

Popular Traditional Musicians of Sierra Leone and Their Signature Instruments: The Case of Denkena and Ordulay from Northern Sierra Leone



Philip Foday Yamba Thulla¹, Konrad Tuchscherer², Ibrahim Mustapha Fofanah³, Edmond Vandy⁴

Abstract

The study examines the instruments used by indigenous musicians in Sierra Leone: particularly those employed in Denkena and Ordulay performances in the North as distinct Sierra Leonean cultural instruments in terms of their production and use. Despite the impact of globalisation and Western technology on Sierra Leonean traditions, indigenous musicians continue to craft and play instruments within a distinctive cultural context. The objectives of the study were to a) identify the different numbers of players in their ensembles and the various numbers of instruments in Denkena and Ordulay's performances; b) compare and contrast the musical instruments used by the two musicians in their performances; and c) assess whether the two musicians incorporate Western-style instruments to enhance their vocalisation. The study tested three null hypotheses using the Kruskal-Wallis Test: H01: The ensemble sizes and the number of instruments were the same in Denkena's and Ordulay's performances. H02: The musical instruments used in Denkena's and Ordulay's performances were the same. H03: The Western-style instruments incorporated by Denkena and Ordulay to enhance their vocalisation during their performances were identical. The researchers analysed a list of musical instruments used by the two indigenous musicians in their performances, categorising them by type and nature. They compared and contrasted these using straightforward computational, linguistic, and anthropological methods to uncover cultural and philosophical meanings. The data show that the musicians use similar musical instruments but with some differences. Both also incorporate some distinct Western-style instruments to enhance their vocal performances, though only to a limited degree.

Keywords

Indigenous Music, Traditional Music Instruments, Traditional Musicians, Western-Style Instruments

¹ Njala University, Freetown, Sierra Leone, Email pythulla@njala.edu.sl

² St. John's University, USA, NY, Email tuchschk@stjohns.edu

³ Njala University, Freetown, Sierra Leone, Email ibrahim.fofanah@njala.edu.sl

⁴ Njala University, Freetown, Sierra Leone, Email edmondvandy37@gmail.com



Introduction

The study argues that the instruments used by indigenous musicians in Sierra Leone, especially those performed by Denkena and Ordulay from Northern Sierra Leone, remain crafted and played within a distinct Sierra Leonean cultural context. According to Stasik (2016), Sierra Leone's traditional music scene reflects its rich cultural history, including musicians such as Salia Koroma, a Mende musician and poet who mastered instruments like the balafon, blending Mende songs with Western-style instruments. Amie Kallon, one of the few remaining female Mende musicians, challenged cultural boundaries while empowering women; S. E. Rogie fused Sierra Leonean palm wine music with American folk and country elements, using his fingerpicking guitar to address social and political themes; and Abdul Tee-Jay, the King of Salone Jazz, integrated the saxophone into traditional music. These are merely a few examples of traditional instruments such as the shegure, bakuiti, and balangi that Sierra Leonean musicians have used over time to showcase the cultural traditions of Sierra Leone, which, for better or worse, have bridged the gap of skill and originality between tradition and contemporary music, delighting both local and international audiences (Schmidt, 2023; Matczynski, 2011; Charry, 2000).

According to Asemah et al. (2021), before globalisation and the influence of Western technology, African communication systems were based on folk media techniques that helped preserve traditional music and culture for millennia, as well as the use of instruments such as the bata, balafon, and shegure to convey their community's beliefs and experiences. Titon (2009) asserts that the expert use of these instruments allow them to function as cultural ambassadors, connecting generations and preserving the country's unique customs. Nzewi (2014) states that whistles, flutes, and vibrating reeds are made from bones, reeds, quills, and horns, which are treated with potent substances to give them special powers. Additionally, Nzewi (2014) notes that specific instruments serve as proactive medical or spiritual channels for traditional doctors and diviners, enabling them to address critical human and social problems. The music of these traditional performers has been demonstrated to influence societal systems and offer therapeutic benefits. According to Nzewi, nine different types of stringed instruments can be plucked, bowed, or struck to produce harmonics and other musical effects. Kirby (as cited in Nzewi, 2024) states that African musical instruments adhered to science in their production regarding "creative theory", "knowledge of acoustics", "sound production devices and techniques", "tuning", "social-cultural rationales", "functional deployment of music types and objects", "adaptation initiatives", and "performance

practices” (p.137), which established that, despite their supernatural abilities, African musical instruments adhere to more or less worldwide ethical and moral principles.

However, many reforms of African musical instruments have been directed towards globalisation. Traditional musicians have recently adopted Western-style instruments and collaborated with performers from other genres, including hip-hop and rap, to expand their artistic boundaries and attract a broader audience. This intergenerational effort in Sierra Leone’s traditional music has ensured, according to Marsh (cited in Benedick et al., 2015), the continuation of traditional musical practices, allowing traditional music to remain relevant in a changing musical landscape by incorporating foreign influences while maintaining its identity, as noted by Bangura (2021).

According to Shepler (cited in Thulla, 2024), Sierra Leonean musicians began experimenting with a fusion of traditional and Western musical traditions in the early twentieth century, with genres such as highlife and palm wine music. However, this fusion gained prominence after the civil conflict in the late 1990s. Sierra Leonean music genres, such as highlife music, were influenced by Ghanaian and Nigerian singers, including the Kumasi Trio, in their dancing rhythms and lyrics, which combined local languages and English (Matczynski, 2011; Emielu, 2011). Palm wine music, on the other hand, originated in Freetown and employed guitars, native songs, and lyrics that expressed societal challenges, political corruption, socioeconomic inequity, and everyday life (Okunade, 2023; Ogunbowale, 2012). This rich musical heritage has been maintained by indigenous musicians who have worked tirelessly to preserve and enhance this cherished musical culture. The objectives of the study were to a) identify the different numbers of players in their ensembles and the various numbers of instruments in Denkena and Ordulay’s performances; b) compare and contrast the musical instruments used by the two musicians in their performances; and c) assess whether the two musicians incorporate Western-style instruments to enhance their vocalisation. The study aimed to help protect Sierra Leone’s cultural heritage by promoting and appreciating these traditional artists. The following null hypotheses were developed based on these objectives: H01: The ensemble sizes and the number of instruments were the same in Denkena’s and Ordulay’s performances. H02: The musical instruments used in Denkena’s and Ordulay’s performances were the same. H03: The Western-style instruments incorporated by Denkena and Ordulay to enhance their vocalisation during their performances were identical.

Literature Review

2.1. Traditional Musical Instruments

Traditional musicians have incorporated musical instruments from their surroundings into their performances (Thulla, 2024), although this is not a unique practice exclusive to the African race. Montagu (2017) points to the history of musical instruments dating back to the Mousterian period when they discovered the femur of a young cave bear from the Divje Babe cave in Slovenia with other Neanderthal remains, which had three holes: two on one side and one on the other, which many people claimed was a flute and Montagu (2017) points to the conch trumpet, found in the Marsoulas cave, in the Haute-Garonne area of southern France, dating from around 20,000 years BP. Other instruments have since been discovered, particularly during the Neolithic period, when shells were found to be used as musical instruments. According to Montagu (as cited in Montagu, 2001), during the Magdalenian period, they discovered animal horns, such as those of cows, sheep, and goats, as well as antelope horns, elephant tusks, hollowed-out wood, and gourds. They also discovered wide-bore bamboo, with the tip broken or cut off, or a hole bored in the side, and cave rocks called rock gongs used as musical instruments, struck on resonant points. Later, according to Montagu (2017), skin drums (membranophones) and stringed instruments were discovered.

However, according to Dubois (2016), the banjo was the first African instrument to be exclusively attributed to Africa, though not specifically to a particular region or group. Even with this claim, Dubois asserts that the banjo resulted from transculturation, in the sense that the interaction between indigenous peoples of the Americas, Europe, and Africa contributed to its development. They created the banjo by enslaved people to work on plantations in the Caribbean and the United States, and Caucasians later used it at minstrel shows. According to Nketia (2017), African percussion instruments had a wider distribution and greater appeal than other instruments, primarily due to their distinctive sound and textures. According to Amaegbe and Omuku (2019), King's Choral Voices musical group of Port Harcourt used percussion instruments to produce high pitches. These include clappers, sticks, drums, rattles, woodblocks, slit drums, calabashes, pot drums, and bells. According to Phunsa (2014), in the past, they used local materials to imitate the sounds of nature, such as mountains, wind, rain, and rainfall, which could create short sounds without an echo. Phunsa (2014) states that Thai music utilises local materials, such as leaves, bark, and bamboo parts, as musical instruments to produce longer sounds. This study examines whether target musicians in the North use

similar indigenous musical instruments, as indicated by the scholars above. The South Bushmen, Swazi Zulu, Xhosa, and others, according to Kirby (as cited in Nzewi, 2014), used whistles, flutes, and vibrating reeds made from bones, reeds, quills, and horns, which were treated with potent substances to imbue them with special powers. Wachsmann and Kay (1971), however, state that African musical instruments and musical forms are tied to cultural systems, noting that strange noises are devices of music making such as “rifle shots, the clanging of brace-lets, the stamping of feet, the pounding of mortars, the slapping of thighs, or the clapping of hands” (p. 399). They go further to define musical form as “...the interplay between corporeal self-expression and the need to communicate in sound.” (p. 399) To produce ‘beaten’ idiophone sound, according to Udofia (2010), gongs, wooden blocks and wooden drums are struck with drum-sticks (beaters) with two hands, and to produce the ‘shaken’ idiophone sound, rattles and maracas instruments are used. To produce the ‘plucked’ chordophone sound, bows attached to the ends of the strings strung to the curved end of the sticks are used. Nzewi (2010) subdivides instruments such as string instruments, wind instruments, and reed instruments, which are of African origin. This study examines the nature of the musical instruments used by Denkena and Ordulay in their performances.

2.2. Integrating Western Instruments into African Indigenous Music

Globalisation has influenced technology used in many local and national African practices, especially in their indigenous music. While Thulla (2024) states that Western musical ideas and instruments are still employed in performances by indigenous musicians to enhance sound quality, traditional Sierra Leonean music emphasises physical, spiritual, and social interactions with the natural environment. Mugovhani (2015) observes that indigenous African music has evolved, citing South Africa’s rapidly changing postcolonial landscape, which has seen a surge of new stylistic directions in indigenous musical practices. Idamoyibo (2016) argues that the drumming heritage of the Yoruba people, particularly in its rhythmic emphasis in Christian *èsà* performances, faces issues because it no longer strictly follows Yoruba accents, making it hard for non-native listeners to understand. He further notes that a major contemporary change in *èsà* music is the fusion of *dùndún* and *bàtá*. Idamoyibo (2016) also considers digitisation of indigenous music as beneficial, noting its transition from storage formats like cassettes to VCDs, CDs, DVDs, and MP3s. Smartphones have also improved the sharing of drum music performances. Ngoma and Fikelepi-Twani (2024) mention that musical instruments are handcrafted from locally available materials such as a twenty-litre plastic bucket and a plastic bag.

Despite these functions, Akpakpan et al. (2023) state that Ibibio traditional musical instruments have been abandoned and replaced by Western equivalents, leading to the loss of much of the traditional value attached to their original instruments. The Bubu performances in northern Sierra Leone follow musical notes similar to Western standards (Thulla, 2024; Kamara, 2017), but Nketia (cited in McConnachie, 2016) argues that virtual musical learning or experience used by African artists is not part of the traditional African musical heritage, supporting earlier scholars who state that calabash or gourd instruments, such as the bob—a stringed instrument tied to a calabash or coconut shell—are played by singers performing ballads for lovers in the playground (Ballgobin & Antoine, 2003). The debate over African music incorporating Western instruments and ideas remains intense, with scholars like Karmova et al. (2023) and Mihelj (2019) et al. maintaining that digitization is vital for preserving African ethnicity and culture, while Newell (2012) believes that digitizing traditional music can provide new historical insights. Conversely, scholars such as Manžuch (2017) suggest that digital technologies can both include and exclude heritage services and participatory ethical decision-making. Netshivhambe (2024) opines that technological advancements have improved the teaching and making of indigenous musical instruments for education, yet “despite calls for the decolonisation of higher education systems, the educational landscape remains one of the least transformed spaces in South Africa.” (393) Muyonjo (2024) warns that the historical significance of Ugandan indigenous musical instruments is at risk because of the slow adoption of immersive technologies like Augmented Reality to replace museums, libraries, and heritage centres. In this context, issues such as contextual factors appear to have created challenges in the digitisation efforts undertaken by many institutions. Overall, many traditional African artists have incorporated Western instruments or styles into their performances. According to Falola and Fleming (2012), it is increasingly difficult to distinguish between what is African and what is foreign, traditional and modern, to the extent that the origins of most African musical instruments are becoming hard to trace, as each civilisation claims ownership of the instruments they craft without regard for their original creators. This study identifies the Western or Western-modified instruments used by the target musicians.

The paper begins with an introduction, then reviews the literature on African traditional musical instruments, followed by the methods and a detailed analysis of the data, and concludes with a discussion of the study’s implications.

Methods

The study employed a mixed-methods approach to examine the instruments used in the music performances of Denkena and Ordulay from Northern Sierra Leone. The researchers applied instrument examination, computational methods, and anthropological techniques to analyse and interpret the cultural and philosophical significance of the instruments used by the two artists. They also conducted two focus group discussions—one in each of the musicians’ communities—and three Key Informant Interviews (KII) to gather supplementary data. Initially, the researchers visited the communities where the musicians still performed, observed live performances, and studied their musical compositions to understand which Western or Western-style instruments the two artists incorporated into their performances. They analysed the musical styles, instrument types, and sound attributes of each set of instruments to assess their alignment with the musical genres and styles. The researchers then compared and contrasted the instruments of both musicians. A Kruskal-Wallis Test was used to test the study’s hypotheses. After securing ethical clearance from Njala University’s Directorate of Research and Development (DR&D), the researchers adhered strictly to the documented ethical guidelines. Informed consent was obtained from the communities prior to documenting their cultural heritage.

Results and Discussion

4.1. Results

Objective 1) Identify the different numbers of players in Denkena and Ordulay’s ensembles and the various numbers of instruments used in their performances.

The researchers examined the sizes of the ensembles and the number of instruments in Denkena’s and Ordulay’s performances. The researchers calculated the totals for the players and instruments, determined the type of music and description, conducted interviews, and subjected the hypothesis to a Kruskal-Wallis Test. Below are the results of the calculations:

Table 1

Denkena and Ordulay’s ensembles and musical instruments

Artist	Type of Music	Ensembles	Number of players	Name of Musical Instruments	Description	Total Number of Instruments at One Performance
--------	---------------	-----------	-------------------	-----------------------------	-------------	--

Denkena	<i>Mump ma tam</i> (Storytelling Music)	A bass drum player A <i>Shamgba</i> drum player An <i>Akeleŋ</i> player A five-gallon havoline rubber player (occasionally) A lead singer/storyteller	5	<i>Shamgba</i> <i>Aŋkongoma</i> Five-gallon havoline rubber <i>Akeleŋ</i>	Wooden Drum A cylindrical-shaped gourd or hollow wooden drum with animal skin An empty havoline rubber with a hole on each side Slit wooden drums	4
Ordulay	1, <i>Kagbeŋ</i> Music (instruments, a backup singer and a lead singer singing into a modern bullhorn) 2. <i>Sampa Soko</i> Music (Ritual chants and regimental steps for initiates led by the <i>Soko</i> , a spiritual leader, performed for rainmaking and cursing)	A shaker player A metal file player (<i>Aŋshera</i>) A <i>Kondi</i> player A <i>Aŋkongoma</i> player An <i>Argogo</i> player A handbell player A lead singer, singing in a modern bullhorn (microphone)	7	<i>Aŋkenke</i> Bullhorn <i>Aŋshera</i> <i>Kondi</i> <i>Aŋgbelen</i> <i>Aŋkongoma</i> <i>Argogo</i>	A shaker made of plant seeds threaded together by a string. Modern bullhorn Metal file Small wooden boxes A handbell made of iron that has two separate leaves and a clapper between them An iron instrument with two metal bells	7 (they added two instruments (bolded) during <i>Sampa Soko</i> 's performance)

Table 1 shows that Denkena performed “Mump ma tam”, a storytelling music piece, with a group of five players. During his performances, he employed a total of four ensembles: *Shamgba*, *Aŋkongoma*, a five-gallon Havoline rubber, and a lead singer/storyteller. Ordulay played *Kagbeŋ* and *Sampa Soko* music with a seven-member ensemble. In one performance, he used five instruments: *Aŋshera*, *Kondi*, *Aŋgbelen*, *Argogo*, and a bullhorn. During a *Sampa Soko* performance, he added two more instruments: *Aŋkenke* and *Aŋkongoma*.

One of the experts said the following during one of the Key Informant Interviews:

While ankenke and agbelen are used in Kagbeth music, music boxes, ankongoma, tabuleh, and ankenke are used in disco music. During weddings, funerals, and fishing in southern Mende, people frequently use kelen, sangbei, a horn instrument called buee, a rattle called sehgbura, buubu, toodo, and a small bass drum called beergutie.

Objective 2: Compare and contrast the musical instruments used by the two musicians in their performances.

The researchers compared and contrasted the musical instruments used in Denkena's and Ordulay's performances. They analysed the musical style and type, the instrument type and attributes of each set of instruments, conducted interviews to determine their alignment with the style and types of music. The hypothesis was tested through the Kruskal-Wallis Test.

According to Table 1, Denkena and Ordulay, although both were Temne traditional musicians, differed significantly in their musical style and instrument use. Denkena specialised in *Mump ma tam*, while Ordulay performed *Kagbeh* Music and *Sampa Soko* Music, which include ritual chants and regimental steps for initiates. Denkena used drums and slit drums, while Ordulay played a variety of instruments. These included *Aŋkenke*, bullhorn, *Kondi*, *Aŋgbelen*, *Argogo*, and *Aŋshera*.

In an interview with Denkena, he disclosed:

My songs and stories depict animals acting like humans and provide explanations for the state of affairs.

This suggests that anthropomorphism—animals acting like humans—is a storytelling element used in Denkena's songs and stories to remark on or explain the current status of the society in a metaphorical or allegorical manner.

Ordulay revealed the following:

My music has its origins in the Ojeh Society, a secret society descended from the Yoruba tribe in Nigeria. I sing praise songs for chiefs at coronations, for women's secret societies like the Bondo, and for traditional Temne social gatherings. My style is ceremonial.

This demonstrates that Ordulay's music has roots in West African traditional culture, particularly in the Yoruba Ojeh Society and Temne customs. He performs ceremonial praise songs for important community gatherings and secret societies, suggesting a role as a cultural preserver and traditional music performer.

Objective 3: Assess whether the two musicians incorporate Western-style instruments to enhance their vocalisation.

The researcher assumed that the Western-style instruments incorporated by Denkena and Ordulay to enhance their vocalisation during their performances were identical. The

researchers addressed this assumption through observation of live performances, experts' opinions and discussions, and subjected the hypothesis to a Kruskal-Wallis Test.

Table 2

Western Instrument/Western-styled Incorporated by Denkena and Ordulay to Enhance Vocalisation and Sound Quality

Artist	Western/Western-styled Instrument Incorporated	Total Number of Western/Western-styled Instruments at a Single Performance
Denkena	Shamgba Five-gallon Havoline rubber	2
Ordulay	Modern Bullhorn Anshera Angbelen	3

Table 2 reveals that Denkena incorporated two Western or Western-style instruments. Ordulay, however, incorporated 3 items: a modern bullhorn, *Anshera* (a metal file), and *Angbelen* (an iron instrument with two metal bells). Both local artists incorporated Western/Western-style instruments in their performances. In terms of the musical sounds and effects, Denkena's set of instruments was predominantly percussion instruments. In contrast, Ordulay's set of instruments consisted of a handheld percussion instrument, an electronic amplification device, a metal file (not typically used as a musical instrument), some resonant chambers, a tuned percussion instrument played by striking, and a bell tree or a similar arrangement of bells. In other words, Denkena's instruments consisted mainly of traditional percussion instruments, while Ordulay's included a mix of percussion, non-musical items, and a handbell.

The following was disclosed by a key informant interviewed:

Even though modernity has significantly impacted dance and instruments, the performance's traditional components and instrumentation have not changed. The dance troupe's main instruments are the shake shake (a percussion instrument made of tiny shells strung around a gourd), balangi, and sanbga (a drum).

This implies that the dance troupe has kept traditional components and instruments in its performances despite the impact of contemporary trends on dance and music. The traditional elements that have remained timeless include their main instruments, such the *shake shake*, *balangi*, and *sanbga*.

The following was revealed during discussions with the performers about the performances' technology and aesthetics:

Since there are no longer enough animal hides to make his drum and we are using a bullhorn, we would need you to supply instruments like drums. We want more opportunities to showcase our music on major platforms, including national traditional shows, and to improve our skills.

Another revelation was as follows:

The bullhorn is not our grandfather's tradition, yet today, it enables the Soko's words to be clearly heard by all, even over the drums. The essence of the message remains unchanged; only its delivery method has evolved.

This shows how traditional messages (Soko's words) can be transmitted effectively with the use of modern technology (the bullhorn) without altering its meaning. It also shows that even though modern technology may change, the relevance of the message and its goal remain constant. Even in the middle of other traditional instruments like drums, the bullhorn, for instance, amplifies and ensures that the message reaches the intended audience despite not being an indigenous instrument.

Results Following Hypotheses Testing

The researchers formulated and tested specific null hypotheses to determine whether there was a statistically significance difference in the ensemble sizes, the number of instruments, and/or the incorporation of Western-style instruments between Denkena's and Ordulay's performances. The results, H_0 , indicated that there was no statistically significant ($p < .05$) difference in the performances of the two artists regarding their use of ensembles, numbers of instruments, and/or incorporation of Western-style instruments in their performances.

A Kruskal-Wallis Test revealed a statistically significant difference ($p = .029$) in the medians of ensemble use between the two artists (see Table 3). Therefore, the researcher rejected the null hypotheses. Further, a Kruskal-Wallis Test revealed a statistically significant difference ($p = .003$) in the medians of the instruments used by the two artists. The null hypothesis was rejected. Additionally, a Kruskal-Wallis Test revealed a statistically significant difference ($p = .000$) in the medians of incorporation of Western-style instruments. The researcher rejected the null hypothesis (see Table 3).

Table 3*Hypotheses Testing Results*

Null Hypothesis	Test	Sig.	Decision
The medians of the ensemble sizes and the number of instruments are the same in Denkena's and Ordulay's performances.	Independent-Samples Median Test	.029	Reject the null
The medians of the musical instruments used by the two artists are the same.	Independent-Samples Median Test	.003	Reject the null
The medians of Western-style instruments incorporated by the two musicians to enhance their vocalisation are identical.	Independent-Samples Median Test	.000	Reject the null

4.2. Discussion

The results revealed that Denkena's style of music was *Mump ma tam*, a storytelling music genre featuring 5 players in his group. He performed with three instruments. These included *Shamgba*, *Aɲkongoma*, and five-gallon havoline rubber. Ordulay performed *Kagbeh* and *Sampa Soko* music with a seven-piece ensemble and seven instruments. The instruments included *Aɲkenke*, *Aɲshera*, *Kondi*, *Aɲgbelen*, *Aɲkongoma*, *Argogo*, and a bullhorn. This agrees with Amaegbe and Omuku (2019) and Phunsa (2014), who claim that traditional musicians have used native instruments such as clappers, sticks, drums, rattles, woodblocks, slit drums, calabashes, pot lids, and bells. In a sense, Denkena's ensemble can be seen as smaller (five players vs. seven) and employs fewer core instruments (four vs. seven) than Ordulay's. This quantitative difference is not merely numerical; it reflects the fundamental divergence in the scale and complexity of their musical productions, with Ordulay's work encompassing both secular (*Kagbeh*) and deeply spiritual (*Sampa Soko*) functions that require a larger, potent, and more versatile ensemble.

Comparing and contrasting the musical instruments used by the two musicians in their performances shows that Denkena and Ordulay had different types of music and instruments.

Denkena used drums and slit drums, whereas Ordulay employed *Aykenke*, bullhorn, *Kondi*, *Angbelen*, *Argogo*, and *Anshera*. Denkena incorporated two Western or Western-style instruments. Ordulay incorporated three instruments: a modern bullhorn, an *Anshera* (metal file), and an *Angbelen* (iron instrument with two metal bells). The divergence is not just in the names of instruments; it is embedded in their fundamental composition and sonic roles. Denkena's instruments are overwhelmingly dominated by traditional relics intricately woven into wooden percussion instruments such as the *Shamgba*, *Aykele*, and *Ankongoma*, creating a cohesive rhythm for storytelling (Thulla, 2024). In stark contrast to Ordulay's ensemble, there is noticeable diversion, blending shaker-idiophones like *Aykenke*, metallic instruments like *Angbelen*, and *Argogo*. Ordulay's ensemble also encompasses a repurposed instrumental tool (*Anshera*, a metal file) and some electronic amplification (Bullhorn). This eclectic mix signifies a musical practice that bridges the traditional, the modern, and the spiritual, creating a much wider palette of textures and sounds (Phunsa, 2014).

The study moves beyond mere description to argue that Denkena's and Ordulay's instrumental choices represent two distinct models of cultural sustainability in a globalised world. Both traditional musicians combined Western and local instruments (Thulla, 2024; Mugovhani, 2015). However, this analysis reveals a critical nuance that speaks directly to the scholarly debate on cultural fusion. The instruments of Denkena were mainly traditional percussion instruments, with the Havoline robber representing grassroots innovation that utilises available materials. This aligns with the African creative theory discussed by Nzewi (2014), in which the modification and use of local materials are a traditional, culturally imbued practice. This phenomenon exemplifies the evolution described by Mugovhani (2015) in indigenous African music, in which new stylistic directions emerge from traditional roots.

Ordulay's instruments consisted of percussion, non-musical artefacts, and a handbell, suggesting a more direct engagement with global material culture and blending traditional and modern components in their music. The Havoline rubber and bullhorn added a unique and inventive touch to the melody of their music (Manžuch, 2017; Newell, 2012), but their core function was pragmatic enhancement rather than artistic transformation. This finding allows us to extend Nzewi's (2024) framework. Whereas Nzewi (2024) emphasises that instruments originated from bones, reeds, and horns, this study demonstrates that the underlying principle of adaptation now encompasses industrial materials like Havoline

robbers and metal files. This challenges purist perspectives that might view such incorporation as a loss of traditional value. Instead, the cultural contexts of these instruments, as implied by Nzewi (2024), are not defined by pure origin but by the intentionality of their use within a potent adaptive tradition.

Conclusion and Implications

The study's findings formed the basis for the following conclusions and implications.

The test found no statistically significant differences between the two artists in the sizes of their ensembles, the number of instruments, or the incorporation of Western-style instruments, resulting in several distinct conclusions to be drawn as follows:

1. Denkena and Ordulay perform different music with different ensembles: Denkena performs *Mump ma tam* (Storytelling Music), with instruments such as *Shamgba*, *Ankongoma*, and Havoline rubber, while Ordulay performs *Kagbeh* and *Sampa Soko* music, each with seven players and instruments. This pattern confirms that ensemble structure is closely linked to musical genre and function. It also suggests that local instruments remain important in the music of the indigenous people in Sierra Leone.
2. Denkena and Ordulay, as Temne traditional performers, use a wide range of musical styles and instruments. Their instrumental palettes not only differ but also serve unique artistic and ritual purposes. This indicates that the Temne people continue to maintain diverse musical genres, each with its own distinct material culture.
3. Both performers use Western/Western-styled instruments in their performances, even though their percussion instruments are diverse, suggesting that indigenous performers strategically adopt Western conventions to revitalise and pragmatically enhance their performances, rather than abandon their traditional foundations.

These findings have broader implications for Sierra Leone's traditional music, which reveals its adaptive capacity. The findings suggest that preservation does not require museum-like stasis but can be achieved through a conscious and critical integration of new tools that serve the tradition's core aesthetic and functional needs. For cultural policymakers and educators, this underscores the importance of supporting artists like Denkena and Ordulay who are navigating this path with the ambition to ensure that Sierra Leone's cultural heritage remains a dynamic and living force.

Acknowledgements

The researchers are indebted to Pa Lamin Sesay (Denkena) and Abdulai Mansaray (Ordulay), the target performers, for allowing us to study their performances. We also thank the

members of the study area communities for helping us interpret specific words, instruments, and ideas during the interviews and discussion sessions. The researchers are grateful to the British Academy Funded Mentoring, Writing, and Networking (MEWANE) Programme for Early Career Researchers and the Njala University administration for the research funds.

References

- Akpakpan, M. J., Ayebatonye-Fatayi, P., & Ibekwe, E. U. (2023). Socio-Cultural Functions of Ibibio Traditional Musical Instruments. *Awka Journal of Research in Music and the Arts (Ajrma)*, 16. <https://www.nigerianjournalsonline.com/index.php/ajrma/article/view/4218>.
- Amaegbe, J., & Omuku, P. (2019). Sonic Effects of Indigenous Percussive Musical Instruments in Choral Music Performances: The Case of Kings Choral Voices of Port Harcourt. *Journal of Nigerian Music Education (JONMED)*, 9(1) <https://www.nigerianjournalsonline.com/index.php/jonmed/article/view/529>.
- Asemah, E. S., Kente, J. S., & Nkwam-Uwaoma, A. O. (2021). Handbook on African Communication Systems. https://www.researchgate.net/publication/366897393_Handbook_on_African_Communication_Systems.
- Ballgobin, D. V., & Antoine, M. (2003). Traditional musical instruments from the oral tradition: Folk music in Mauritius. *Revi Kiltir Kreol*, 3, 69-82. <https://d1wqtxts1xzle7.cloudfront.net/32768781/Veenalibre.pdf?1391622878=&response-content->
- Bangura, I. (2021). Young People, Music, and Sociopolitical Change in Post-War Sierra Leone. *Youth and Popular Culture in Africa: Music, Media and Politics*, 111–131. DOI:10.1017/9781800102095.006.
- Benedict, C., Schmidt, P., Spruce, G. & Woodford, P. (Ed.) (2015). Music, Social Justice, and Social Inclusion. *The Oxford Handbook of Social Justice in Music Education*, 173. <https://doi.org/10.1093/oxfordhb/9780199356157.013.20>
- Charry, E. (2000). *Mande music: Traditional and modern music of the Maninka and Mandinka of Western Africa*. University of Chicago Press. <https://press.uchicago.edu/ucp/books/book/chicago/M/bo3629899.html>
- Dubois, L. (2016). *The banjo: America's African instrument*. Harvard University Press. <https://doi.org/10.1017/S0021875817001244visibility>
- Emielu, A. (2011). Some Theoretical Perspectives on African Popular Music. *Popular Music*, 30(3), 371–388. <https://doi.org/10.1017/S0261143011000249>
- Falola, T., & Fleming, T. (Eds.). (2012). *Music, performance and African identities* (Vol. 3). New York: Routledge. <https://doi.org/10.4324/9780203831571>

Idamoyibo, A. A. (2016). Indigenous music in a new role. *Nordic Journal of African Studies*, 25(3&4), 20-20. <https://doi.org/10.53228/njas.v25i3&4.108>.

Kamara, E. (2017). Bubu in Sierra Leone. *Music In Africa*.
<https://www.musicinafrica.net/magazine/bubu-sierra-leone>

Karmova, M., Khachmafova, Z., Khabekirova, Z., Khachetsukova, Z., & Shkhumishkhova, A. (2023). Digitalisation: Advantage or disadvantage in the issue of preserving the languages of minority ethnic groups (in the example of the Abaza language). In *SHS Web of Conferences* (Vol. 172, p. 01005). EDP Sciences.
<https://doi.org/10.1051/shsconf/202317201005>.

Manžuch, Z. (2017). Ethical Issues in the Digitisation of Cultural Heritage. *Journal of Contemporary Archival Studies*, 4(2), 4. <http://elischolar.library.yale.edu/jcas/vol4/iss2/4>

Matczynski, W. (2011). Highlife and its Roots: Negotiating the social, cultural, and musical continuities between popular and traditional music in Ghana. Retrieved from: https://digitalcommons.macalester.edu/musi_honors/10/.

McConnachie, B. (2016). Indigenous and Traditional Music in the School Classroom: A Re-Evaluation of the South African Indigenous African Music (IAM) Curriculum. PhD diss., Rhodes University. <http://hdl.handle.net/10962/6806>.
<https://core.ac.uk/download/pdf/145038654.pdf> / <http://hdl.handle.net/10962/6806>.

Mihelj, S., Leguina, A., & Downey, J. (2019). Culture is digital: Cultural participation, diversity and the digital divide. *New media & society*, 21(7), 1465–1485.
<https://doi.org/10.1177/1461444818822816>.

Montagu, J. (2001). *Musical Instruments of the Bible*. Lanham, MD: Scarecrow Press.
https://books.google.com.sl/books/about/Musical_Instruments_of_the_Bible.html?id=RsV-.

Montagu, J. (2017). How music and instruments began: A brief overview of the origin and entire development of music, from its earliest stages. *Frontiers in Sociology*, 2, 8.
<https://doi.org/10.3389/fsoc.2017.00008>.

Mugovhani, N. G. (2015). Emerging trends from indigenous music and dance practices: A glimpse into contemporary Malende and Tshigombela. *Southern African Journal for Folklore Studies*, 25(3), s81-s96. <https://journals.co.za/doi/pdf/10.10520/EJC-6a09fe7f7>.

Muyonjo, J. (2024). Ugandan Indigenous Musical Instruments in Augmented Reality. <https://aaltodoc.aalto.fi/server/api/core/bitstreams/d5e20324-7c96-4c4f-b6af-056743fc7808/content>.

Netshivhambe, N. E. (2024). De-neocolonizing the South African Music Education: Selective Transformation. In *De-neocolonizing Africa: Harnessing the Digital Frontier* (pp. 393-416). Cham: Springer Nature Switzerland.
https://link.springer.com/chapter/10.1007/978-3-031-66304-8_22.

Newell, J. (2012). Old objects, new media: Historical collections, digitisation and affect. *Journal of Material Culture*, 17(3), 287–306. DOI:10.1177/1359183512453534.

Ngoma, K., & Fikelepi-Twani, Z. (2024). Decolonising the Teaching and Learning of Indigenous Nguni Music instruments in higher institutions of learning in South Africa. *E-Journal of Humanities, Arts and Social Sciences*, 5(5), 578-592.
<https://doi.org/10.38159/ehass>.

Nketia, J. K. (2017). 13 The Scholarly Study of African Music: A Historical Review. *The Garland Encyclopedia of World Music: Africa*, 13.
<https://books.google.com.sl/books?hl=en&lr=&id=6HQIEQAAQBAJ&oi=fnd&pg=PA13&dq=Nketia,+J>.

Nzewi, M. (2014). Musical instruments of the indigenous peoples of South Africa.
<https://doi.org/10.1080/18125980.2014.966516>.

Nzewi, O. E. S. (2010). The use of performance composition on African music instruments for effective classroom music education in Africa. University of Pretoria (South Africa).
<https://www.proquest.com/openview/01a765444c38ff3df486d54d299c1563/1?pq->

Ogunbowale, M. O. (2012). “In the Ghetto, Life is no easy for we”: The Construction and Negotiation of Identity in Ajegunle Raga (Doctoral dissertation, University of Guelph).
<https://atrium.lib.uoguelph.ca/server/api/core/bitstreams/b41196b2-902b-42e7-8e88-d5e660f11077/content>.

Okunade, S. A. (2023). Jùjú Music And Consumer Culture In The Oil Boom Era In Southwestern Nigeria, 1970-1980 (Doctoral Dissertation).
<http://hdl.handle.net/123456789/2077>.

Phunsa, S. (2014, November). Applying augmented reality technology to promote traditional Thai folk musical instruments on postcards. In *Proc. International Conference on Computer Graphics, Multimedia and Image Processing*. <https://www.researchgate.net/profile/Suwichai->

Schmidt, K. (2023). Globalisation, Commodification and Cultural Production in Africa: Contemporary Theatre in Sierra Leone. Taylor & Francis.
<https://doi.org/10.4324/9781003450085>

Shepler, S. (2010). Youth music and politics in post-war Sierra Leone. *The Journal of Modern African Studies*, 48(4), 627-642. <https://doi.org/10.1017/S0022278X10000509>.

Stasik, M. (2016). Real love versus real life: youth, music and utopia in Freetown, Sierra Leone. *Africa*, 86(2), 215-236. <https://www.jstor.org/stable/26158014>.

Thulla, P.F.Y. (2024). Music is Culture, But is Technology? Witmer et al. (Eds.), *Consilience, Synthesis Lectures on Engineers, Technology, & Society*, (pp. -). Springer. Retrieved from https://doi.org/10.1007/978-3-031-58399-5_7.

Titon, J. T. (2009). Music and sustainability: An ecological viewpoint. *The world of music*, 119–137. <https://www.jstor.org/stable/41699876>.

Udofia, S. (2010). The Language of African Musical Instruments: Issues in Composition, Performance and Pedagogy. *Lwati: A Journal of Contemporary Research*, 7(1). 10.4314/lwati.v7i1.57482.

Wachsmann, K. P., & Kay, R. (1971). The interrelations of musical instruments, musical forms, and cultural systems in Africa. *Technology and culture*, 12(3), 399-413.
<https://doi.org/10.2307/3102425> / <https://www.jstor.org/stable/3102425>.