

Translation from Bulgarian

Critical Review

by Assoc. Prof. Dr. Georgi Metev Petkov

Music Department, New Bulgarian University – Sofia, professional field 8.3 Music and Dance

of the PhD thesis

of

Liburn Jupolli

for awarding the educational and scientific degree of Doctor in professional field 8.3. *Music and Dance*,

New areas of exploration in 21st century instrument invention and its effects on musical composition

Supervisor: Prof. Dr. Simo Lazarov

Liburn Jupolli is a composer, multi-instrumentalist, inventor, producer with over fifteen years of experience. He has released 25 music albums performed / presented at internationally famous music festivals /. He works as a lecturer, invented 2 new instruments, composed 60 different productions in theatre, film, animation, fine arts, games and is the founder of the first Faculty of Modern Music in Kosovo, Centre for Contemporary Music Research, IL-IR Philanthropic Foundation and MAGMUS publishing house. He has a record for a marathon concert performance of 13 hours and 32 minutes.

Liburn Jupolli became interested in composition at the age of 12, and at the age of 16 he wrote his first composition for a theatrical production; since then, he has been working on various theatre and film productions, animation and games in the Balkans, Europe and India in the course of 15 years. While working in the entertainment industry, Jupolli actively wrote original music for various instrumentalists and ensembles in Europe and the United States. In addition to composition, he is interested in musical innovations, development of education and new technologies. In 2010 he invented the microtonal spatial instrument Octo. Since 2018, he is a lecturer at UBT-University of Business and Technology, where he is the founder of the Faculty of Modern Music in Kosovo in 2019 and the Centre for Contemporary Music Research.

The degree candidate's creative pursuits extend beyond the limitations of conventional musical instruments and tempered sound order. In addition to the capabilities of electronics and spatial acoustics, he designs and uses his own instruments and accessories to help him achieve new sound colours. The present research is the result of the long-term purposeful interest of the degree candidate on the topic of contemporary compositional means of expression, concepts, technologies and innovations. Apart from being an observer and researcher, the

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author is an active participant as a composer, looking for contemporary musical means of expression. Jupolli's creative pursuits also prompted him to pursue a luthier-inventive activity closely related to the electroacoustic field.

The subject of the PhD thesis "New areas of exploration in 21st century instrument invention and its effects on musical composition" results from and is specified on the basis of the author's creative searches and experiments over the past decade. The work is in a total volume of 150 pages, structured in 7 chapters, introduction, conclusion, bibliography, including 87 titles related to the subject. I have full knowledge of the abstract, containing 23 pages, which clearly and correctly reflects the content of the PhD thesis and its scientific contributions.

The **OBJECT** of the present research is hybrid and microtonal spatial instrument **Octo** invented by the author and the opportunities offered by this innovation as a stimulus for creative invention in modern music.

The **SUBJECT** of the research is the process of musical and creative development in the field of composition and presentation of modern microtonal and electroacoustic instruments with new microtonal and spatial properties.

The **PURPOSE** of the research has been achieved by presenting an in-depth look at the technical aspects of the process accompanying the construction of a new instrument combining microtonal possibilities with spatial possibilities and diversifying the group of lute / plucked / string instruments, as well as the impact of this innovative instrument on notation and composition as a whole.

Liburn Jupolli has a clear goal - to create a hybrid tool with the following qualities:

- to be accessible by all instrumentalists
- to use the eastern and western tonal possibilities
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- to have a wide microtonal range

- to be able to reproduce, switch and combine microtonal and semitone capabilities from medieval western music, Asian music and modern hybrids

- to be easy to use and learn

- to have 5 octaves and a half tonal range

- to be able to control timbre

- to enable a designated output for each timbre, providing 8.0 spatiality properties

- to enable, by partition of 8.1 output, diversified use of external effects.

The empirical research method based on the personal creative searches and experiments of the author in two main areas - microtonal music and spatiality, is definitely the leading method in the PhD thesis. The doctoral student successfully solves various technical problems in the implementation of the instrument, in coordination with the sound reproduction and with the possibilities for composing new music. A new system for setting, construction, fretboard design, fixed frets / positions /, creating convenience for playing microtones, instrument body, adapters and related electronics, has been developed, allowing separate control and processing of the sound produced by the eight strings of Octo.

On the way to the invention and implementation of the new hybrid microtonal and spatial instrument Octo in the performing music practice, Liburn Jupolli makes an in-depth scientific research with a really proven and practical application contribution. The empirical material is the result of almost everyday practical and research work. Before coming to Octo, the doctoral student developed several innovative models of musical instruments, which he implemented in his practice. As can be seen in the text of the PhD thesis, the chosen logic of the presentation is indicative of the availability of skills for developing a theoretical research model. A proof of the relevance of the design is its innovative nature, associated with the tendencies of looking for new means of expression in the field of contemporary music. The doctoral student knows in depth a sufficient number of sources of information on the problems of the research, which can be seen from the bibliography, and he also worked with prominent modern luthiers-experimenters from around the world to create this unique new musical instrument. The author also expresses his special gratitude for the assistance in the development and creation of Octo to the Finnish luthier living in North Carolina, USA - Ari Lehtela.

Contributions of the research

1. An innovative system for the synthesis of microtonal tones has been developed. The effectiveness of this system in its theoretical and applied nature has been scientifically proven.

2. A special scheme for connecting the sound producing adapter has been developed, through which it is possible to produce microtones.

3. An authorial microtonal system, allowing for imitation of string instruments of different nationalities and cultures, has been created.

4. A new way of writing microtonal scales when performing on **Octo** has been introduced.

5. An innovative way to control the parameters of the sound and its delays has been created.

6. An eight-channel **Octo** instrument with eight output channels was invented, which made it possible to divide each string into separate amplifiers. Its capacity (effectiveness) has been scientifically proven.

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7. The idea for a more extensive study of the timbre has been expanded by using separate effects for each string and a corresponding notation system has been created.

8. A spatial notation method has been developed for Octo.

9. Joint performance on the hybrid instrument **Octo** in different ensemble formations has been experimented.

I fully agree with the personal contributions of the author thus derived at the textual level, presented in the abstract.

I am pleasantly impressed by the final result of the practical part of the development - the new unique instrument invented on the basis of the classical guitar, which could be learned to play by a musician with the habits of an instrumentalist who has mastered the stringed-plucked-lute instruments. A special authorial contribution is the opportunity, provided by this instrument, for performance of both tempered and microtonal music, going beyond the boundaries of the established in the world musical practice tempered sound scale and inherent in different genres and ethnocultures around the world. Okto combines various eastern and western stringed-plucked instruments. My personal recommendation to the doctoral student is to consider simplifying the way of controlling the electroacoustic part of the instrument at the next stage of perfecting the instrument. If possible, the "sound production" should be performed by only one person or should be automated as much as possible on the basis of modern electronics by preprogramming for each musical performance or something in that line of thought.

Based on the above, I allow myself to appreciate this practical-applied research on its merits, with all its theoretical and practical contributions. I

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congratulate the author and the scientific supervisor of the doctoral student Prof. Dr. Simo Lazarov.

I strongly recommend to the esteemed Scientific Jury to award Liburn Jupolli the educational and scientific degree of Doctor in professional field 8.3. "Music and Dance".

24.10.2020

Assoc. Prof. Dr. Georgi Petkov

I, the undersigned Venceslava Mishlyakova hereby certify the truth of the translation made by me from Bulgarian language to English language of the enclosed document Critical review. The translation consists of 7 pages.

Translator: BUS

