv method of play) was not recognized in Ukraine, as a prominent designer dreamed.

Thus, I. Skliar created two types of Kyiv-Kharkiv bandura: 1) a chromatic bandura with no mechanism and with a range that coincided with the Kharkiv "standard" bandura in the C dur tuning, which differed it from the Chernihiv type; and 2) a concert bandura with the tonalities switching mechanism. I. Skliar summarized the results of his many-years work in the manual "Kyiv-Kharkiv Type Bandura" (1971). The modification of Skliar's Kyiv-Kharkiv bandar was carried out in 1968 by the Ukrainian craftsman and bandura player V. Hliad (England), who previously worked also on the production of turban-like banduras (modelled after A. Paplynskyi and S. Lastovych-Chulivskyi). After Skliar's death, in 1971, craftsman Lavrinenko, based on Skliar's design, made a Chernihiv type concert bandura (with switching mechanism) (master version). Bas-relief of T.

Shevchenko, designed by D. Vasyliev, served as the sounding-board decor. O. Kolotskyi was the author of the color inlay.

With his Kyiv type bandura, Skliar suggested several options for placement of the sound hole – on the sounding board (most of the instruments) and on the skirt (individual models – in the form of 18-20 round holes). Together with V. Tuzychenko, the craftsman was involved in bandura family development based on the Kyiv type bandura. Several of Sklar's early and experimental banduras are kept with DMTMiK, the Museum of Kobsa Art of Crimea and Kuban (Yalta), the Dnipropetrovsk History Museum and private collections.

Banduras by Vasyl Herasymenko

During the pre-war period (1920 – 1930s), the Kyiv and Kharkiv bandura types underwent expansion in the western Ukrainian territories. The first banduras emerged under the direct effect of H. Khotkevych scientific and creative activities in Halychyna, which was part of Austria-Hungary. Khotkevych's undertaking was followed by the bandura players from Kharkiv and Kyiv regions (V. Yemets, M. Teliha, D. Honta), as well as the famous bandura virtuosos from Halychyna, who led the educational movement and ensured prominent bandura place in the musical life of the Western Ukrainian lands between the two world wars and within the first postwar years. During his forced emigration to Halychyna (1906–1912) H. Khotkevych had no students, however, his "Bandura Playbook" (1909), published by him in Lviv, had a decisive impact on the emergence of a galaxy of talented Halician bandura players in the 1920s and 1930s. – Yu. Singalevych, K. Misevych and Z. Shtokalko (Khotkevych's student). They independently designed the instruments and independently mastered the play according to the instructions taken from Khotkevych's "Playbook".

Within the postwar period (from 1949) the Lviv Factory of Musical Instruments resumed its operation starting the production of nine experimental diatonic banduras according to the drawings of bandura-player O. Hasiuk. Their design was focused on the model of the torban-like bandura by Kyiv craftsman A. Paplynskyi, cultivated in Halychyna by K. Misevych (O. Hasiuk' instrument is kept with the Museum of Kobza Play of Crimea and Kuban (inventory No 152)). A. Paplynskyi's instruments served as models for K. Misevych's banduras, who in the pre-war years made his own banduras and had many students in Lviv, including O. Hasiuk and V. Dychak (There is 1953 photo of the Bandura Players Chapel at Lviv Promcooperation Club, where O. Hasiuk and V. Dychak with this type banduras are present among the participants next to V. Herasymenko). Actually, the search by young V. Herasymenko (1927–2015) began with the focus on the models of Lviv diatonic banduras.

In the early 1950s, the craftsman started making his own banduras on the models of banduras already existing in Lviv, as well as on the model of the chromatic bandura by V. Tuzychenko, experimenting with the improvement of its acoustic-timbre qualities. One of his first banduras (1958) has a wavy (Tuzychenko-based) head shape. Its design was convenient to accommodate more bass strings due to their chromatization. The small melodic strings were also fully chromatized, with a number of holes in the upper rib, into which the strings

penetrated; the pins covered with a wooden bar. The sound hole made in the form of a lyre. First V. Herasymenko's instruments, which were created in 1950–1957, had a hollowed body made of maple or willow. The craftsman, in order to improve the acoustic performance and using bandura of 1952 (with chromatic tuned melodic strings), performed experiments with timber lamination of the upper sounding-board, which was perpendicular to the lamination of the wood of the lower body part – the skirt, as in some Tuzychenko's banduras. The pin box for fixing melodic strings, which consisted of long and short pins, was "recessed" in the pinblock.

Herasymenko's early banduras were not entirely original in design, as the craftsman created them based on the use of technologies and design features of V. Tuzychenko's Kyiv type banduras, as well as bandurasmade by the Western Ukrainian craftsmenfrom Halychyna and Volyn – K. Misevych, Yu. Singalevych, O. Hasiuk (Herasymenko created his first banduras in the workshop of M. Hnatovskyi, bandura repairman, who in the postwar years helped Yu. Singalevych to produce banduras for the Lviv Bandura Players Chapel). They are characterized by accurate elaboration, good and pleasant sound. In 1955, V. Herasymenko became interested in Skliar's Kyiv-Chernihiv bandura, which was just launched into serial production, and started working on changes of calculations in the structure of own instruments through improvement of their timbre and acoustic properties, increase of sound power and search for more perfect mechanisms.

In 1958, the craftsman creates his first instrument, the skirt of which was made of rivets (segments). This method of making the bottom of the body to reduce the instrument weight was not a novel one. The first models of such skirts existed already on the diatonic banduras of the early XX century, made by Odesa Workshop of Musical Instruments. In 1929, this method of body construction was applied by the craftsman H. Horhul on diatonic Kharkiv type banduras. Skirt segments on Herasymenko's banduras are made of maple (thickness 3–3.5 mm). From the inside of the body they are fastened with thin plates, inserted in layers and glued across. The sounding-board made of spruce is connected to the skirt using a *bochok [Ukrainian]* in the form of a thin sycamore strip 250 mm wide and approximately 1000 mm long. It is glued to the oval of the inner side of the body and secured in the lower end by two pads. The neck is made of solid lump of wood. The location of sixteen sound holes beneath the lower rib is caused by the general design of the instruments.

In 1956, for the first time, the craftsman introduced tonalities switching mechanism of own design, which was more compact and lighter compared to I. Skliar's bandura. It was first used on an instrument with a hollow body, in 1958 – on bandura with a segmental body design (O. Korniievskyi also applied segmental structure of the body). The location of tonalities switching mechanism was undergoing constant changes. Experimenting with the length of the mechanism levers housed in the pin block, its levers were first withdrawn from the back of the body (by Skliar's Kyiv type bandura), then – in the middle of the upper *shemstok [German, Ukrainian]*, like in O. Herasymenko's bandura, and finally – into its lower end. Herasymenko, improving Skliar's mechanism, made it compact, conveniently adjustable, which ensures high clarity of strings sound. The craftsman improved this mechanism by adjusting the length of each of its seven

levers located in the same plane (in the pin block), concentrating the mechanism switching levers in the form of a beam (fan) on one axis. This ensured its easy switching (in one movement) and reduced the time of tuning the scale to a desired tonality. Similar to Skliar's Kyiv type bandura, the mechanism does not touch the resonator body and does not affect its resonance.

In 1960, the Lviv Factory of Musical Instruments "Trembita" launched serial production of children's (teenage) Kyiv-type banduras with a corresponding reduction in the body size and the number of strings (56:15 bass and 41 melodic strings). Based on them, in 1965, Herasymenko designed his own teenage bandura with tonalities switching mechanism (intended for students of Lviv CMS), which had 66 strings – 15 bass and 51 melodic strings. The craftsman made the bodies of these banduras of maple or sycamore, sometimes of spruce; the sounding-board oval was decorated with inlay – an ornament of tinted wood. The instruments were covered with clear lacquer. A year later, for the first time, the children's bandura made by craftsman was launched into production with a fully chromatized scale.

In 1964, V. Herasyenko designed several "chromatic" banduras with tonalities switching mechanism named "Lvivianka". Similar to the previous instruments, the body was of segmental structure. The first "Lvivianka*s*" had 64 strings (16 bass and 48 small melodic strings). Their dimensions – 1,000/500/150 mm, scale – G dur (similar to Kyiv-Chernihiv type bandura). In 1970, the craftsman designed another "Lvivianka" model, the bandura-primo. This instrument had 65 strings (17 bass and 48 melodic strings), its range reached 4.75 octaves (dimensions – 1,002/520/150 mm, scale –*G dur*). Since 1979, the craftsman has placed 15 basses on the same concert-type instruments, and since 1980 – sixteen. This "Lvivianka" model was made of a rare variety of maple texture called "bird's eye". In 1978, it was exhibited at the VDNH USSR in Moscow and won an award in the category "Culture and Art".

The concerto "Lvivianka*s*" are light and convenient, with a nice timbre color. They feature full sound and bright yet soft timbre. In contrast to the massive I. Skliar's banduras with hollowed body, the riveted bodies reduced significantly total instrument weight (up to 4,5 kg). The sound became more clear, delicate, though was somewhat inferior to the saturation and sound power of the Kyiv bandars by I. Skliar. Since 1964, Lviv Music Factory "Trembita" launched "Lvivianka" serial production tonalities switching mechanism currently played by almost all professional bandura players of the Western Ukraine.

In 1990, a former Herasymenko's student, today – Honoured Artist of Ukraine, bandura-player O. Stakhiv, having returned from a concert tour to the North American and European countries, brought to his teacher a copy of the Kharkiv type bandura cultivated in the Western Ukrainian diaspora. It was a diatonic instrument with a single-series mechanism by craftsman Vasyl (William) Wetzal (Canada), made in 1989 on the basis of Honcharenko's bandura. In 1989, Herasymenko received as a gift an audio album of the American bandurist Z. Shtokalko "Oh, my thoughts" with records of ten original works, including four original *dumas* (New York). Stokalko's performance of the Ukrainian epic deeply

impressed the craftsmen and convinced him of the need to develop Kharkiv method of play in Ukraine.

In 1991, the famous Canadian bandura-player and Kharkiv-type bandura researcher V. Mishalov visited Lviv on a concert tour, who, while communicating with the professor, showing him the Kharkiv chromatic bandura by V. Hliad (England) and acquainted with H. Khotkevych's compositions in his own performance. V. Herasymenko became very interested in the repertoire and design of Kharkiv-type bandura, which had been developing since the 1940s, mainly in the Western Ukrainian diaspora. Since 1991, with the acquisition of Ukraine's Independence, the craftsman began developing his first model of the Kharkiv-type bandura based on V. Wetsal's bandura made following "Poltavky" model by Honcharenkos brothers (Mishalov, 2010). In 1992, the craftsman created first diatonic Kharkiv-type bandura with a single-series mechanism and oval rib (800/450/120 mm) (Currently, this diatonic bandura is the property of bandura player Yu. Kytastyi (USA), who frequently visits Ukraine on concert tours performing both traditional repertoire and his own improvisational compositions). The mechanism, located on two small snare heads (separately for bass strings and small melodic strings), consisted of individual switches on each string separately, which sharped a tone of the sound. A year later, a diatonic bandura with no mechanism appeared. In 1994, Herasymenko created the first chromatic model of the Kharkiv-type bandura with a straight rib and switches on each pair of strings, using some of the experiments previously carried out with "Lvivianka" (sizes 1,000/500/150 mm, scale– G dur). Shortly, he made two more copies of Kharkiv-type "chromatic" banduras. O. Sozanskyi describes the present state of Kharkiv-type banduras made by his Maitre:

> "*First <…> was diatonic one with a round rib and individual switches. The second diatonic bandura was made with a straight rib, but with no switches. Currently, this bandura <…> is unfit for use. The third bandura was chromatic – with a round rib<…>. The fourth chromatic bandura with straight rib <…> is out of operation. There are practically two Kharkiv-type banduras <…> with an individual switching mechanism: one of them is owned by Yu. Kytastyi, a friend of craftsman. Among the models of Herasymenko's Kharkiv-type banduras there is one more instrument – bandura with a general mechanism based on Lviv bandura "Prima" with a straight rib, on which there is a possibility of simultaneous switching of all strings, similar to modern chromatic bandura*" (Yevhenieva & Kozii, 2006).

At the same time, the acoustic properties of the instruments were improved and their mechanisms modified. The models of 2000 (with five sound holes) and 2001 combine two bandura types – Lviv type – for small melodic strings and Kharkiv-type for basses. Each group of strings, as with previous models, was placed on a separate snare head. The bass strings, like melodic ones, were doubled and a mechanism used to rearrange each pair (Each segment of the Kharkiv-type mechanism is located on two different hight stainless steel columns, between which there is a steel spring with a cup-shaped duralum bushing. Pushing the lever while squeezing the spring shortens the strings, causing a halftone increase in sound. The levers are marked with colored symbols for convenient reference. The short strings mechanism consists of 26 segments (for 52 strings), mounted on a separate string holder, bass – with 7 (for 14 strings)).

Currently, professor's former students play the "chromatic" Kharkiv-type banduras. Among them well-known concert bandura-platers Lazurkevych (2011), and B. Bahlai, a former student of T. Lazurkevych's class at the M. Lysenko National Academy of Music in Lviv. In total, Herasymenko designed five banduras of the Kharkiv-type model (In total V. Herasymenko designed more than 40 models of bandura), each of which has an individual design. Using his experience with academic Kyiv and Lviv bandura types, the craftsman sought to create such instruments that would combine the compact tonalities switching mechanism with the Kharkiv-type individual switches introduced by him at "Lvivianka" in order to perform the broadest bandurarepertory.

Thus, the Kharkiv type bandura, which until the 1990s was rarely used in traditional bandura art in Ukraine (G. Tkachenko and his followers), joined the academized bandura tradition. From 1993 to 2012, Professor Herasymenko taught the Kharkiv method of play at the Lviv National Music Academy. Since 2011, it has been introduced as an elective course in the bandura class of Lviv Specialized Music School named after S. Krushelnytska by T. Lazurkevych (2011) and O. Sozanskyi. Since 2011, Associate Professor T.M. Lazurkevich instructs the Kharkiv method of play at Lviv National Academy of Music. In fact, the Lviv National Academy of Music is currently one of the few higher educational institutions in Ukraine instructing the Kharkiv method of play (using "chromatic" instruments).

The craftsman made all models of Kharkiv type bandura in his workshop, located at 26 Holubovycha Street in Lviv. The fourth model (2000), different from the previous in the exterior decor, was exhibited in 2000 in Toronto, Canada, during the International Festival "Bandura 2000". The first bandura models (1992, 1993) were designed for students of craftsman's class, today – Honored Artists of Ukraine T. Lazurkevych and O. Sozanskyi (Kharkiv-type banduras of 2000 and 2001 have a straight rib (similar to anniversary "Lvivianka")). While the first model is equipped with an individual mechanism on each string, all subsequent have a different type of mechanism, each segment of which combines the strings in pairs. Models of 2000 and 2001 combine two types of mechanism – Kharkiv-type on bass strings and Lviv-type – on short melodic strings. According to V. Mishalov, a Canadian bandura player, who cultivates a purely Kharkiv method of play, the craftsman's achievements were ambiguous (one of the Chernihiv-type bandura from the bandura player's collection utilizes Kharkiv mechanics designed by V. Vetsal, which V. Mishalov plays using Kharkiv method).

Despite the excellent timbre-acoustics, the instruments with two types of switches are not very comfortable to play with the left hand because of the presence of the Lviv-type mechanism and pins on the upper rib. Bandura player considers critical the distance from the side to the threshold and the place of the beginning of string for the development of left-hand play method, reducing its sound-producing capabilities (Mishalov, 2010). According to Lviv bandura players, who apply the Kharkiv method of play, the most successful models of the Lviv designer for the development of play technique would be banduras with oval rib (without Lviv-type mechanics).

In contrast to the Kyiv-type banduras, the crossing of strings on the "chromatic" Kharkiv-type banduras by Herasymenko is done on the contrary – an auxiliary row of strings on the snare head is located on the top, and the main one – beneath, which affects the development of the left-hand play technique. According to V. Mishalov, due to the high setting on the strings, the hand gets tired quickly, which affects the completeness of the sound of the main row of strings (Mishalov, 2010). Students of the Herasymenko's class, who possess both play methods, do not share V. Mishalov's opinion (Lazurkevych, 2011).

The possibilities of playing Kharkiv-type bandura in Ukraine open considerable prospects for performing (in particular, picking-articulating) technique development, as H. Khotkevych wrote in his time. The introduction and mastering the Kharkiv-type method of play requires "overcoming the opponency" of the modern popular-academic bandura schools of Ukraine in their capacity of "successors" of the Soviet period of Chernihiv-Kyiv bandura performance development. By inertia of the Soviet past, they cultivate everywhere the Kyiv method of play. There are many problems associated with the introduction of Kharkiv-type bandura into the academic process at different levels of musical education in Ukraine, which are additionally affected not only by the lack of this type of instruments industrial production, but also by the catastrophic shortage of highly skilled staff of craftsmen, instructors and performers.

In fact, in Ukraine, only few students of Professor V. Herasymenko, the founder of the modern Lviv Bandura School, play the Kharkiv-type bandura. Still, the Kyiv-Chernihiv method of play prevails in the training-performing practice. However, in the future, the development of bandura art in Ukraine should be more focused on prevalence of the Kharkiv-type bandura, a technically more promising tool, developed in Ukraine by H. Khotkevych, P. Ivanov, I. Skliar, V. Herasymenko, as well as craftsmen from the western Ukrainian diaspora – Honcharenko brothers, V. Vetsal, V. Hliad, K. Blum, A. Birko and others. Nowadays, craftsmen-designers of the Kharkiv Academic Bandura are facing the need of experimenting with the achieved high-quality acoustic parameters of the instrument and searching for the best design of the tonalities switching mechanism to ensure comprehensive mastering of the repertoire created for both types of bandura – Chernihiv-Kyiv type and Kharkiv type. However, even today, the matter of introducing in Ukraine the Kharkiv-type bandura into production and pedagogical process is hampered by a number of factors – not only economic but also subjective in nature.

Conclusion

The development of the Chernihiv and Kharkiv academic bandura types in the 1920s and 2010s is primarily associated with the names of three prominent contemporary Ukrainian bandura craftsmen – O. Korniievskyi, I. Skliar, and V. Herasymenko. Each of them has made a significant contribution to the establishment and development of an academic-type instrument. The academization of diatonic banduras, their gradual transformation in the direction of scale "chromatization", that is, transformation into the instrument with double-diatonic tuning system, was in line with the general trends in traditional popular-instrumental cultures development of the Eastern Europe. The searches proceeded in the direction of different chromatization methods for traditional

instruments tuning system, introducing different types of tonalities switching mechanisms. They were aimed at reducing instument weight, achieving the most convenient play methods for Chernihiv (later Kyiv-Chernihiv) and Kharkiv bandura types.

O. Korniievskyi was the first who attempted introducing chromatism on individual melodic strings. He also experimented with a lyre-like bandura (with two necks) and bandura with two pin boxes. His unique instrument "banduryna" was made in one copy and never used in performing practice. V. Tuzychenko's search in the field of "pianozation" of bandura did not find support among bandura players. I. Skliar's search rendered a greatest impact on the Chernihiv-type bandura development. His later attempts to improve Kharkiv-type bandura remained at the stage of experiments. In Western Ukraine, bandura "Lvivyanka" designed by V. Herasymenko became especially popular. The craftsman's search at a mature age for revival of the Kharkiv-type bandura in Ukraine ended up with the creation of five types of instruments, which are now played by the prominent designer students. The instruments developed by I. Skliar and V. Herasymenko are used in the practice of modern bandura performance until present.

The possibilities of playing Kharkiv-type bandura in Ukraine open considerable prospects for the modern performing technique development. However, the introduction of the Kharkiv method of play in the performance practice requires "overcoming the opponency" on part of the modern popular-academic bandura schools in Ukraine established due to the activity of the popular instruments departments at Ukrainian universities, colleges and academies of music, which cultivate widely the Kyiv method of play on an academic instrument by inertia of the Soviet past.

References

Amerta, I. M. S., Sara, I. M., & Bagiada, K. (2018). Sustainable tourism development. *International research journal of management, IT and social sciences*, *5*(2), 248-254.

Bailey, J. (1983). The Versification of the Russian Kant from the End of the Seventeenth to the Middle of the Eighteenth Century. *Russian Literature*, *13*(2), 123-174. https://doi.org/10.1016/0304-3479(83)90037-6

Bashtan, S. (1998). To the memory of the prominent Ukrainian artist – I. M. Skliar. *Bandura 63-64*, 30-35.

Bohm, P., & Russell, C. S. (1985). Comparative analysis of alternative policy instruments. In *Handbook of natural resource and energy economics* (Vol. 1, pp. 395-460). Elsevier. https://doi.org/10.1016/S1573-4439(85)80013-0

Brockhoff, K. K. (1992). Instruments for patent data analyses in business firms. *Technovation*, *12*(1), 41-59. https://doi.org/10.1016/0166-4972(92)90031-C

Cherkaskyi, L. M. (2003). Ukrainian traditional musical instruments. *Cherkaskyi LM-K.: Technique*.

Cherneta, T. O. (2013). Bandura art of the Dnieper Region of XX century: from amateur to academism.

Crank, J. P. (1990). Police: Professionals or craftsmen? An empirical assessment of professionalism and craftsmanship among eight municipal police

agencies. *Journal of Criminal Justice*, *18*(4), 333-349. https://doi.org/10.1016/0047-2352(90)90045-D

Deko, O. A. (1968). *Craftsmen of Chernihiv Sounds: Narrative about Chernihiv Factory Named after P.P. Postyshev.* Kyiv: Muzychna Ukraiina.

Granger, C. W. (1988). Some recent development in a concept of causality. *Journal of econometrics*, *39*(1-2), 199-211. https://doi.org/10.1016/0304-4076(88)90045-0

Hlebova, N., Oleksenko, K., Oleksenko, R., & Afanasieva, L. (2021). Subjunctive aspects of sociological support of the modern teacher formation process in the development context of the new Ukrainian school system. *Linguistics and Culture Review*, *5*(S1), 439-450.

Hubiak, D. (2006). Design thought evolution in bandura improvement. *Research notes of the Ternopil National Pedagogic University named after Volodymyr Hnatiu, 1(16),* 85-89.

Humeniuk, A. (1967). Гуменюк, Андрій. *Українські народні музичні інструменти.*

Ivanov, P. (1981). Orchestra of Ukrainian folk instruments. *Kyiv: Musical Ukraine.[In Ukrainian].*

Khotkevych, H. M. (2007). *Art Works for Karkiv-type bandura.* Toronto; Sidnei; Kharkiv: TO Ekskliuzyv.

Kovalenko, M. (1959). Improved bandura. *Soviet Culture, 60(476),* 3-9.

Lazurkevych, T. M. (2011). Modern integration of Kharkiv type bandura as an academic development factor of kobza art in Ukraine. *Research notes of the Ternopil National Pedagogic University named after Volodymyr Hnatiuk, 1,* 103-109.

Larionova, L. (2005). History of one collection (Museum of the Chernihiv Factory of Musical Instruments). *Ukrainian Culture Treasury, 5,* 92-99.

Mishalov, V. (2010). Considerations regarding bandura design and improvement. In: *H.M. Khotkevych. Bandura and its Design* (pp. 245-265). Toronto; Kharkiv: Hnat Khotkevych Foundation for National and Cultural Initiatives.

Nehru, R. S. S. (2016). Corporate social responsibility & education for sustainable development. *International Research Journal of Engineering, IT and Scientific Research*, *2*(3), 72-81.

Nonaka, T., & Bril, B. (2012). Nesting of asymmetric functions in skilled bimanual action: Dynamics of hammering behavior of bead craftsmen. *Human Movement Science*, *31*(1), 55-77. https://doi.org/10.1016/j.humov.2010.08.013

Nyrko, O. (1994). Kobza art of Kuban. In: *Kobzar and Lyre Traditions and Modern Development there* (pp. 19-21). Kyiv: Ukrainian Center for Folk Art.

Park, W. K., & Lesselier, D. (2009). Electromagnetic MUSIC-type imaging of perfectly conducting, arc-like cracks at single frequency. *Journal of Computational Physics*, *228*(21), 8093-8111. https://doi.org/10.1016/j.jcp.2009.07.026

Pavlenko, S. (2006). Kobza father. In: *In Banduras' Humming and Mourning* (pp. 325-328). Kyiv: MAUP.

Roi, V. (1967). Bandura with additional resonating holes. *Folk Art and Ethnography, 3*, 55-59.

Shudria, M. (2006). Straivari from Koriukivka. In: *In banduras' humming and mourning* (pp. 9-36). Kyiv: Vydavnytstvo MAUP.

Skliar, I. (1971). *Bandura of Kyiv-Kharkiv Type.* Kyiv: Muzychna Ukraina.

Smolen, D., Topp, R., & Singer, L. (2002). The effect of self-selected music during colonoscopy on anxiety, heart rate, and blood pressure. *Applied Nursing Research*, *15*(3), 126-136. https://doi.org/10.1053/apnr.2002.34140

Standley, J. M. (2002). A meta-analysis of the efficacy of music therapy for premature infants. *Journal of pediatric nursing*, *17*(2), 107-113. https://doi.org/10.1053/jpdn.2002.124128

Suwija, N., Suarta, M., Suparsa, N., Alit Geria, A.A.G., Suryasa, W. (2019). Balinese speech system towards speaker social behavior. Humanities & Social Sciences Reviews, 7(5), 32-40. https://doi.org/10.18510/hssr.2019.754

Toya, H., & Skidmore, M. (2007). Economic development and the impacts of natural disasters. *Economics letters*, *94*(1), 20-25. https://doi.org/10.1016/j.econlet.2006.06.020

Vereshchahina-Biliavska, O. Y., Cherkashyna, O. V., Moskvichova, Y. O., Yakymchuk, O. M., & Lys, O. V. (2021). Anthropological view on the history of musical art. *Linguistics and Culture Review*, *5*(S2), 108-120.

Yevhenieva, M., & Kozii, O. (2006). Meet the virtuoso duet "Bandurna Rozmova": Ternopil radio interview with bandura player O. Sozanskyi. *Kobzar of Ternopil Region*. Retrieved from: https://onlineradiobox.com/ua/Ternopil?lang=ru (accessed 12.07.2021).

Zinkiv, I. Y. (2021). Academization of the Ukrainian Bandura by the Proficient Bandura-Craftsmens of the XX–Early XXI Centuries. *REVISTA GEINTEC-GESTAO INOVACAO E TECNOLOGIAS*, *11*(4), 2459-2480.