

# The integration of Chinese traditional instruments in contemporary symphony ensembles

## A integração de instrumentos tradicionais chineses em conjuntos sinfônicos contemporâneos



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**Abstract:** The aim of the work was to reveal the nature of the aesthetic and functional interaction of Chinese instruments with the academic orchestral tradition in the context of the globalised musical space. The research used a comprehensive methodological approach that combined historical and cultural analysis, comparative aesthetic reconstruction, structural and functional generalisation of orchestral practice, and musicological study of scores and audiovisual sources. The material was based on works by contemporary composers in which Chinese instruments (erhu, pipa, sheng, xun, percussion) were integrated into the symphonic texture in various formats. As a result, it was found that traditional Chinese instruments had a multiple musical, social, and symbolic functions formed in the context of historical, social and philosophical traditions. It was found that a modern symphony orchestra is capable of flexible adaptation and expansion of the timbre palette through the integration of

non-European instruments. The musicological analysis of the works has demonstrated that Chinese instruments not only complemented the orchestral palette, but also transformed the compositional logic, introducing new semantic and cultural codes into the symphonic discourse. The practical significance of the research results lies in the possibility of applying the typology of integration models in composing and performing practice, as well as in the development of intercultural music education and orchestral drama in the context of global artistic dialogue.

**Keywords:** timbre interaction. orchestral texture. intercultural dialogue. semantic value. aesthetic frameworks.

**Resumo:** O objetivo do trabalho foi revelar a natureza da interação estética e funcional dos instrumentos chineses com a tradição orquestral acadêmica no contexto do espaço musical globalizado. A pesquisa utilizou uma abordagem metodológica abrangente que combinou análise histórica e cultural, reconstrução estética comparativa, generalização estrutural e funcional da prática orquestral e estudo musicológico de partituras e fontes audiovisuais. O material foi baseado em obras de compositores contemporâneos nas quais instrumentos chineses (erhu, pipa, sheng, xun, percussão) foram integrados à textura sinfônica em vários formatos. Como resultado, constatou-se que os instrumentos tradicionais chineses tinham uma carga multifuncional formada no contexto de tradições históricas, sociais e filosóficas. Constatou-se que uma orquestra sinfônica moderna é capaz de adaptação flexível e expansão da paleta tímbrica por meio da integração de instrumentos não europeus. A análise musicológica das obras demonstrou que os instrumentos chineses não apenas complementaram a paleta orquestral, mas também transformaram a lógica composicional, introduzindo novos códigos semânticos e culturais no discurso sinfônico. O significado prático dos resultados da pesquisa reside na possibilidade de aplicar a tipologia de modelos de integração na prática de composição e execução, bem como no

desenvolvimento da educação musical intercultural e do drama orquestral no contexto do diálogo artístico global.

**Palavras-chave:** interação de timbre. textura orquestral. diálogo intercultural. valor semântico. estruturas estéticas.

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## 1. Introduction

The relevance of the study stems from significant shifts in global musical culture during the late 20th and early 21st centuries, particularly the growing prominence of cross-cultural collaboration and genre fusion. This transformation is exemplified by the increasing integration of non-Western instruments, such as traditional Chinese instruments, into academic concert practices, including symphonic, chamber, and film music. Improvements in the design of these instruments, combined with a broader movement towards aesthetic pluralism in contemporary art music, have facilitated their incorporation. Key intercultural exchanges, such as collaborations between Chinese and Western composers and performers, have highlighted the need for not only technical adaptation of Chinese instruments but also a deeper understanding of the aesthetic, structural, and cultural transformations that accompany their integration into the symphonic medium.

The analysis of the aesthetic structure of the modern symphony ensemble has shown its capacity for structural form, texture, and harmonic language flexibility, expressed through adaptive transformations of form, orchestration, and harmonic organisation in response to intercultural inclusion. Structural form becomes flexible, becoming open to segmentation and modular development rather than strict sonata or ternary schemes; texture flexibility is manifested in its reconfiguration to accommodate instruments with delicate timbres by thinning orchestral density and redistributing functional roles; and harmonic language flexibility expands beyond the equal-tempered tonal framework toward modal and pentatonic inflections derived from Chinese musical systems. Such flexibility ensures the symphony orchestra's ability to integrate external timbral codes – particularly those of traditional Chinese instruments – without compromising its internal coherence.

The work of Chinese composers of the XX and XXI centuries was the subject of consideration in the work of Cheng et al. (2022), who focused on how folk intonation penetrates the symphonic language. It was found that folk timbres, despite being adapted to the Western harmonic system, retained their characteristic style through specific orchestration. The study by Lei (2024) compared Chinese and Western musical culture with an emphasis on aesthetic guidelines and cultural intersections. The author studied the interaction of two systems at the level of composition philosophy and performance thinking, concluding that the integration of cultural traditions is the result of not only technical, but primarily ideological convergence. At the same time, the structural side of the integration was left out of the picture, in particular, orchestral models, instrumentation techniques and timbre ratios.

Studying the timbre organisation of Chinese piano music, Fang (2022) focused on imitation techniques that allowed to convey the characteristic sounds of folk instruments through the academic keyboard language. Composers conveyed features of erhu, pipa, or dizi through piano articulation. However, this topic did not cover the context of the symphony orchestra, so the analysis of integration within the ensemble remained undiscovered. The training of conductors for folk instrument orchestras was the subject of analysis by Strilets (2021), who examined the structure of conducting education and ways to modernise it. The author stressed the need for methodological adaptation to work with atypical instruments. Although the study was not focused on symphony orchestras, it outlined important aspects of performance training that may be relevant in the process of integrating traditional instruments into more complex ensemble forms.

Ma and Chen (2024) used grounded theory as a tool for studying transformational dynamics. They showed instrument design improved for orchestral performance, enhancing resonance, range, and tuning. This created the prerequisites for

successful orchestral adaptation, but the process of incorporating instruments into the score body itself remained outside the scope of the analysis. The reverse process, i.e., the mastering of Western academic percussion instruments by Chinese performers, was studied by Dunjui and Khvatova (2024). They found that Chinese musicians mastering Western instruments integrated features of their folklore tradition. Despite its importance for understanding the processes of interpretation, the topic of the direct incorporation of Chinese drums into the structure of a symphony orchestra has remained unexplored.

The work of Jia (2021) aimed to describe the classification of Chinese folk instruments and indicate the areas of their application in modern times. The author focused on such instruments as erhu, pipa, sheng, and dizi, tracing the trend of their growing presence in academic projects. The material contained a list of the main areas of use, but did not include musicological analysis of the works or ways of timbre interaction with the symphonic environment. Changes in music education related to the incorporation of traditional Chinese music were the subject of a study by Xie et al. (2024). They studied how educational institutions are rethinking repertoire and teaching methods to ensure that traditions are relevant in the new educational context. The authors emphasised the need for an interdisciplinary approach to shaping the educational process. At the same time, the issue of incorporating Chinese instruments into orchestral practice did not receive significant coverage in the paper.

An analysis of the available literature has shown that technical adaptation, stylistic transformations, and the educational context have been studied in a fragmentary manner. However, the absence of a comprehensive approach combining cultural analysis of instruments, the evolution of the symphony ensemble, compositional strategies and the reception of intercultural interaction created a scientific gap. The aim of the study was

to analyse the processes of integration of traditional Chinese instruments into modern symphony ensembles, taking into account historical, cultural, technical and compositional aspects. The objectives of the study were as follows: to investigate the historical and cultural origins and functional load of traditional Chinese instruments; to analyse the aesthetic structure and dynamics of the development of a modern symphony ensemble; to classify forms and methods of integrating Chinese instruments into an orchestral context; to carry out a musicological analysis of the selected works and determine the nature of intercultural dialogue in compositional models.

## 2. Materials and methods

The study employed a comprehensive methodological approach that combined historical and cultural analysis, comparative aesthetic reconstruction, structural and functional generalisation of orchestral practice, and analytical musicological study of scores and audiovisual sources. The research was based on a multi-level processing of musical material, covering both traditional Chinese instruments in their historical context and models of their integration into the symphonic environment. The historical and cultural origins of Chinese instruments were studied through a contextual analysis of sources covering different periods of the Chinese musical tradition. The instruments were systematised according to their acoustic and constructive classification: strings, wind instruments and percussion instruments. Particular attention was paid to the functional load of each instrument in different genre and social situations (rituals, theatre, chamber ensembles, court music).

The analysis of the aesthetic structure and dynamics of transformations of the modern symphony ensemble was carried out on the basis of the comparative method, which allowed tracing the differences between the normative orchestral model of the



XIX century and its modifications within the XX-XXI centuries. As part of this procedure, the orchestral changes were typologised, in particular, in view of the emergence of non-traditional instruments, the expansion of the timbre spectrum, the introduction of electroacoustic sound sources and the specifics of functional redistribution between orchestra groups. The orchestral structure was considered as an adaptive system capable of integrating external acoustic codes, in particular Chinese instruments, at the level of drama, texture and timbre organisation.

The forms and methods of incorporating Chinese instruments into the symphonic context were analysed by classifying them based on their functional role: soloistic use, inclusion in the orchestral texture, and functional substitution. A comparison of scores and performance recordings was made, which allowed us to record different models of interaction between instruments and the symphonic fabric. For this purpose, a corpus of nine composers' works representing the main models of integration was chosen. The selection criteria were: (1) the participation of a traditional Chinese instrument in a full-fledged symphonic environment; (2) the availability of high-quality audiovisual material; (3) the representativeness of the work in terms of compositional technique and intercultural drama. A corpus of nine works by contemporary composers was used to analyse the processes of integrating Chinese traditional instruments into the symphonic context. The selection was based on the representativeness of the works in terms of instrument types, the role of the instrument in the composition, and the quality of available audiovisual sources (Table 1).

The presented material base ensured the methodological completeness of the analysis, allowing us to cover the main types of integration of Chinese instruments into the symphonic environment. Each of the pieces provided an opportunity to explore not only the technical aspects of timbre interaction, but also to identify aesthetic and compositional patterns of intercultural interaction in the academic genre.



**Table 1 – Selected works for the analysis of Chinese instrument integration in symphonic contexts**

Title of work	Rationale for selection	Object of analysis
Zhao Jiping – Pipa Concerto No. 2 (Wu Man, 2014)	A work specifically composed to integrate the pipa with the Western orchestra; demonstrates deep textural blending of timbres	Pipa articulation, orchestral accompaniment techniques, timbral balance strategies
Isao Matsushita – Hi-Ten-Yu (Berliner Philharmoniker., 2016)	An example of full integration of East Asian percussion into the rhythmic and dramaturgical structure of a symphonic composition	Interaction between taiko and orchestral percussion, tempo construction, rhythmic dramaturgy
Guan Xia – Earth requiem (National Symphony Orchestra & Chorus, 2013)	A symphonic model in which the Chinese sheng assumes a significant harmonic and structural role	Timbral interaction with woodwinds, role in polyphonic texture, harmonic layering
Tan Dun – Crouching Tiger Concerto (erhu version) (City Chamber Orchestra of Hong Kong, 2010)	Features the erhu as soloist in a classical symphonic concerto; highlights the instrument's expressive and timbral function	Erhu intonation line, microtonal nuances, interaction with orchestral sections
Zhou Long – The Rhyme of Taigu (Singapore Symphony, 2011)	Chinese percussion instruments are fully integrated into the rhythmic structure of the orchestral framework	Logic of rhythmic development, interaction with Western percussion, contrast and synthesis of textures
Chen Qigang – Wu Xing (The Five Elements) (N Rapp, 2018)	Models an atmospheric orchestral texture with sheng and xun as timbral counterpoints	Techniques of timbral contrast, background and support functions, tonal transitions
Bright Sheng – China Dreams (Prelude) (Coda Allegretto, 2013)	Combines pipa, erhu, and a Western orchestral structure through segmented timbral zones	Timbral segmentation, sequential shift of instrumental groups, adaptation of form to intercultural narrative

Tan Dun – Crouching Tiger Concerto (cello version) (Lake Superior Chamber Orchestra, 2014)	An alternative version with a different soloist allows comparison of instrumental roles and orchestral interaction	Structural function comparison, texture variability, changes in dynamic balance
He Zhanhao, Chen Gang – The Butterfly Lovers Violin Concerto (erhu version) (Classical Music. Reference Recording, 2022)	The erhu replaces the violin in a classical Western concerto; an illustrative case of instrumental role transfer	Timbral adaptation, phrasing transformation, soloist function modification

Source: compiled by the authors.

Based on the analysis of scores, recordings, and acoustic features, methodological recommendations were formulated for conductors and arrangers to address the technical and interpretive challenges of integrating Chinese instruments into symphonic ensembles. These focused on timbre balance, intonation alignment, rehearsal strategies, and notation clarity, derived from case-based observations and documented performance practices.

### 3. Results

#### 3.1 Historical and cultural context of traditional Chinese instruments

Traditional Chinese musical instruments are an integral part of the historical and cultural landscape of China, performing not only aesthetic but also symbolic, social and ritual functions. Their origin spans several millennia, and their functioning took place in the context of changes in dynastic regimes, religious beliefs, philosophical systems and theatrical and musical practices. In modern musicology, traditional Chinese instruments are divided into three main groups based on acoustic principles and design features: strings, wind instruments, and percussion instruments. Traditional Chinese stringed instruments have deep historical roots and a distinct aesthetic specificity. They were used in both

palace and folk music, forming the basis of melodic range and emotional expression. The design features of each instrument are directly related to the functional load and cultural ideas about sound, harmony and spirituality (Table 2).

Table 2 – String instruments

Instrument	Brief description	Main function
Erhu	Two-stringed bowed instrument, known since the Tang dynasty	Characterised by expressive techniques such as continuous vibrato, wide glissandi, and nuanced control of bow pressure and speed, enabling subtle gradations of tone colour and emotional shading in solo and chamber performance
Pipa	Four-stringed pear-shaped plucked instrument	Used in solo and ensemble performances, especially in theatrical genres
Guqin	Seven-stringed fretless plucked instrument, one of the oldest in Chinese culture	Produces subtle tonal colours and expressive nuances; traditionally used in Confucian rites and modern chamber settings

Source: compiled by the authors based on Ma and Chen (2024).

Stringed instruments of the Chinese tradition not only performed an artistic function but also served as a means of self-discovery, ritual practice and theatrical presentation of emotions. Their timbre uniqueness and performance flexibility create the basis for integration into modern forms of symphonic and chamber performance.

In Chinese musical culture, wind instruments played an important role in religious rites, court ceremonies and folk festivities. Their sound is characterised by a wide range of timbres – from sharp and sonorous to soft and meditative – which ensured multidimensional musical expressiveness in traditional genres (Table 3).

Table 3 – Wind instruments

Instrument	Brief description	Main function
Dizi	Transverse bamboo flute with a membrane that adds a whispering overtone	Used in both court and folk music contexts
Xun	Clay ovoid aerophone with a soft, muffled tone	Used in religious and ritual ceremonies
Sheng	Multi-reed mouth organ capable of producing chords	Employed in ceremonial music, chordal accompaniment in rituals

Source: compiled by the authors based on Qiu et al. (2021).

The functional diversity of wind instruments determined their significance not only in the performance, but also in the sacred and symbolic dimensions. Their ability to convey the atmosphere of ritual, natural harmony and social hierarchy contributed to the preservation of the ritual code in music and opens up prospects for intercultural reinterpretation in the contemporary orchestral environment.

The percussion instruments of traditional Chinese music were distinguished by their functional versatility, combining a rhythmic basis with ritual and communicative tasks. They were actively used in theatre, military ceremonies, festivals and religious events, forming a special acoustic system of signs and signals (Table 4).

Table 4 – Percussion instruments

Instrument	Brief description	Main function
Bo	Pair of cymbals for creating bright rhythmic accents	Used in theatre and military ceremonies
Pai	Bronze gongs of various sizes	Used for rhythmic foundation and accentuation in ceremonial and theatrical music, contributing sharp, bright rhythmic accents to the ensemble
Luo	Drums with a wooden body and leather membrane	Provided rhythmic support in festivals, processions, and rituals

Source: compiled by the authors based on Yang et al. (2024).

The significance of percussion instruments has gone beyond musical accompaniment to become a structural marker of events, rituals and dramatic changes. Their historical experience as instruments of action, rhythm and meaning creates a powerful resource for experimentation within contemporary symphonic structures.

The cultural function of Chinese instruments was closely linked to philosophical and social concepts. In particular, the guqin was seen as a means of self-improvement and reflection, and its study was part of the compulsory curriculum of classical Confucian education, along with calligraphy, painting, and poetry. The guqin was considered an instrument of the sages, and its sound was a reflection of the harmony between man and nature. The pipa, on the other hand, was often associated with emotional expression and theatrical aesthetics. In traditional Chinese drama, especially in the genres of kunqu and Peking opera, the pipa accompanied scenes of grief, tension, or dramatic intensity. Its playing technique allows for the performance of complex glissandos, tremolos and arpeggios, which creates a wide range of emotional shades.

Historical examples of the instruments' use demonstrate their functional adaptation to different genre, social and geographical contexts. The erhu, as a bowed instrument, was widely used in Suzhou chamber ensembles specialising in the performance of jiangnan xiyue (江南絲竹), a South Chinese traditional music for small instrumental groups. One of the documented examples is the Shanghai Xiyue Ensemble, which was active in the 1920s and preserved numerous pieces from the provinces of Jiangsu and Zhejiang in its repertoire. The erhu played the melodic line alongside the dizi and yangqin, creating a harmonious texture of chamber sound.

Guqin was traditionally used in Song rituals, in particular during the performance of the Jinxiang (敬香) ritual, a meditative incense burning ceremony in Taoist and Confucian temples. Historical evidence is found in the Shenqi Qinpu (神奇琴譜), a treatise compiled in 1425 that describes the functions of guqin as a means

of achieving inner harmony and concentration. Texts from the Northern Song period (960-1127) also mention the performance of guqin solos in Quanzhen monasteries to accompany philosophical readings and meditations.

The shen was actively used in the ceremonial ensembles of the imperial court, in particular in the context of Confucian worship rituals to Heaven and Ancestors. Its ability to form chords and polyphony provided a special soundscape that emphasized the solemnity of the event. At the same time, the dizi gained popularity in the folk music of southern China – in the genres of rural music, dance improvisation and song accompaniment. Its lightweight construction, affordability, and bright tone made the dizi a versatile instrument for both amateur and professional musicians.

Thus, the historical and cultural context of traditional Chinese instruments demonstrates their multidimensional role in the musical, ritual and philosophical life of Chinese society. Their classification according to acoustic properties is combined with functional differentiation, which was formed under the influence of socio-historical conditions. This creates a theoretical basis for further analysis of the processes of integration of these instruments into modern symphony ensembles, where not only sound characteristics but also symbolic connotations inherent in the age-old tradition play an important role.

### 3.2 Modern symphony ensembles: structure and aesthetics

The symphony orchestra as the main form of a large academic ensemble was formed in the Western European tradition during the XVIII and XIX centuries. In its classical structure, it was divided into four main groups: strings, woodwinds, brass, and percussion. A typical orchestra includes first and second violins, violas, cellos, basses, flutes, oboes, clarinets, bassoons, French horns, trumpets, trombones, tuba, timpani, snare drum, cymbals, and a harp or piano if necessary. This model of the orchestra became the normative one in the Romantic and modernist repertoire and remains the basic one in contemporary orchestral practice.

During the XX century, the symphony orchestra underwent profound transformations driven by aesthetic searches, the development of avant-garde music, and the intensification of intercultural dialogue, understood as the dynamic exchange of musical languages, performance traditions, and symbolic meanings between different cultural systems. In this context, composers began to explore how the encounter of diverse sound worlds could generate new aesthetic values and compositional strategies. Contemporary composers have been actively expanding the orchestral palette with additional instruments, non-standard orchestration, electronic devices, noise effects, and atypical sound-producing techniques (Issakova et al., 2020; Winston and Uppunda, 2024). One of the directions of these changes was the involvement of instruments from non-European cultures, including traditional Chinese, Japanese, Indian, African, and Arabic. This practice has led to the gradual formation of a new concept of the symphony ensemble as an open system capable of adapting to various timbral and cultural models.

This evolution also foregrounded the interaction of distinct musical ontologies, revealing how the encounter between Western academic norms and non-Western traditions redefines fundamental assumptions about sound, structure, and expression. In the Western orchestral paradigm, pitch is governed by the equal-tempered tuning system, rhythm by metrical regularity, and affect by codified dynamic and harmonic conventions. By contrast, many Chinese instruments embody alternative ontologies of sound: their tuning systems rely on flexible intervallic relations within pentatonic or just-intonation frameworks; their rhythmic organisation privileges temporal elasticity and expressive rubato over mechanical pulse; and their affective vocabulary is rooted in the symbolism of timbre and gesture rather than harmonic progression. When these principles enter the orchestral environment, they challenge the fixity of Western tuning, destabilise metric uniformity, and expand the expressive field beyond harmonic causality. The resulting synthesis transforms the orchestra from a closed, rule-governed



structure into an adaptive interpretive system, where multiple ontologies of sound coexist, negotiate, and ultimately generate a new mode of symphonic thinking that is both acoustically hybrid and philosophically pluralistic.

The organic model of integrating a Chinese traditional instrument into an academic symphonic context is illustrated by the performance of the “Pipa Concerto No. 2” by Zhao Jiping, which was performed in Beijing in 2019 by Wu Man and the National Centre for the Performing Arts Symphony Orchestra (Wu Man, 2014). In this work, the pipa does not appear as an additional colourful element, but acts as a full-fledged structural core of the composition. The composer applies the traditional technique of writing for symphony orchestra, preserving the classical form of the concerto (exposition – development – reprise), but at the same time rethinks the function of the soloist in view of the instrumental features of the pipa. The part of the soprano is constructed with regard to her unique articulation: glissandos, tremolos, rhythmic tremolos and imitations of percussion effects. These techniques are integrated into the orchestral texture through appropriate changes in the distribution of functions between the orchestral groups: some of the rhythmic structures are transferred to the woodwinds and percussion, while the string group provides the background for the microdynamics of the solo instrument. The timbre interaction is achieved not through opposition but through gradual convergence – the pipa “merges” into the overall texture, creating a continuum of sound.

Isao Matsushita’s symphonic composition “Hi-Ten-Yu”, conducted by Kent Nagano, is a telling example of the deep timbre and structural integration of traditional instruments into a Western academic form (Berliner Philharmoniker, 2016). The work uses Japanese taiko drums, which are not limited to the function of a spectacular supplement, but build their own dramatic line within the symphonic score. The distribution of roles between taiko and symphonic percussion groups demonstrates clear coordination: traditional instruments not only saturate the texture, but also

actively shape its rhythmic and dynamic logic. There is no division into a “central academic orchestra” and an “ethnic periphery” in the composition: instead, the structure of the work models the interpenetration of two systems of sound organisation. Taiko dictates the tempo, momentum and phrasing structure, forcing the orchestra to adapt to his acoustic logic. The result is not a folkloric insertion, but a coherent timbre and rhythmic concept in which the traditional instrument is a source of structural innovation. This model can also be applied to the Chinese tradition, where percussion instruments such as bo, pai, loi have historically played a similar ritual and dramatic role.

One of the most consistent implementations of the concept of intercultural orchestral integration is the activity of the China National Centre for the Performing Arts Orchestra (NCPA Orchestra), which actively develops the symbiosis of the Western academic tradition with the Chinese timbre code (National Symphony Orchestra & Chorus, 2013). In this context, the performance of Guan Xia’s large-scale work “Earth Requiem” is particularly illustrative, in which traditional Chinese instruments do not function as insertion or decorative elements, but become carriers of a dramatic idea. A special role in this work is played by the shen, an ancient multi-stringed air horn capable of forming full-fledged chordal structures, which is unique to the Chinese musical tradition.

The shen is integrated into the symphonic fabric not by duplicating the orchestral parts, but by providing the instrument with autonomous thematic material. The composer uses the shen to create a timbre contrast with the woodwinds, expand the harmonic spectrum and saturate the overall texture with imitative structures. As a result, the instrument functions not as a soloist but as an active element of polyphonic interaction within the ensemble. This approach allows us to speak of a deep compositional integration, where aesthetics and structure are inextricably linked.

Explicitly theorizing the interaction of different musical ontologies addresses how non-Western tuning systems, rhythmic freedom, and affective expression challenge and transform

Western academic norms in orchestral contexts. For instance, many Chinese instruments, such as the pipa, are tuned in flexible systems that are not bound by the equal-tempered scale, creating a distinctive harmonic language that contrasts with Western tonal norms. Chinese rhythmic practices also often prioritize flexibility and rubato over strict metric regularity, offering an alternative approach to time and phrasing. Furthermore, the affective expression inherent in Chinese music, emphasizing timbral nuances and emotive articulation, adds layers of meaning that are not easily conveyed within the rigid structures of Western orchestration. This blending of distinct musical ontologies results in a symphonic transformation, where the orchestra becomes a more adaptive and fluid structure, embracing alternative tunings, rhythms, and expressive forms.

In all of these examples, it was not just the addition of a new timbre to the orchestral palette, but a change in the aesthetic logic of orchestration. The symphony ensemble began to be perceived as a flexible system capable of transformations in response to cultural challenges. This dynamic led to a rethinking of the very principles of timbre balance, phrasing, rhythmic structure, and the role of the soloist in the orchestral environment. Instead of the traditional division between soloist and accompaniment, new models of dialogue interaction have emerged, where the timbres of traditional Chinese instruments are deployed as autonomous but organically integrated components.

A significant aesthetic change was also the inclusion of specific playing techniques inherent in Chinese instruments in the overall performance concept of the work. For example, the pipa transmits fast glissandos and arpeggios that have no analogues in the Western tradition, which affects the dynamics of orchestral development. Erhu, due to its ability for microtonal deviations and emotional nuance, requires flexibility in dynamics and articulation from the orchestra. In turn, the shen, with its ability to play chords, allows for the modification of harmonic accompaniment functions, replacing or complementing traditional brass groups.

In addition to the technical aspects, the integration process also reveals a conceptual level – the desire for intercultural representation in sound. Symphony ensembles are turning into a space of cultural polysemy, where each timbre carries not only acoustic but also semantic value. Instruments such as the erhu or the shen denote a certain tradition, narrative, and symbolism that can be read by the listener even on a subconscious level. In this context, the aesthetics of the modern orchestra acquires the features of a global heterotopic space in which different times, styles and cultural codes coexist.

It can be also argued that the modern symphony orchestra is in a state of dynamic reformatting, reflecting global processes of cultural interaction. The integration of Chinese traditional instruments is one of the most representative examples of this trend. It not only expands the timbre spectrum of the orchestra, but also transforms its aesthetic and semantic structure, contributing to the formation of new models of musical thinking within the intercultural space. This transformation, however, is not limited to sonority alone.

The integration of Chinese traditional instruments into symphonic music is the result of the gradual development of intercultural thinking in academic art. It involves not only a timbre combination of instruments from different traditions, but also a rethinking of the form, drama, functional load and even the ontology of the musical text. The issues of commonality or difference between musical models, intonation systems, ways of forming sound and cultural connotations of timbre form the field of interdisciplinary dialogue, where music acts as a space of semiotic interaction. In this context, works in which integration is not decorative but functionally motivated and formative are of particular value.

In his “Crouching Tiger Concerto”, Tan Dong adapts the traditional Chinese instrument pipa to the genre of the European concert for soloist and orchestra (City Chamber Orchestra of Hong Kong, 2010). The composer retains the structure of a classical

concerto, but the drama of the work is built around the timbre interaction between the orchestra and the pipa. The pipa part contains techniques characteristic of the Chinese tradition – glissandos, vibrato, fast arpeggios, tremolo, dotted articulation – which are adapted to the Western metrical rhythm and harmonic system. The thematic material is gradually expanded with the use of modal intonation, understood as melodic and harmonic organisation based on pentatonic and heptatonic modes characteristic of Chinese folk and court music rather than on the Western system of functional tonality. The orchestra, in turn, responds not as an accompaniment in the usual sense, but as a contextual plane in which the timbre of the soprano operates. It adjusts its dynamics and density, creating an acoustic environment in which the instrument does not lose its expressiveness. This model allows the composer to avoid exoticising the instrument and to grant it equal status within the compositional process.

In the versions of “The Butterfly Lovers Violin Concerto” with the erhu as a solo instrument, a conceptual transformation of the original idea takes place (Classical Music. Reference Recording, 2022). The erhu replaces the violin not only in timbre but also semantically: it returns the work to its original folklore intonation, bringing it closer to the Chinese tradition. The use of the erhu requires the adaptation of melodic lines, as the instrument has no frets, and its intonation is not standardised within a uniformly tempered system. The implementation of this approach demonstrates that the functional replacement of an instrument is accompanied by changes in performance technique, phrasing, and even rhythmic articulation. However, the form of the concert is preserved, which allows us to assess the degree of flexibility of the Western model in relation to Chinese instruments.

The integration of Chinese instruments into symphony orchestral practice requires an adaptive approach on the part of the conductor (Zhetessova et al., 2025; Bayramova, 2025). One of the most common technical challenges is the problem of balancing dynamics. Traditional instruments, such as the pipa,

erhu, xun or sheng, have limited sound projection, which makes it impossible for them to sound naturally in a full orchestral environment without amplification. As a result, conductors are forced to modify the density of the orchestra's texture, reduce the dynamics, or use microphones in acoustically challenging halls. Another aspect is the modification of the rhythmic organisation. Chinese instruments often function in their own rhythmic time, which is not always consistent with the metronomic precision of Western performance. Therefore, the conductor must coordinate tempo, phasing, and synchronisation, taking into account the peculiarities of intonational freedom. There is also often a need for minor editorial changes to the score, especially in cases where the composer envisages interchangeability of instruments (Hao and Deekum, 2025).

The evaluation of works that combine Chinese instruments and Western symphonic structures varies considerably depending on the cultural context. In the Western environment, such works are often perceived as examples of exotic aesthetics or folkloric inlay. Reviews use terminology that hints at "decorative otherness", especially when the instrument is used once and is not integrated into the structure of the work. In the Chinese context, the perception of integration has a different aesthetic basis. The concept of "translating" one's own tradition into the language of academic music, with an emphasis on preserving cultural authenticity, dominates here. The use of instruments is interpreted as preserving identity in a globalised music scene. At the same time, there is a cautious attitude towards experiments that radically change the function of the instrument. This contrast of receptive models emphasises the importance of context as a factor in musical interpretation. The evaluation of a work in each culture is based not only on its musical content, but also on the ideological paradigm that dominates the listener's environment (Zhang and Wang, 2024).

The growing practice of incorporating Chinese instruments into symphony ensembles reflects a broader process of forming



a globalised musical identity. This identity is not based on the unification of styles, but on the recognition of the multiplicity of forms and sources of sound. Music in this context serves as a symbolic platform where timbre, rhythm and form become carriers of not only aesthetic but also cultural information. The inclusion of instruments with incompatible acoustic traditions requires adaptations, but the result is not a compromise, but a new quality of sound that cannot be reduced to the sum of its parts. A Chinese instrument included in a symphonic texture does not lose its identity, but expands the range of aesthetic expectations in a Western environment (Nadirova, 2024).

Music that combines the instrumental and stylistic systems of different cultures can be seen as a tool of cultural diplomacy. Performances by Chinese soloists with Western symphony orchestras are often used as part of soft power strategies (Doszhan, 2023; Danapiiaeva, 2022). They are intended not only to demonstrate technical or compositional excellence, but also to shape the image of a culture as open to dialogue and mutual understanding. Such projects are often initiated as part of cultural exchange, international festivals, or government initiatives. Music here functions as a neutral medium capable of uniting in conditions where verbal dialogue is limited or complicated. In this sense, musical works that combine Chinese instruments with academic form act not only as artistic phenomena but also as means of symbolic representation (Huang, 2023).

The integration of traditional Chinese instruments into symphonic music is a complex and multidimensional process that combines aesthetic, technical and cultural aspects. The analysis of specific works has shown the existence of different approaches to the inclusion of pipa, erhu, sheng and other instruments in academic scores, from soloistic to structural and compositional. An examination of conducting strategies, receptive models, and ideological contexts proves that music on the verge of tradition becomes not only an artistic form but also an instrument of intercultural dialogue. This dialogue can be analyzed through three



dimensions: (1) semantic, focusing on the meanings conveyed by the integration of non-Western instruments; (2) semiotic, exploring the signs and symbols embedded in the timbres and techniques of Chinese instruments; and (3) performative, considering the practices and interpretations in orchestral performance that reflect the interaction between cultures. This practice opens up new possibilities for understanding musical identity in a globalised world.

### 3.3 Forms and methods of integrating Chinese instruments

The integration of traditional Chinese instruments into symphonic orchestral practice covers several key areas that differ both in terms of the functional load of the instrument in the score and the level of its interaction with the Western instrumental system. The most common models are: the use of a Chinese instrument as a soloist; the inclusion of the instrument in the overall orchestral texture; functional replacement or duplication of a Western instrument in an orchestral score.

The use of a Chinese instrument as a soloist implies that the autonomous performance role of the Chinese instrument is preserved. It performs as a soloist within the classical concert form, accompanied by a full symphony orchestra. This type of integration is usually associated with the concert genre, where the timbre characteristics of the traditional instrument are not only preserved but also emphasised by contrasting them with the Western orchestral palette. An example of this approach is Tan Dun's "Concerto for Erhu and Orchestra" (City Chamber Orchestra of Hong Kong, 2010). In the composition, the erhu performs the leading melodic line, while the symphony orchestra provides a multi-level accompaniment modelled on the principles of film symphonism (a compositional and orchestral style derived from cinematic music that combines vivid timbral contrasts, expanded dynamic range, and programmatic expressiveness aimed at creating a narrative or emotional continuum), and modal intonation (a form of melody construction that is based on modes rather than the Western tonal

system). The structure of the concerto follows the traditional three-part form, but the musical material of the erhu goes beyond the ethnic marker: the instrument functions as a full-fledged medium of expression, capable of developing themes, variations, dialogues and climaxes. The peculiarity of the work lies in the fact that the composer uses orchestration not as a background amplification, but as a communicative system in which the erhu acts as an equal participant in the symphonic process.

The second form of integration is the inclusion of the Chinese instrument in the orchestral texture not as a soloist, but as one of its full-fledged components. In this case, the instrument is not brought to the forefront, but acts within the chosen timbre group or as a counterpoint to it. This approach can be observed, in particular, in Zhou Long's orchestral work "The Rhyme of Taigu" (Singapore Symphony, 2011), where the composer combines the Western symphonic form with the Chinese percussion tradition. The composition uses a set of traditional Chinese drums and gongs, which function not as effects, but as the basis of the rhythmic organisation of the work. They do not duplicate the parts of standard percussion instruments, but form their own rhythmic logic, which leads to changes in dynamics, deployment structure and tempo profile. Zhou Long applies the principle of "embedded authenticity": traditional instruments retain their sound nature, but their function is adapted to the system of Western symphonism.

The third approach involves replacing or duplicating the functions of certain Western instruments with Chinese analogues that have a similar timbre, register, or expressive capabilities. This type of integration is the least representative, but it is found in works aimed at creating a hybrid sound model. In this context, the example of Chen Qigang's "Wu Xing" ("The Five Elements") is illustrative, where the shen and xun are used not as solo or ethnographic instruments, but as atmospheric counterpoints to standard wind instruments (N Rapp, 2018). The shen, a multi-stringed instrument capable of polyphony, functions as a substitute or extension for the harmonic section of the orchestra, while the

xun, a soft-tempered clay aerophone, is used as background support or introduction to the scene. Both instruments have a clearly defined place in the drama of the work: they not only contrast with the timbre of Western instruments, but also create their own semantics related to the concept of natural elements. In this composition, the composer models a symbiosis between acoustic systems, where integration does not disturb the overall stylistic balance.

It is important to note that each of the forms of integration is accompanied by a number of technical and acoustic problems. First and foremost, there is the problem of pitch tuning, as Chinese instruments often do not have a fixed pitch or are tuned according to systems other than the uniformly tempered scale. For example, the erhu is tuned in quartets, and intonation variations are the norm in the traditional style of performance. This creates a difficulty in precise coordination with the symphonic system. The second factor is sound projection – Chinese instruments have a lower sound pressure, which makes it difficult to balance them within the full symphony. To overcome this problem, both microphoning and orchestral methods of reducing the density of the texture in the relevant episodes are used. Finally, the third issue is the balance of sound, which refers not only to loudness but also to the coordination of articulation and rhythmic properties. The use of Chinese instruments often involves non-standard methods of sound production, which requires the adaptation of the orchestral structure to the new articulation logic (Guliyeva and Kopanitsa, 2024; Wang, 2023).

In the context of integration practices, Bright Sheng's work "China Dreams", which combines pipa, erhu and a full symphonic structure, is also indicative (Coda Allegetto, 2013). The composer, who has experience of intercultural environments, uses these instruments as carriers of specific timbre and cultural content. In "China Dreams", the pipa serves as a percussive and melodic conductor, the erhu as a lyrical emotional carrier, while the orchestra acts as a space of adaptation. The structure of the

work does not follow a standard form, but is built on the principle of episodic changes in timbre zones. In this context, Chinese instruments are not separate blocks but are integrated through thematic cooperation, dynamic deployment and background transformation. The composer grants them autonomy in the sonic logic, while subordinating them to the overall concept of the work, which is oriented towards a Western audience but open to non-European code.

Thus, the existing forms of integrating Chinese instruments into symphony ensembles demonstrate a variety of strategies – from soloistic representation to full textural incorporation. Each model poses its own challenges, both technical and aesthetic, and requires composers and conductors to take a flexible approach to the score and acoustic balance. At the same time, these examples confirm the potential of intercultural fusion as a means of enriching orchestral thinking, where integration is not limited to adding exoticism but becomes a formative and meaningful factor in contemporary composition.

The integration of traditional Chinese instruments into symphonic ensembles requires not only artistic sensitivity, but also a carefully developed methodological approach that considers the specific characteristics of both musical traditions. One of the primary challenges lies in achieving a balanced timbre. Chinese instruments often possess a delicate and subtle sound that can be easily overshadowed by the fuller textures of Western orchestration. To ensure their audibility and expressiveness within the orchestral environment, it is important to avoid over-orchestration in sections where these instruments play a prominent role. Reducing the density of instrumental groupings and avoiding frequency overlaps helps preserve the unique spectral identity of each traditional instrument, particularly those with gentle acoustic profiles such as the xun, dizi, or pipa. Equally crucial is addressing the issue of tuning and intonation.

Many traditional Chinese instruments, including the erhu and sheng, do not conform to the Western equal temperament system.

This discrepancy requires flexible harmonic planning within the orchestral score. Using modal progressions, open intervals such as fifths, or sustained drones can accommodate the intonational nuances of Chinese instruments without compromising the musical coherence of the whole. Conductors and arrangers should implement rehearsal strategies that allow for gradual intonation alignment between Chinese and Western sections, including slow joint exercises and focused auditory coordination (Wang et al., 2024; Gonçalves, 2024).

The rehearsal process itself must be adapted to the needs of intercultural collaboration. When working with musicians unfamiliar with Chinese musical traditions, it is essential to allocate time for contextual immersion. Introductory sessions on traditional techniques, articulation styles, and expressive idioms can significantly enhance mutual understanding within the ensemble. The use of visual cues, modified conducting gestures, and cooperative rehearsals with cultural facilitators or native performers can serve as effective tools in bridging stylistic differences. Another consideration involves notation and performer communication.

Given the discrepancies between traditional Chinese and Western notation systems, the score should provide clear interpretive guidance. This may include flexible phrasing suggestions, alternative articulations, or hybrid notation formats adapted to the performer's background. Where necessary, explanatory remarks and translated performance instructions can support the accurate transmission of musical intentions. Finally, the issue of dynamic control and amplification should be approached with technical precision. The acoustic limitations of traditional instruments often necessitate selective amplification during performance in large halls. This should be tested in real-time rehearsal conditions to maintain balance without distorting the acoustic texture.

While the modern symphony orchestra demonstrates a remarkable capacity for adaptability in integrating non-European

instruments, it is essential to acknowledge the technical and acoustic limitations that accompany such intercultural expansion. The process of integration is constrained by several well-documented challenges. First, sound projection poses a significant difficulty: instruments such as the pipa, erhu, and xun possess limited acoustic power, which often requires careful orchestral thinning or selective amplification to ensure these instruments are heard clearly within the full symphonic texture. Second, tuning discrepancies arise from the coexistence of the Western equal-tempered system and the variable modal or just-intonation frameworks typical of Chinese instruments. This necessitates flexible harmonic planning, real-time intonation negotiation between performers, and occasional adjustments to maintain a cohesive sonic blend. Third, notation differences complicate orchestration and rehearsal processes, as traditional Chinese instruments use alternative systems, such as jianpu (numerical notation), which must be translated into Western staff notation without losing the idiomatic nuances of the traditional performance practices. These limitations underscore the ongoing need for specialized adaptation techniques, such as microphoning, dynamic redistribution, and culturally sensitive notation systems, to ensure effective orchestration and faithful representation of the instruments' unique qualities.

Therefore, despite the orchestra's theoretical openness, effective integration depends on specialised adaptation techniques, including dynamic redistribution, microphoning strategies, timbre-based voicing, and flexible rehearsal methods, that allow for both acoustic balance and cultural authenticity. Recognising these challenges underscores that the globalisation of symphonic language is not merely aesthetic but also deeply technical, requiring sustained collaboration between composers, conductors, and performers across traditions.

## 4. Discussion

The results of the study demonstrate the multilevel specificity of the integration of traditional Chinese instruments into



contemporary symphonic practice. For the purpose of a deeper understanding of the identified patterns, a comparison was made with the scientific works of other researchers who have studied related aspects of aesthetics, cultural dynamics and intercultural interaction in the field of musical art. This approach gave an opportunity to identify both common positions and differences in the interpretation of the processes of adaptation, musical identity and compositional practice in the context of a globalised cultural space.

The aspect of the historical and cultural multidimensionality of traditional Chinese instruments revealed in the study results was partially confirmed in the conclusions of B. Du and Y. Liang (2024), who examined the evolution of Chinese instruments in the context of material culture. While this study focused on the ritual and philosophical functions of the guqin, pipa, and sheng, the authors gave preference to technical aspects and the chronology of constructive changes, leaving out the semantic dimension of the musical instrument. Thus, the authors' approach was archaeological and typological, while the present study considers the function of the instrument as a cultural constant with a multidirectional role.

The conclusions drawn about the timbral role of Chinese instruments in contemporary symphonic drama were correlated with the analysis of L. Qiuxiao (2022), who focused on the noise effects of pipa in electronic music. In contrast to the intertemporal dialogue found in symphonic scores, the authors considered pipa as a source of acoustic experimentation, where noise and artefacts acted as a structuring factor. Both approaches demonstrated the importance of unconventional timbral characteristics, but in this study, the emphasis was placed on the organic interweaving of the instrument into the orchestral fabric rather than on the spectacular isolation of timbre.

The integration of the erhu as a solo instrument found in the study was compared with the work of Y. Qiaoyi (2024), where the erhu was considered in the global cultural space. The author emphasised the symbolic role of the erhu in the representation of



Chinese identity, which correlates with the results of the present study on the semantic load of the instrument in concert models. At the same time, the researcher's study lacked an in-depth analysis of the textural incorporation of the erhu into Western symphonies, focusing instead on the receptive and cultural-political dimensions.

The conclusions about the transformation of orchestral structure under the influence of intercultural inclusions were compared with J. Yang's (2022) analytical study of contemporary Chinese symphony. Both approaches confirmed the shift towards polytonality, heterogeneous structure, and adaptive dramaturgy that results from the inclusion of traditional instruments in the academic environment. In the study, the focus was primarily on performance – both the technical challenges of intonation and balance and the audience response.

Instead, the present study focuses on compositional strategies, in particular, on the variability of the structural incorporation of Chinese instruments into the symphonic fabric, from soloistic functions to polyphonic interaction at the level of the timbre code. In addition, the influence of the semantics of the traditional instrument on the overall architectonics of the composition was revealed, which was not covered in researcher's study.

The study also showed that Chinese instruments demonstrate different models of inclusion in the orchestral texture, which is directly related to the aesthetic intent and cultural position of the composer. A similar aspect of was considered in the work of J. Yu (2022), who focused on the conflict between local tradition and global unified standards of musical production. The author interpreted intercultural integration as a risk zone of identity loss. The same study proved that a symphonic structure can not only adapt to instruments of another tradition, but also be transformed by them without stylistic loss, indicating the potential for symbiotic interaction between cultures.

As part of the consideration of receptive strategies for integrating instruments, a comparison was made with the results

of J. Liu et al. (2024), who studied the socio-cultural significance of musical traditions in an intercultural context. They emphasised the preservation of the traditional musical code as a means of forming collective memory. In the results of the present study, this trend was traced through the symbolic load of timbres and drama. The difference was in the analytical focus: the authors' was sociocultural, while the present study was structural and compositional.

The statement that the integration of Chinese instruments contributes to the expansion of the semantic spectrum of orchestral music has found a conceptual parallel in the work of D. Yikun (2024), who analysed the phenomenon of symphonic statecraft in post-Maoist China. The author considered symphony as a means of cultural representation, and the results of this study showed that the use of Chinese instruments in global symphonies has not only an aesthetic but also an ideological function. Both works pointed to the transformation of the orchestral genre under the influence of cultural policy, although this study focused more on the compositional model.

As part of the analysis of the heterophonic logic inherent in Chinese traditional music, a comparison was made with the work of A.R. Thrasher (2023), who examined the role of heterophony as a fundamental principle in shaping ensemble practice. Both studies confirmed that Chinese musical instruments and ensembles have evolved in a paradigm of heterophonic thinking that is not focused on Western-style functional harmony.

The study focuses on the historical determination of heterophony as a phenomenon rooted in the social structure and traditions of performing improvisation. At the same time, the results of this study have shown that heterophony not only persists as a background feature of traditional performance practice, but also transforms within the framework of contemporary symphonism. It functions as an instrument of polyphonic enrichment of texture and as a means of revealing the individuality of timbre in new compositional contexts.

The thesis on the synthesis of Eastern and Western stylistic codes in works using Chinese instruments correlated with the dissertation research of S. Zhang's (2023) dissertation on the combination of the traditional Chinese orchestra and the piano concerto form. The researcher emphasised the interaction between modal intonation and the classical harmonic plan, which is also reflected in this study, where inter-textural permeability and timbral adaptation are revealed. A common feature of both works was the highlighting of intonational interactions between cultures, but the author's focus was on the internal structure of the Chinese orchestra, while this study uses a Western symphony ensemble as the key unit of analysis. This made it possible to demonstrate integration mechanisms not as interaction within the local canon, but as a dialogue between fundamentally different instrumental systems.

The study by Y. Zhang et al. (2022) analysed the perception of the "Chinese style" in music through the prism of listeners' cognitive processing of timbre characteristics. The authors proved that traditional Chinese instruments, in particular the erhu, pipa, and sheng, have high recognisability in the sound field, even in hybrid compositions. This correlated with the results of the present study, according to which the timbre of Chinese instruments performs not only an aesthetic but also a semantic function – it carries an associative load that affects the drama of the work. However, whereas the researchers focused on the empirical dimension of the listener's reaction, the present study analysed the structure of the compositions that shapes this perception, in particular the ways in which the timbre of the instruments is introduced into the symphonic texture and the semiotic mechanisms of their aesthetic representation.

The concept of cultural integration through performance practice presented by S. Kang (2025) provided a relevant framework for comparison with the findings of this study on score adaptation and conducting strategies. The author described code-switching as a performing and educational practice where musicians move

between traditional and academic systems to learn new stylistic norms. In the present study, a similar phenomenon was observed at the level of compositional and conducting approaches, in particular, in the techniques of timbre balancing, texture modification and interpretive plasticity. In both cases, the need for flexible thinking, openness to intersystemic dialogue, and a deep awareness of the cultural specificity of instruments within the academic tradition was emphasised.

One of the key findings of this study concerned the multifaceted nature of interpretative integration between traditional Chinese instruments and the Western symphonic structure. This dimension, especially in relation to the expressive and psychological impact of performance, aligned partially with the conclusions drawn by K. Chen (2022), who investigated the interpretative dimension through the lens of flow theory. While the author emphasized the importance of the performer's immersion and cognitive focus in achieving optimal expressiveness, the present study demonstrated that intercultural integration posed an additional layer of interpretive complexity, as musicians were required to operate within unfamiliar acoustic and cultural codes. Thus, this study extended the researcher's psychological model by highlighting the performative challenges that arise when musicians navigate multiple aesthetic frameworks within a hybrid orchestral context.

The results related to the physical and expressive agency of instruments, especially in terms of articulation and idiomatic phrasing, offered a meaningful point of comparison with the findings of C. Cole (2022). The study analysed instrumental gesture and its relationship to musical structure, particularly focusing on string performance. Although the work was situated within a Western theoretical paradigm, the present study reinforced the centrality of gesture in performance – especially in cases involving erhu, pipa, and sheng – where non-Western articulation methods required specific accommodation within Western orchestration. The notion of “expressive gesture” in the researcher's framework found resonance here but demanded an intercultural adaptation

strategy, particularly in conductor-performer communication and rehearsal preparation.

A particularly significant thematic convergence emerged when examining the study's results on timbral balance and emotional perception of sound, in relation to the empirical findings of H. Chan et al. (2022). Their study explored how pitch and dynamic range across instrument families influenced emotional interpretation. The current research, by focusing on the integration of Chinese instruments such as the xun or sheng, confirmed that deviations from conventional pitch-centering and dynamic gradation altered listener affective response. While the researchers quantified emotional valence across standard orchestral instruments, this study offered a qualitative dimension, showing that cultural familiarity and sound symbolism shaped audience reception in cases involving unfamiliar instruments. Hence, the findings added an intercultural perspective to the psychological-emotional framework established by the researchers.

The analysis of performance reception and its social dimension invited comparison with the study by M. Alsop et al. (2024), who assessed the impact of outreach concerts on audience wellbeing. Although their work primarily focused on the socio-emotional outcomes of accessible orchestral performances, the current study shared the concern with audience impact, albeit from an intercultural perspective. It was shown that the inclusion of Chinese instruments in symphonic settings affected not only aesthetic experience but also audience identification, recognition, and emotional openness. The study offered supplementary evidence that unfamiliar sonic elements, when properly contextualised and balanced, could elicit heightened engagement and broaden listeners' perceptual horizons. Thus, while the authors concentrated on access and inclusion, the current research added a dimension of cultural expansion and auditory pluralism as contributors to audience wellbeing.

Finally, technical challenges surrounding acoustics and instrument interaction, a recurring theme in this research, were

partially addressed in the work of J. Braasch (2023), who examined acoustical affordances and difficulties in performances involving indigenous and orchestral wind instruments. The findings on tuning instability, projection imbalance, and environmental responsiveness directly supported the present study's emphasis on the acoustic limitations of Chinese instruments in symphonic contexts. However, this research expanded on the researcher's conclusions by offering specific methodological solutions: orchestrational thinning, microphoning strategies, and adaptive rehearsal techniques were discussed as necessary compensatory mechanisms. In this way, the current study not only confirmed but operationalised the researcher's general observations, moving from acoustical theory to practical application within large-scale orchestral integration.

Thus, the results of the study were generally in line with the leading provisions of contemporary musicological and cultural studies on the role of traditional instruments in the globalised musical space. At the same time, new analytical perspectives were proposed that expanded the understanding of intercultural interaction not only in the timbre and aesthetic, but also in the compositional, dramatic and receptive dimensions. Comparison with current research has demonstrated both methodological consonance and uniqueness of the author's approach to the analysis of adaptation strategies, forms of inclusion and the symbolic role of Chinese instruments in the symphonic context. Summarising the key observations and their critical reflection allows us to proceed to the formulation of final conclusions that outline both the theoretical significance of the results obtained and the prospects for their practical application.

## 5. Conclusions

The study found that traditional Chinese musical instruments had a complex historical and cultural origin, shaped by religious, social and philosophical factors. Their functional load went beyond the purely musical, covering ritual, moral and symbolic



spheres. Instruments such as the guqin performed a meditative and educational function in the Confucian environment, while the pipa was associated with theatrical expression, and percussion instruments with ritual and ceremonial practices. A stable correlation was found between the design characteristics of instruments and their cultural purpose within historical dynastic models.

The analysis of the aesthetic structure of a modern symphony ensemble has shown its ability to be flexibly reformatted in the context of intercultural interaction. The standard orchestral model, formed in the European academic tradition, has undergone a significant expansion of timbre composition during the XX-XXI centuries, including the integration of instruments from non-European systems. The symphony orchestra has come to be seen as a dynamic structure open to new acoustic and semantic forms. The main ways of integrating Chinese instruments into the orchestral context were classified: soloistic model, textural incorporation and functional substitution. In each case, the need to adapt the score, balance the timbre density, and take into account the intonation specifics of Chinese instruments were evident. These forms of integration not only changed the acoustic profile of the orchestra, but also transformed its compositional logic. The musicological analysis of the selected works revealed the characteristic features of the intercultural dialogue that took place at the level of form, drama, timbre interaction and ideological content. The integrated Chinese instruments did not function as decorative elements but became full-fledged carriers of figurative and conceptual load, forming a new artistic quality within the globalised symphonic practice.

In addition to its theoretical contribution, the study has important practical implications for modern musical practice. For composers, it demonstrates the necessity of developing orchestral textures that account for the acoustic limitations and idiomatic potential of Chinese instruments, employing strategies such as dynamic redistribution, modal modulation, and timbre-sensitive



orchestration to maintain sonic coherence. For conductors, it highlights the importance of adopting adaptive rehearsal methodologies that incorporate flexible tempo coordination, attentiveness to microtonal deviations, and interpretive mediation between divergent performance traditions. For educators, the findings advocate the inclusion of intercultural orchestration and performance practices within professional training programs, enabling future musicians to cultivate cross-cultural competence and engage creatively with pluralistic sound environments.

The main limitations of the study included the selective availability of scores and full-length recordings, which narrowed the possibilities for a comprehensive comparative analysis of orchestration techniques and the specifics of timbre interaction in different interpretations. Promising directions for future research include exploring how Chinese traditional instruments interact within chamber ensembles, investigating educational approaches to their inclusion in academic training, and examining audience reception across cultural contexts. Further studies may also focus on the compositional strategies of Chinese diaspora composers and the development of orchestration techniques for timbral adaptation in intercultural symphonic works.

## REFERENCES

ALSOP, M., HAMBRICK, M., HEITZ, H., BATLEY, P. Effects on personal and cultural wellbeing of attending free community outreach concerts given by a professional orchestra. **Music Science**, v. 29, n. 2, p. 314–329, 2024. <https://doi.org/10.1177/10298649241296499>.

BAYRAMOVA, A. Traditional musical instruments in the light of museum interpretation. **Asian European Music Research Journal**, v. 15, p. 102–109, 2025. <https://doi.org/10.30819/aemr.15-10>

BERLINER PHILHARMONIKER. Matsushita: Hi-Ten-Yu / Hayashi · Nagano · Berliner Philharmoniker [Video]. YouTube, 16 Aug. 2016. [https://www.youtube.com/watch?v=k1Rs6C\\_yfyM](https://www.youtube.com/watch?v=k1Rs6C_yfyM).

BRAASCH, J. Acoustical affordances and challenges with indigenous and orchestral wind instruments. **Journal of the Acoustical Society of America**, v. 154, n. 4, p. A185, 2023. <https://doi.org/10.1121/10.0023209>.

CHAN, H., CHANG, B., HORNER, A., LAW, M. A comparison of the emotional characteristics of western orchestral sustaining musical instrument families with different pitch and dynamics. **Journal of the Acoustical Society of America**, v. 152, n. 4, p. A55, 2022. <https://doi.org/10.1121/10.0015523>.

CHEN, K. Musical interpretative practices as a way to improve the relationship between the flow theory and musical performance. **Psychology of Music**, v. 51, n. 4, p. 1288–1301, 2022. <https://doi.org/10.1177/03057356221135667>.

CHENG, M., PANG, B., ZENG, X., XU, W., CHANG, Y. Integration of the traditions of folk-instrumental art into the works of Chinese composers of the 20th and 21st centuries. **Rupkatha Journal on Interdisciplinary Studies in Humanities**, v. 14, n. 2, p. 1–17, 2022. <https://doi.org/10.21659/rupkatha.v14n2.19>.

CITY CHAMBER ORCHESTRA OF HONG KONG. Tan Dun Crouching Tiger Concerto (1) – Hsin Hsiao-hung (erhu) & City Chamber Orchestra of Hong Kong [Video]. YouTube, 21 Apr. 2010. <https://www.youtube.com/watch?v=CftBSEbld4o>.

CLASSICAL MUSIC. The butterfly lover concerto 梁祝協奏曲 / Chinese violin concerto (rf.rc.: Takako Nishizaki, L.K.-Tjiang) [Video]. YouTube, 13 Feb. 2022. <https://www.youtube.com/watch?app=desktop&v=Dh6LmWCRdpl>.

CODA ALLEGETTO. China dreams, prelude [Video]. YouTube, 14 Nov. 2013. <https://www.youtube.com/watch?v=GSSgirwSVnE>.

COLE, C. Hands, fingers, strings, and bows: Performance technique and analysis in J.S. Bach's Largo for solo violin. **Music Theory Online**, v. 30, n. 3, 2024. <https://doi.org/10.30535/mto.30.3.1>.

DANAPIIAEVA, ZH. Geopolitics of central Asia in the orbit of world systems. **Bulletin of the Jusup Balasagyn Kyrgyz National University**, v. 14, n. 3, p. 246–253, 2022.

DOSZHAN, R. Multi-vector cultural connection in the conditions of modern globalisation. **Interdisciplinary Cultural and Humanities Review**, v. 2, n. 1, p. 27–32, 2023. <https://doi.org/10.59214/2786-7110-2023-2-1-27-32>

DU, B., LIANG, Y. The development and evolution of ancient Chinese musical instruments. **Frontiers in Art Research**, v. 6, n. 7, p. 46–51, 2024. <http://doi.org/10.25236/FAR.2024.060708>.

DUNJUI, G., KHVATOVA, S. Mastering percussion instruments of the European academic tradition by Chinese musicians in the 20th–21st centuries. **Scientific and Analytical Journal Burganov House: The Space of Culture**, v. 20, n. 6, p. 102–114, 2024. <http://dx.doi.org/10.36340/2071-6818-2024-20-6-102-114>.

FANG, Y. The influences of folk song and folk instruments in Chinese piano music. Tuscaloosa: The University of Alabama, 2022.

GONÇALVES, J. C. What Is (Not) Aesthetic Education? **Bakhtiniana**, v. 19, n. 2, p. e63561e, 2024. <https://doi.org/10.1590/2176-4573e63561>

GULIYEVA, I., KOPANITSA, L. Folklore in contemporary music: Revival of cultural traditions. **Interdisciplinary Cultural and Humanities Review**, v. 3, n. 2, p. 24–34, 2024. <https://doi.org/10.59214/cultural/2.2024.24>

HAO, W., DEEKUM, N. The influence of Chinese traditional music on modern wind band training in China. **Global Interactive Journal of World Religions and Cultures**, v. 5, n. 1, p. 52–65, 2025.

HUANG, L. China wind music: Constructing an imagined cultural China. Philadelphia: Temple University, 2023.

ISSAKOVA, S. S., SADIROVA, K. K., KUSHTAYEVA, M. T., KUSSAIYNOVA, Z. A., ALTAYBEKOVA, K. T., SAMENOVA, S. N. World ethnocultural specificity of verbal communication: Good wishes in the Russian and Kazakh languages. **Media Watch**, v. 11, n. 3, p. 502–514, 2020. <https://doi.org/10.15655/mw/2020/v11i3/202935>

JIA, Q. Application of Chinese traditional musical instruments. **Scientific and Social Research**, v. 3, n. 1, p. 80–84, 2021. <https://doi.org/10.36922/SSR.V3I1.1063>.

KANG, S. Adaptations, code-switching, and novelty with cultural integrity: Musicians performing and learning musical instruments in different musical traditions. **Journal of Research in Music Education**, 2025. <https://doi.org/10.1177/00224294251317170>.

LAKE SUPERIOR CHAMBER ORCHESTRA. Crouching Tiger Concerto – Tan Dun – LSCO & Betsy Husby [Video]. YouTube, 3 Aug. 2014. [https://www.youtube.com/watch?v=dr2Qv4tu\\_IA](https://www.youtube.com/watch?v=dr2Qv4tu_IA).

LEI, S. Research on the comparison and integration of Chinese and Western music cultures. **Cultural and Religious Studies**, v. 12, n. 1, p. 32–35, 2024. <http://doi.org/10.17265/2328-2177/2024.01.005>.

LIU, J., CHEN, Y., HUANG, S. Exploring the sociocultural influence of music traditions across different cultures. **SHS Web of Conferences**, v. 187, p. 02008, 2024. <https://doi.org/10.1051/shsconf/202418702008>.

MA, Y., CHEN, Y. Exploring the model of contemporary Chinese ethnic musical instrument improvement mechanisms: Based on grounded theory. **Sage Open**, v. 14, n. 1, 2024. <https://doi.org/10.1177/21582440241235018>.

N. RAPP. Qigang Chen's Wu Xing (The Five Elements) (1999) for symphony orchestra [Video]. YouTube, 23 Sep. 2018. <https://www.youtube.com/watch?v=aGyaemEWYFI>.

NADIROVA, M. A. Global sounds: The integration of world music in contemporary genres. In: VESIK, T. (Ed.). *XIV International Scientific and Practical Conference "The Modern Vector of the Development of Science"*. Philadelphia: World of Conferences, 2024, p. 7–11.

NATIONAL SYMPHONY ORCHESTRA & CHORUS. Guan Xia: Earth requiem [Audio]. Apple Music, 6 May 2013. <https://music.apple.com/fm/album/guan-xia-earth-requiem/680847020>.

QIAOYI, Y. Revitalizing tradition: The role of the erhu in modern music and global culture. **International Journal of Education and Humanities**, v. 4, n. 4, p. 512–521, 2024. [https://doi.org/10.58557/\(ijeh\).v4i4.271](https://doi.org/10.58557/(ijeh).v4i4.271).

QIU, J., WU, S., ZHAO, Y., HUANG, H., WU, L. Sound power characteristics of Chinese traditional wind instrument Qudi. **International Journal of Architecture, Arts and Applications**, v. 7, n. 1, p. 8–15, 2021. <http://doi.org/10.11648/j.ijaaa.20210701.12>.

QIUXIAO, L. Presentation of noise elements of Chinese plucked string instruments in electronic music. **Organised Sound**, v. 27, n. 3, p. 316–324, 2022. <http://doi.org/10.1017/S1355771822000528>.

SINGAPORE SYMPHONY. Zhou Long The Rhyme of Taigu | Singapore Symphony Orchestra, Lan Shui | Berlin Philharmonie [Video]. YouTube, 6 Dec. 2011. <https://www.youtube.com/watch?v=-l8uP-ldAbA>.

STRILETS, A. The theoretical fundamentals of the training the folk instruments orchestra conductor. **Problems of Interaction Between Arts, Pedagogy and the Theory and Practice of Education**, v. 61, p. 26–49, 2021. <https://doi.org/10.34064/khnum1-61.02>.

THRASHER, A. R. Traditional instruments and heterophonic practice. In: STOCK, J. P. J., HUI, Y. (Eds.). *The Oxford Handbook of Music in China and the Chinese Diaspora*. New York: Oxford University Press, 2023, p. 179–198. <https://doi.org/10.1093/oxfordhb/9780190661960.001.0001>.

WANG, L. A preliminary study on the performance form of guzheng and poetry ode. **Bulletin of the Jusup Balasagyn Kyrgyz National University**, v. 15, n. 4, p. 21-26, 2023. [https://doi.org/10.58649/1694-8033-2023-4\(116\)-21-26](https://doi.org/10.58649/1694-8033-2023-4(116)-21-26)

WANG, X., PALSHKOVA, I., YAKYMENKO, P., ZABIIAKA, I., TERENCEO, O. The internationalization of teaching: keys to professional development abroad. **Amazonia Investiga**, v. 13, n. 80, p. 143–159, 2024. <https://doi.org/10.34069/AI/2024.80.08.13>

WINSTON, J. S., UPPUNDA, A. K. Musical feature perception: a comparative study among musicians, dancers, and non-musicians. **Asian European Music Research Journal**, v. 14, p. 13-24, 2024. <https://doi.org/10.30819/aemr.14-2>

WU MAN. Wu Man performs Zhao Jiping's pipa concerto No. 2 with the NCPA Orchestra [Video]. YouTube, 17 Dec. 2014. <https://www.youtube.com/watch?v=J91Pyz2NvnA>.

XIE, S., HIN-ON, T., SAPASO, P. Integrating traditional Chinese music into contemporary music education: An evolutionary perspective. **Evolutionary Studies in Imaginative Culture**, v. 8, n. 2, p. 70–82, 2024. <https://doi.org/10.70082/esiculture.vi.672>.

YANG, F., CHONPAIROT, J., YOU, L., LI, J. Guqin: The physical structure and literary significance of Chinese traditional musical instruments. **International Journal of Education and Literacy Studies**, v. 12, n. 2, p. 111–117, 2024. <http://dx.doi.org/10.7575/aiac.ijels.v.12n.2p.111>.

YANG, J. Symphony music of modern China: Performance dimension. **Baltic Journal of Legal and Social Sciences**, v. 2, p. 191–197, 2022. <https://doi.org/10.30525/2592-8813-2021-2-25>.



YIKUN, D. Symphonic music and cultural statecraft: The rise of symphonic statecraft in the post-Mao China. **International Journal of Cultural Policy**, 2024. <https://doi.org/10.1080/10286632.2024.2402243>.

YU, J. When the local encounters the global: Aesthetic conflicts in the Chinese traditional music world. **Journal of Chinese Sociology**, v. 9, n. 1, p. 6, 2022. <https://doi.org/10.1186/s40711-022-00169-y>.

ZHANG, J., WANG, I. Chinese and Western aesthetic realization in traditional Chinese instrumental performance: Perspectives of scholars and students. **Malaysian Journal of Social Sciences and Humanities**, v. 9, n. 11, p. e003075, 2024. <https://doi.org/10.47405/mjssh.v9i11.3075>.

ZHANG, S. Synthesizing Eastern and Western musical idioms in the context of the piano concertos with the traditional Chinese orchestra: An analytical study of selected works, with performance considerations. Greeley: University of Northern Colorado, 2023.

ZHANG, Y., ZHOU, Z., SUN, M. Influence of musical elements on the perception of “Chinese style” in music. **Cognitive Computation and Systems**, v. 4, n. 2, p. 147–164, 2022. <https://doi.org/10.1049/ccs2.12036>.

ZHETESSOVA, Z., ISSAKOVA, S., ISSAKOVA, A., YESSENOVA, K., OZGAMBAYEVA, R., ISMAILOVA, F. Strategy and Tactics of Communication in Fairy Tale Discourse. **Eurasian Journal of Applied Linguistics**, v. 11, n. 1, p. 118–128, 2025. <https://doi.org/10.32601/ejal.111110>

## Authorship contribution

Jiahui Huang contributed to the conceptualization and theoretical framework of the study, literature analysis, and preparation of the initial manuscript draft. Jiayao Huang contributed to data collection, analytical interpretation, and critical revision of the manuscript for important intellectual content. Both

authors discussed the results and approved the final version of the manuscript

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