

Authentic Instruments from an Organological Perspective in the Process of East-West Cultural Assimilation

Elif Sayın¹

Abstract

Organology is a discipline that focuses on the structural characteristics and functions of musical instruments. Through the science of organology, instruments provide profound insights into the diverse cultural elements they embody, thereby carrying traces not only of their role as intermediaries of music but also of historical significance.

The ultimate aim of this study is to elucidate the traces of intercultural exchange by leveraging the historical development of bowed string instruments, which have also permeated Turkish culture through the cultural interactions between different geographical regions. Through organology, the structure and materials of musical instruments can be elucidated, shedding light on the socio-cultural context in addition to the climatic and socio-economic conditions of various geographical regions. This discipline entails the classification of different musical instruments into general categories such as bowed string instruments, wind instruments, keyboard instruments, and percussion instruments, with a particular focus on the development of bowed string instruments in this study. Organological research examines the structural analysis of musical instruments, encompassing a comprehensive examination of the components, materials, dimensions, and shapes of an instrument. Moreover, organology delves into the functionality and playing techniques of musical instruments, investigating how an instrument is played, the techniques employed, and the sounds produced. This encompasses aspects such as correct playing positions, finger placements, breathing techniques, and bowing techniques.

Through the study of Organology, which investigates the historical development, origins, and evolution of musical instruments in different cultures, a comprehensive understanding of the cultural, historical, and socio-cultural contexts surrounding these instruments is achieved. The purpose of this study is to examine the development of string instruments from past to present from an organological perspective.

¹ İstanbul Nişantaşı University, Faculty of Arts and Design, Orcid: 0000-0001-6594-0958

Introduction

Since the dawn of recorded history, humanity has always strived to sustain its existence by living in harmony with nature and engaging in interactions with its surroundings. As a means of communication, humans initially imitated the sounds they heard and utilized body language and gestures to interact with their environment. Over time, this interaction propelled humanity to transcend primitive forms of communication and seek refinement and beauty. In the process of developing modes of communication, humans explored aesthetic qualities in their own vocal expressions and created melodic and rhythmic compositions using materials found in nature, such as stones, animal bones, and horns.

The communicative abilities of humankind have evolved in tandem with their interconnectedness with the natural world. During early stages, individuals relied on imitating environmental sounds to establish communication. For instance, they utilized animal vocalizations to mimic hunting calls or convey danger. Additionally, body language and gestures were employed as integral components of communication.

As humans expanded their repertoire of communication, aesthetic considerations gained significance. The pursuit of beauty and aesthetics in their own vocal expressions laid the foundation for music. By utilizing various materials found in nature, individuals crafted melodic and rhythmic structures. Striking stones to produce sounds and playing objects like animal bones or horns enabled the creation of melodic arrangements. This can be regarded as a precursor to music.

Over time, humans further developed and diversified music. The invention of musical instruments, the establishment of notation systems, and the emergence of musical forms and styles transformed music into a rich and intricate art form. Through music, individuals have expressed their emotions, told stories, and forged connections among communities. Furthermore, music has played a significant role as a cultural expression. Musical structures, instruments, and melodies in different cultures have facilitated the expression of identity.

Today, music serves a multitude of purposes, including enhancing emotional experiences, providing entertainment, serving as an art form, functioning as a therapeutic tool, and participating in rituals, among others. Humanity's interaction with nature and their pursuit of communication have influenced the development of music and other forms of expression, playing a crucial role in the cultural evolution of humankind. The quote

“Rene Hygue: Art is intertwined with aesthetics” (Turani, 2010: 11) suggests that there is a close relationship between art and aesthetics. René Huygue, a renowned figure in the field, presumably emphasized the interconnectedness of these two concepts. Aesthetics refers to the branch of philosophy that explores the nature and appreciation of beauty. It encompasses the study of sensory or visual experiences and the principles governing what is considered aesthetically pleasing. In the context of art, aesthetics plays a fundamental role in how we perceive and evaluate artistic creations. By stating that art is intertwined with aesthetics, Hygue likely argued that aesthetics is a fundamental aspect of artistic production and reception. Artistic expression often aims to evoke aesthetic experiences and elicit emotional or intellectual responses from viewers or audiences. Artists employ various elements, such as color, form, composition, texture, and rhythm, to create visually appealing and engaging artworks. Furthermore, the quote implies that aesthetics provides a framework for understanding and analyzing art. Aesthetic theories and principles guide our interpretation and critique of artworks, helping us appreciate the artistic choices made by creators and discern the inherent beauty or value in a given artwork.

It is important to note that the full context of Rene Hygue’s statement, as well as the broader discussion in the referenced work by Turani would provide a more comprehensive understanding of the specific arguments and ideas presented.

Although the exact point at which the creations of this aesthetic pursuit transformed into music is not fully known, based on information recorded by archaeologists since the Paleolithic era, it is believed that art has evolved within a structured framework, progressing from small hunter-gatherer communities to villages, then to larger human settlements known as site locations, further advancing into urban civilizations and ultimately developing into nation-states, kingdoms, empires, and other large-scale political entities.

Throughout this progression, art and its various forms, including music, are thought to have played a significant role in shaping and reflecting the cultural and social dynamics of these societies. The development of settled communities led to the emergence of more complex artistic expressions, as individuals had more opportunities for specialized craftsmanship, cultural exchange, and the establishment of social hierarchies.

Music, as one of the artistic manifestations, is believed to have accompanied these societal transitions. It would have evolved from simpler

forms of rhythmic and melodic patterns, potentially originating from imitations of natural sounds and vocal expressions, gradually incorporating more sophisticated techniques, instruments, and compositional structures. However, the specifics of this evolutionary process and the exact timeline remain speculative and subject to ongoing research and archaeological discoveries.

The transformation of art into music reflects the deep-rooted human impulse for creative expression and the desire to communicate and connect with others through aesthetic means. Music, with its emotive and symbolic power, likely played a significant role in fostering a sense of identity, communal bonding, and cultural continuity within these evolving human societies.

1. Hybrid Instruments from an Organological Perspective

During archaeological excavations carried out in the Divje Babe caves in the northwest of Slovenia, which are believed to have been inhabited by Neanderthals, flute samples made from bones, presumed to date back to the Middle Paleolithic period ranging from 50,000 to 35,000 years ago, have been discovered. These bones were derived from animals such as vultures and mammoths (Kunej and Turk, 2000: 235).

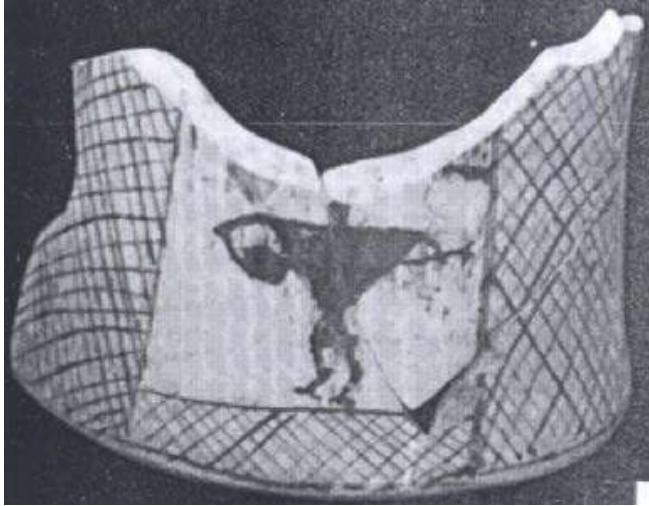
This situation presents an intriguing dual observation. Firstly, it highlights the inclination of humans to engage in the pursuit of melodious sounds as a means of self-expression, paralleling their constant need for creation. Secondly, it underscores the fact that the process of music formation can extend to an unexpectedly ancient timeframe. Another interesting aspect in this regard is that the instruments have been shaped in physical positions capable of producing both whole and half-tone sounds. Although these pitch intervals, which can serve as the foundation for the sound ranges utilized in contemporary instruments, may be limited in terms of octaves, they imply a similarity in the pursuit of melody.

Figure 1. Neanderthal flutes, photo Tomaz Lauko, NMS (The Neanderthal Musical Instrument from Divje Babe I Cave (Slovenya): A Critical Review of the Discussion, mouth spring (Turk, Turk and Otte, 2020, p. 2)



All human communities possess their own music. It is a well-known fact that this has been passed down from generation to generation. Furthermore, music has always served as a tool to aid humans. Moreover, archaeological findings indicating that music dates back tens of thousands of years serve as evidence of this (Kunej and Turk, 2000, p. 437).

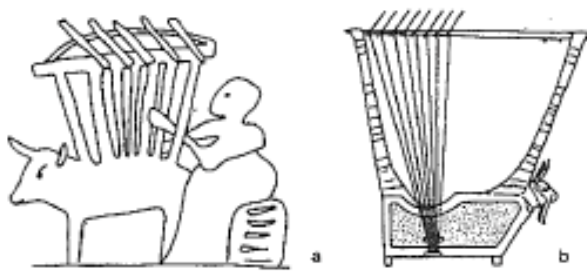
Figure 2. Adana Archaeology Museum Inventory No: 3059: The Musician Playing Bağlama Figurine Unearthed in the Samsat District of Adiyaman



During archaeological excavations conducted in Anatolian lands, figures of humans playing musical instruments, believed to be associated with the Hittite civilization that made Anatolian lands their homeland, have been discovered. These figures, engraved on stones, symbolize the presence of social life and art, dating back to approximately 1200 BC. It is observed that people, in different geographical regions of the world, had increasingly close relationships with art, driven by their desire to achieve better means of expression, during approximately the same time period.

The Mesopotamian lands, known as the cradle of civilizations, have been home to civilizations that left their mark in history with their art, starting around 4000 BC. In these lands where the Akkadian, Persian, Babylonian, Assyrian, Elamite, Sumerian, Hittite, and Kassite civilizations thrived, the existence of musical instruments such as small flutes called tiğ or tiggi, small drum examples called balag, and instruments like lilis, which can be considered as ancestors of the timpani, and çeng, which can be considered as ancestors of the harp, can be observed. Çeng, in particular, has been a musical instrument seen in Iran, Greece, Egypt, Assyria, Central Asia, and Caucasian countries. The Hittites are one of the oldest civilizations that lived in Anatolian lands. When the Hittites arrived in Anatolia, the region was under the rule of the Hatti state. The Hittites, through their communication with European and Indian immigrants, who brought with them a cultural diversity, were influenced by their cultures and continued their cultural development for centuries. Historical evidence provides significant information about the origins of musical instruments. Looking at other civilizations living in Anatolian lands during the same period (such as the Hattians, Phrygians, Lydians, Ionians, and Urartians), it can be observed that these states influenced each other in various aspects of daily life, culture, art, and trade, leading to the blending of various cultural structures between the East and the West throughout history. This cultural exchange facilitated mutual political, commercial, economic, and cultural interactions from the East to the West.

Figure 3. Musical instruments of the Mesopotamia region (Say, 1997, p. 36)



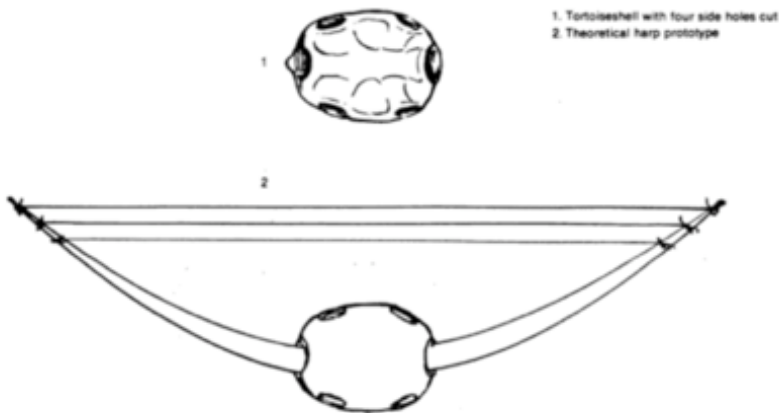
A Sumer'lilerde lir

In the archaeological studies conducted among the remains of the Hittite Empire, which ruled over the area from Central Anatolia to Upper Mesopotamia between 1600 BC and 1178 BC, figures of instruments and musicians found on stone reliefs provide evidence that music has always existed in human life. From the earliest known civilizations, instruments

(made from natural materials) used as a means of communication during special moments such as religious ceremonies, rituals, and celebrations, in different geographical regions of the world, have evolved and modernized over time, enabling a wide range of sounds in contemporary instruments. As a result, primitive music, which originated from tradition and improvisation, has undergone new explorations in terms of purpose, function, methodology, and aesthetic concerns, advancing the art of music. Alongside this progression, the physical structure of instruments used as means of expression has also developed, allowing for a higher quality of sound production.

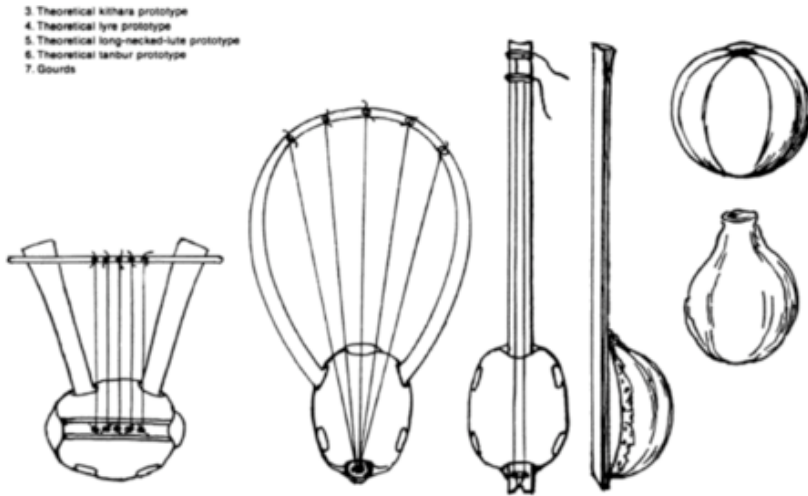
There is evidence suggesting that the origin of the bow used in musical instruments is derived from hunting bows. It is believed that the idea of producing sound from a bow is inspired by the sound generated when a hunting bow is stretched. “Hunting bows were ancestors of stringed instruments. The transition from single-string hunting bows to bows with various hair structures is just a small step. The sound produced when a hunting bow is stretched can also be used to obtain sound from the soundbox of instruments (Jahnel, 2000, p. 15).

Figure 4. Instrument bow made from hunting bows (Jahnel, 2000, p. 15)



The limitations of the bows obtained from hunting bows are the weakness of the sound produced and their lack of resistance to pressure. In the above image, a hunting bow made from a turtle shell with its four sides cut off is observed. This data, theoretically, also contributes to the prototype of the harp. Therefore, the lute, harp, and hunting bow converge to some extent in terms of their construction and origin.

Figure 5. The first examples of stringed instruments made from natural materials such as tree bark, tree trunks, animal intestines, and thin tree branches found in nature (Manual of Guitar Technology, Jahnel, 2000: 16).



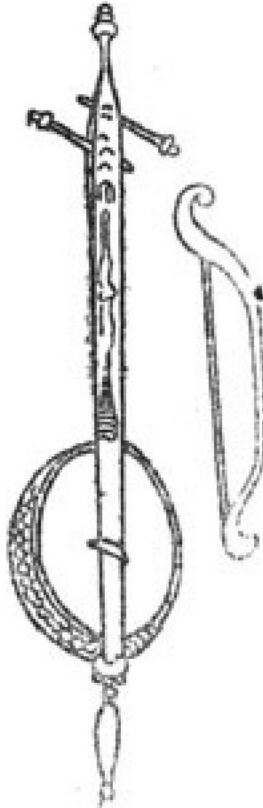
From a physical perspective, the soundholes on stringed instruments have also varied according to the artistic characteristics and the instrument maker. It can be observed that the distribution of bowed instruments originated from Iran around the 9th century, with written sources about bowed instruments emerging around the 10th century. Concurrently, it is evident that these instruments were transmitted to Anatolian lands and Europe through travelers and explorers.

Figure 6. The figurine of a person playing a guitar on pottery at the British Museum in London



The ravanastron, also known as ravanahatha, rawanhattha, or ravana hasta veena, is one of the bowed instruments that existed before the Common Era and originated from India, Pakistan, and Sri Lanka. It represents one of the primitive forms of the modernized violin we know today. The ravanastron is crafted by stretching goat skin over the body of a coconut shell or a halved gourd. It is played using gut strings stretched over a bamboo neck and is performed with a classical bow designed in a similar form to other bowed instruments. During the Middle Ages, as Indian rulers began to exert influence over music, it is believed that the ravanastron, along with other commercial migrations taking place between the 7th and 10th centuries, was transported via Arabs, and it is considered to be the precursor of the Arab rebab, also known as the Arabian rebab.

Figure 7. Ravanastron (Stoeving, 1913, p. 33)



With a history dating back to around 3800 BCE and also observed in Arabia during the 9th century, the rebab is claimed by some sources to be an instrument belonging to the Uyghur Turks, while others suggest its presence in countries such as India, Iran, Arabia, Pakistan, North Africa,

and Afghanistan, both in ancient times and more recently. Over the years, as the rebab spread across continents, it became distinctive with the ethnic characteristics of the regions where it was found. Examples include the Uyghur rebab, Afghan rebab, and Iraqi rebab, among others.

Rebab (rubāb), besides meaning a small bowed instrument in Persian, is a general term for plucked and bowed instruments in the territories where Islam is accepted. Physically, the rebab varies across different regions, appearing in Central Asian Turkic communities in the form of a bowed or plucked instrument, and it has become intertwined with the ancestors of the viol family through migrations to Europe. Rebab held significant importance in Ottoman music but lost their former popularity with the onset of European culture in Turkey during the late period of the Ottoman Empire. To summarize all the information, it can be said that historical instruments such as rebab, *ıklığ*, and *kemençe* cannot be clearly distinguished based on physical similarities, but they have evolved by migrating to different regions and assimilating with the culture of the places they have reached.

Hieronymus, a knowledgeable priest from Moravia in the 13th century, was not only a priest but also wrote about music. Hieronymus provides interesting information about the rebec (rubeba) and viel (viella). The rebec is known as a two-stringed instrument tuned in a fifth interval (C, G). These two-stringed rebecks, tuned according to the fifth interval system, undoubtedly serve as ancestors to the fiddle family, and thus the modernized version of the rebec can be considered as the precursor to the violin family (Clinkscale, 1900, p. 596).

After the evidence regarding the existence of the rebec (rebeca, rebecq, rubeb, rubeba, rebet, ribeca, rabel, rebeccum, rebequin, rebecca) in the 9th century, it is believed that it was used in Europe in the 10th century. However, concrete evidence of the rebec's existence began to emerge in the early 12th century through Arabic and Latin terminology. With a history spanning from the Middle Ages to the Renaissance, the rebec is one of the hybrid instruments that developed between Europe and Asia. The widespread use of rebecks between the 13th and 16th centuries is well-known, but it is unclear whether they were introduced to Europe by the Arabs or if they already existed in Europe since the 9th century.

It is believed that there is a connection between the rebec and the rebab. There is evidence in the table of Arabic and Latin terms. Performers who argue that the rebec is more suitable for Medieval music state that it lost its prestige by being taken out of the palace and performed in street

entertainments after the Renaissance, and disappeared from sight in the 18th century (Paris, Bibliothèque Nationale, Ms. lat. 14754).

Rebecs are small-bodied instruments with three strings, resembling a carved pear, and they have a fretless fingerboard and a curved bridge, producing a nasal tone. The earliest commonly used examples were three-stringed, but over time, they diversified with five-stringed versions and variations in body length.

Figure 8. Rebab image in Italian sources (Wooldfield, 1984, p. 26), Rebec. The three Parents of the violin, Bahorik, H. Tez. Cedarville University, The Research and Scholarship Symposium



The rebec's unique sound and historical significance have made it a subject of interest among musicians, scholars, and instrument enthusiasts. Its distinct tone, reminiscent of medieval and Renaissance music, offers a window into the musical practices and aesthetic preferences of past eras. Additionally, the rebec's role in cultural exchange and its association with various artistic traditions highlight the interconnectedness of musical development across different regions and time periods. Further research and exploration into rebec repertoire, playing techniques, and historical contexts provide valuable insights into the instrument's evolution and its place in the musical landscape of the time. Analysis of surviving rebecs, iconographic representations, and written sources contribute to our understanding of the rebec's construction, ornamentation, and performance practices. Collaborations between performers, scholars, and instrument makers contribute to the revival and reinterpretation of rebec music, ensuring its continued relevance in contemporary contexts. In conclusion, the rebec occupies a significant place in the history of musical instruments, bridging the gap between cultures and influencing the development of music in Europe and Asia. Its distinct

design, sound, and historical associations make it a fascinating subject of study and performance, shedding light on the diverse musical traditions of the past. The rebec's journey from its early origins to its eventual decline underscores the dynamic nature of musical evolution and the importance of preserving and celebrating the legacy of these remarkable instruments.

Figure 9. Illustration of dancer dancing playing rebec (Hoffmann, 2018, p. 215)



In the 15th and 16th centuries, when polyphonic music began to flourish, vocal music took the forefront. The pursuit of polyphony continued to develop in parallel during the 16th century. With the prominence of vocal music, the vocal ranges in larger instruments were expanded to accompany the vocals. The development of the viol family, which was used as a supporting instrument, also increased. The foundations of modern instruments, which have reached a standard structure today with viols of different sizes and timbres, were thus laid. For example, the terms *vielle*, *fiddle*, and *viuola* may have different interpretations in the literature. *Fiddle* (*lyre*, *lyra*, *λύρα*) derived from the Byzantine *lyra*, which belonged to the Byzantine Empire during the Middle Ages. Additionally, in the first English-Latin dictionary called *The Promptorium Parvulorum*, *vielless* are associated with *lut* types. *Vielles* used by troubadours for accompaniment between the 13th and 16th centuries are depicted in medieval paintings and figures, and they are also associated with the Arab *rebab* in terms of their origin.

Another instrument associated with the rebec is the fiddle. With ongoing developments, the *lira da braccio*, also known as the arm lyre, shares a similar appearance with the rebec. Thus, rebab, rebec, fiddle, *vielle*, and *lira da braccio* are instruments that succeed each other in terms of appearance, sound, and historical periods. “The etymology of the word ‘fiddle’ is uncertain. It is likely derived from the Latin word *fidula* or has its roots in the Germanic languages” (Simpson and Weiner, 1989, p. 28). The relationship between the rebec and the fiddle showcases the interconnectedness of musical traditions across different regions and time periods. These instruments share similarities in their physical appearance, indicating a shared lineage and influence. The evolution of the *lira da braccio*, also resembling the rebec, further illustrates the development and transformation of bowed string instruments throughout history.

Exploring the connections and distinctions between these instruments offers valuable insights into the cultural exchange, musical practices, and artistic expressions of various societies. Comparative studies of their construction, playing techniques, and repertoire contribute to a deeper understanding of their roles and significance in different musical contexts. The term “fiddle” itself carries a certain ambiguity in its etymology. Its origins can be traced back to the Latin word “*fidula*” or have roots in the Germanic languages. This linguistic ambiguity reflects the diverse cultural influences that have shaped the instrument and its name throughout history.

In conclusion, the rebec and the fiddle are closely related instruments, sharing similarities in appearance and historical development. The *lira da braccio* also joins this lineage, further enriching our understanding of bowed string instruments. Exploring the etymology, cultural connections, and musical characteristics of these instruments provides valuable insights into the rich tapestry of musical heritage and its evolution over time. Further research and collaborations between scholars, musicians, and instrument makers contribute to the preservation and appreciation of these instruments, ensuring their continued relevance and vitality in contemporary musical practices.

Figure 10. Fiddle (vielle, viola d'arco, viuola) Cagliari Ulusal Arkeoloji Müzesi'nde sergülenen 1500'lerden viola d'arco çalan melek müzisyen figürü (Wooldfield, 1984, p. 58)



For example, the ancient Greek instrument known as the kithara, similar in physical characteristics to the lyre, and featuring strings that evoke the tone of a guitar, was a musical instrument that existed between the 8th and 7th centuries BC. This instrument, which is believed to have evolved through interactions during travels, is also referred to as the Classical Greek guitar. Similarly, the instrument called phorminx, believed to have originated from Mesopotamia, is a flat-fronted, curved-backed instrument played on the lap, resembling the lyre and kithara (Pagliaro, 2015, p. 4). When looking at these ancient instruments frequently depicted in Greek mythology, it can be speculated that they are among the earliest ancestors of the string instrument family, capable of being carried to different regions through cultural interactions.

When looking at lutes in general, it is believed that long-necked and relatively smaller-bodied plucked lutes have a more ancient chronology.

Depictions of long-necked lutes have been found on Mesopotamian seals dating back to approximately 2340-2198 BCE through archaeological excavations. Similar lute images have also been discovered in archaeological excavations believed to be associated with Ancient Egypt. Lutes can be categorized into various types such as minor octave, alto, tenor, bass, major octave bass, and arched lutes. In historical contexts, lutes have been associated with divine and angelic figures within religious elements and have frequently been depicted as such in paintings as an iconic element. When examining the lute family, the instruments are composed of simple wooden branches, tree barks, and basic resonating chambers (bodies) in their primitive forms (earliest examples are found in China, India, Arabia, the Celts, Persians, Hittites, and Ancient Greece), while the instrument bows are derived from hunting bows used in archery.

Figure 11. Angels playing the lute in the stained glass window on display in New York St. at Agnes Church (Spring, 2001: 24)



The family of lute instruments (lût, luth, lute, lauto, lãvta) is classified into various types with short or long necks, and over the centuries, they have taken on different forms in different regions. The classical lute underwent physical changes during the 16th, 17th, and 18th centuries. “Contrary to belief, the lute was never the natural instrument of French poets (troubadour, trouvère). It does not appear in the symbols of French or English literature before the 13th century. It is absent iconographically” (Spring, 2001, p. 1). Information about the lute and its history before it arrived in Northern Europe is quite uncertain. Additionally, the lute is also associated with the

medieval instrument known as the gittern or citole in terms of appearance and sound. The lute family includes various instruments such as the theorbo, archlute, vihuela, and oud, each with its own unique characteristics and playing techniques. These instruments have played a significant role in the development of Western music, particularly during the Renaissance and Baroque periods. The lute's versatile and expressive nature, combined with its rich history and cultural associations, has made it a beloved instrument among musicians and scholars alike. The lute's evolution and regional variations have been influenced by cultural interactions, trade routes, and artistic developments. As it spread across different parts of the world, the lute absorbed local musical traditions, resulting in distinct regional styles and playing techniques. From the intricate ornamentation of the Persian oud to the refined polyphony of the European lute, each variant reflects the artistic sensibilities and musical practices of its respective culture. Research into the lute's history, repertoire, and performance practices continues to shed light on its significance in various musical traditions. The exploration of historical manuscripts, treatises, and surviving instruments provides valuable insights into the techniques and aesthetics of lute playing in different periods. Additionally, collaborations between lute players, composers, and musicologists contribute to the revival and reinterpretation of lute music in contemporary contexts. In conclusion, the lute family of instruments encompasses a rich tapestry of musical traditions, spanning centuries and continents. Its enduring popularity and adaptability are testaments to its timeless beauty and the artistic possibilities it offers. The study of the lute opens doors to understanding the intricate interplay between culture, history, and music, enriching our knowledge of both the instrument and the diverse musical landscapes it has traversed throughout its fascinating journey. In conclusion, due to the scarcity of medieval instruments, primary sources serve as references through depictions in artwork, literary works, anonymous instruments, or stories. When examining the terminology, the Latin word "fidis" is found in the English-Latin dictionary "Dictionarium Anglo-Latinum" from 1483, where it refers to a harp string and an anonymous name for a fiddler. Similarly, the word "fidecen" [fidicen], found in the ancient manuscript English-Latin dictionary "The Promptorium Parvulorum," means harpist and fiddler. On the other hand, the term "viella" is usually associated with the violin but is also associated with lut types, referred to as "lavta" (lute) in The Promptorium Parvulorum. Additionally, John Palsgrave's French dictionary "Lescarlissement de la Langue Francoyse" (1530) provides evidence of differing opinions on this matter.

Conclusion

In conclusion, the study of authentic instruments from an organological perspective plays a crucial role in understanding the process of East-West cultural assimilation. By examining the intricate details of these instruments, scholars and musicians can gain valuable insights into the historical, social, and artistic exchanges that have taken place between Eastern and Western cultures.

Authentic instruments, such as traditional Chinese guqin or Indian sitar, possess a rich cultural heritage and serve as tangible artifacts of their respective traditions. Through the careful analysis of their construction, materials, and playing techniques, scholars can trace the evolution and influences of these instruments over time. This organological approach allows for a deeper understanding of how Eastern and Western musical traditions have interacted and assimilated with each other. The assimilation of East-West cultures is a dynamic process that involves the exchange of ideas, techniques, and musical practices. Authentic instruments serve as bridges between these diverse cultures, enabling musicians to explore new musical possibilities and foster cross-cultural collaborations. By studying the organological aspects of these instruments, musicians can learn from different traditions and incorporate elements into their own compositions, thus contributing to the cultural richness of both East and West.

Moreover, the study of authentic instruments helps challenge cultural stereotypes and promotes intercultural understanding. By recognizing the unique qualities and significance of each instrument, individuals gain a greater appreciation for the cultural context from which they originate. This fosters a sense of respect and recognition for diverse musical traditions, fostering mutual understanding and empathy among musicians and audiences alike. In conclusion, authentic instruments are invaluable resources in the study of East-West cultural assimilation from an organological perspective. Through their examination, we gain insights into the historical and cultural interactions between Eastern and Western music traditions. By appreciating and understanding the nuances of these instruments, musicians and scholars can promote cross-cultural understanding and contribute to the ever-evolving tapestry of global music.

Bibliography

- Clinkscale, E. (1900). *Rebec and Viol*. The Musical Times Journal. UK: Musical Times Publications. 1 (1). 596.
- Hoffmann, B. (2018). *The Viola da Gamba*. New York: AshGate Book.
- Türk, Türk and Otte. (2020). The Neanderthal Musical Instrument from Divje Babe I Cave (Slovenia): A Critical Review of the Discussion. 10 (4), 1227.
- Jahnel, F. (2000). *Manual of Guitar Technology. The history and Technology of Plucked String Instruments*, The Bold Strummer Ltd.
- Kunej and Türk, (2000). New perspectives on the beginnings of music: Archeological and musicological analysis of a middle paleolithic bone “flute.” In: Wallin N, Merker B, Brown S. Editors. *The origins of music*. Cambridge: MIT Press; pp: 235–269.
- Pagliari, M. J. (2016). *The String Instrument Owner’s Handbook*. Usa: Rowman & Littlefield Publishers.
- Say, A. (1997). *Müzik Tarihi*. Ankara: Müzik Ansiklopedisi Yayınları.
- Simpson and Weiner, (1989). *Oxford English Dictionary (second edition)*, Oxford: Clarendon Press.
- Spring, M. (2001). *The Lute in Britain: A History of the Instrument and Its Music*. Oxford: Oxford University Press.
- Turani, A. (2010). *Dünya Sanat Tarihi*, İstanbul: Remzi Kitabevi.
- Wooldfield, I. (1984). *The Early History of the Viol*. Cambridge: Cambridge University Press.