Revised Selected Papers

Accademia Musicale Studio Musica Michele Della Ventura, *editor*

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Preface

This volume of proceedings from the conference provides an opportunity for readers to engage with a selection of refereed papers that were presented during the International Conference on New Music Concepts and Inspired Education. The reader will sample here reports of research on topics ranging from mathematical models in music to pattern recognition in music; symbolic music processing; music synthesis and transformation; learning and conceptual change; teaching strategies; e-learning and innovative learning. This book is meant to be a *textbook* that is suitable for courses at the advanced undergraduate and beginning master level. By mixing theory and practice, the book provides both profound technological knowledge as well as a comprehensive treatment of music processing applications.

The goals of the Conference are to foster international research collaborations in the fields of Music Studies and Education as well as to provide a forum to present current research results in the forms of technical sessions, round table discussions during the conference period in a relax and enjoyable atmosphere.

36 papers from 16 countries were received. All the submissions were reviewed on the basis of their significance, novelty, technical quality, and practical impact. After careful reviews by at least three experts in the relevant areas for each paper, 12 papers from 10 countries were accepted for presentation or poster display at the conference.

I want to take this opportunity to thank all participants who have worked hard to make this conference a success. Thanks are also due to the staff of "Studio Musica" for their help with producing the proceedings. I am also grateful to all members of Organizing Committee, Local Arrangement Committee and Program Committee as well as all participants who have worked hard to make this conference a success.

Finally I want to appreciate all authors for their excellent papers to this conference.

April 2019

Michele Della Ventura

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Laying the Foundation For the Inclusion of indigenous Music in Elementary and Secondary Puerto Rican Music Education

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Abstract. The framework of Puerto Rican music education has for decades marginalized the island's musics; local music teacher education programs do not offer instruction in the country's music. School curricula make no mention of Puerto Rican music. Consequently, this paper argues for a culturally responsive Puerto Rican music education, by highlighting the benefits of adopting such pedagogical approach. Furthermore, Puerto Rican music has survived within communal settings; hence exposure to these musics opens up the possibility to a community of practice and the benefits of lifelong music engagement within these settings.

Keywords. Puerto Rico, music education, indigenous knowledge, traditional music.

1 Introduction

A curricular analysis of the music teacher education programs in Puerto Rico outlines the current state of music education in the island [1]. Based on the related literature [2]–[4], and on the standards set by national and international organizations, the research revealed that six of the eight programs offer pre-service music educators the adequate course work for them to flourish as music teachers. Further inquiry revealed a paradoxical characteristic of all programs, as none of them offered musical instruction or pedagogical development in any Puerto Rican music genre. Naturally, the lack of Puerto Rican music in teacher education program has limited the presence of these art forms in schools. Consequently, music teacher education—and teacher education programs in general—lack cultural responsiveness. The country's Departamento de Educación (DE) manages education across Puerto Rico. The DE has established different curricula according to distinctive education levels and subjects. With regards to music, no mention of Puerto Rican music is made [5].

2 Puerto Rican Music and it's Contribution to Music Education

This section of the paper highlights the phenomenological characteristics of Puerto Rican music in order to point out the benefits learning these art forms offer students. Starting

with the eldest musical genre, Bomba is a communal musical expression that has unique particularities that can benefit numerous groups of people. Bomba is frequently practiced in what are called Bombazos, which are essentially musical gatherings that foster participation in a myriad of ways. Firstly, individuals that know how to play the Buleador barrel have the opportunity to bring their instrument and sit in the line of barrels. Secondly, even though in the past playing barrel used to be exclusive to men, today no gender or social discrimination is made. The only criterion for participation is musical knowledge. Moving along with the other musical instruments, the cuás and the maracas instruments normally reserved for one person. Similarly, the Primo barrel is reserved for an expertise Bombero, as this person improvises and follows the steps of a dancer. The dynamic between the dancer and the Primo player is of symbiotic nature, as the dancer dictates the sounds produced by the percussionist in a fashion germane to the musical style. This dancing is reserved for people of all ages and different levels that know how to dance within the Bomba style. Having exposed the more inner musical dynamics of Bomba, it is worth mentioning particularities of the Bombazos as social events; the line between audience and performers is blurred, as all the people present contribute to the performance knowingly or unknowingly. For instance the mere prescence of a person in these events contributes to the stage of the Bombazo, as people are gathered in a circle that forms the batey, the place were the individual dancing takes place. Further, even though not everyone is encouraged to dance by themselves, the rhythm moves people to dance together in the frame of the batey. Another dynamic that further blurs the distinction between musicians and audience is that those that aren't playing an instrument are encouraged to sing the chorus, therefore providing vital help to the primary singer. Furthermore, these Bomba events are held all over Puerto Rico and the diaspora. Therefore, partaking in these musical events is not restricted to a particular geographical region and, today, many are held on a weekly basis.

The other afro-Puerto Rican music tradition, Plena, has a similar dynamic to Bomba. Their more communal dynamic are called Plenazos. These Plenazos are held all over the country and are open to anyone. Partaking in these activities also blurs the line between audience and musician, participants do not need to play one of the instruments to partake: everyone around is encouraged of singing along the chorus established by the main singer. Furthermore, playing Plena has been passed down for over one-hundred years informally, in community settings, and at times in an impromptu manner during the Plenazos. The repertoire of plena, aside from traditional songs, consist of recounting quotidian events of the life of musicians as well as social and political problems. A Maestro Plenero normally controls the dynamic of a Plenazos. This person-a renowned plenero gives structure to the event by giving everyone the opportunity to participate and to contribute to the songs that are sang. This person also gives the chance to everyone playing a requinto-the instrument that improvises-a chance to shine. The other two instruments, the punteador and buleador, are more present in this music,. Although, numerous requintos can play at the same time only one improvises at a time. The other sole instrument is the guiro, which is played by only one person.

From this analysis, I will expose some of the contributions Afro-Puerto Rican music can offer students. In the conventional sense, playing the diverse percussion instruments can contribute to the explanation of conventional rhythm literacy and the development of instrumental skills. The vast repertoire can be used for developing singing skills. Considering Bomba has its particular dancing style, students can learn the moves of the musical expression, similar to what music methods such as Stokoe and Dalcroze suggest [6]-[7]. Aside from contributing to the attainment of conventional goals of music education, Bomba and Plena playing grants access to a community of practice students can partake for the rest of their lives. Learning these genres in school would allow students to participate of Bombazos and Plenazos, and to bring into the classroom the things they learn in such events, making the music class something that transcends the classroom. Community musicians can come into the classroom to further cement ties that transcend the classroom. Moreover, connections can be made among schools. Educators can connect different classrooms by organizing interschool music gatherings. All of these initiatives portray Bomba and Plena as human expressions that can lead to lifelong music engagement.

Música Campesina establishes a clear distinction between audience and performers, as the singers—called trovadores and cantadores—sing as soloist. However, students can develop singing skills from this music's repertoire. Also, something that does not occur with these music genres is the interpretation of this music in a choral setting, which is a dynamic music teachers can incorporate. Further, pupils can develop instrumental skills from learning the instruments germane to the genre, the Puerto Rican cuatro, guiro, and bongos. Also, considering that this music primarily illustrates the music in the mountains, students will learn about life in the countryside of the island. Considering that the Décima is an octosyllabic form, studying this prose has an invaluable benefit for developing skills in Spanish language. Singers of this genre are revered for their rich vocabulary, and engagement with this music can help improve pupil's lexicon. Moreover, considering the importance of knowing the syllables of words for accentuation, engagement with this form can help with the development of the skills needed for this essential aspect of the Spanish language.

3 Benefits of Music Education

The benefits of engaging with Puerto Rican music in schools outlined in the previous section also provide students with the upsides related to music education exposed by several scholars. Research has correlated music education with social, health, cognitive, and academic benefits as well as linked music-making with neurological activity and development with areas of the brain associated with communication and memory [8]. For instance, music education in schools has proven to enhance motor skills [9]-[11], improves the brain readiness for achievement [12], expands memory skills [13]-[14], helps literary skills [15]-[16]. Aside from these cognitive enhancements, music education in schools has shown to contribute to academic success. Studies have found that music education students perform better in language class [17], the study of foreign languages [18]-[19], performance in math class [20], and, noticeably, music pupils have shown to

perform better in standardized tests [21]. Furthermore, music in school can improve students' attitude toward school [22].

It is important to highlight the social benefits engagement with these musics can elicit. Music-making has been associated with social cohesion, enjoyment, personal development, empowerment, and counteract depression as well as improve and sustain well-being [23]-[24]. Notably, recent researchers have found that these social benefits can also be prolonged and/or attained during the third and fourth ages [25]-[26]. Further, educators play a vital role in the lasting musical engagement of their students, a phenomenon highly influenced by the experience teachers provide their pupils [27]. These musics, and their cooperative nature, can turn away from conventional models of music education that inherently foster competition among students [28]. The benefits of lifelong engagement with music include for instance the prevention of burnout and the improvement of mood states as well as total mood disturbance. Lifelong recreational music making has proven to offer numerous benefits, including exercise, nurturing, social support, bonding, intellectual stimulation, and development of coping mechanisms aside from the musical dexterities intrinsically developed [29]. The benefits of lifelong engagement transcend the social and well-being aspects [30], as the hard sciences have proven that prolonged music education has vital upsides to humans [31]. For instance, cognitive functioning in older adults has been associated with continuous music engagement [32]-[33]. In fact, larger amount of musical training has been associated with faster neural responses to speech [34]. Noticeably, scholars have taken to task studying the effects music has on preserving the functions of the brain. Results of these studies have shown that music engagement better combats the aging process of amateur musicians than that of professional and non-musicians [35], and music training slows the cognitive decline and fosters plasticity in the developed brain [36].

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This book presents a collection of selected papers that present the current variety of all aspect of music research, development and education, at a high level. The respective chapters address a diverse range of theoretical, empirical and practical aspects underpinning the music science and teaching and learning, as well as their pedagogical implications. The book meets the growing demand of practitioners, researchers, scientists, educators and students for a comprehensive introduction to key topics in these fields. The volume focuses on easy-to-understand examples and a guide to additional literature.

Michele Della Ventura, editor **New Music Concepts and Inspired Education** Revised Selected Papers

