

THE DEVELOPMENT OF A METHOD FOR TEACHING EXTENDED CELLO TECHNIQUES USING FREE IMPROVISATION

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Abstract

Throughout the history of music learning, teaching methods have been a useful tool to explain how an instrument works based on the performance demands at the time. These methods have adapted to the musical style and the interpretative needs around them. They have been used as a reference by performers, composers, musicologists, and scholars to identify the evolution of a certain instrument, teaching technique or stylistic regard. This research is based on explaining the creation process of the method *El violonchelo desde una mirada contemporánea* (The cello from a contemporary perspective) and its usefulness in teaching and learning contemporary music at the university level. The product is a didactic tool that facilitates the learning process of extended techniques on the cello by using free improvisation as a guide.

The project rested on the fulfillment of three specific objectives: the description of twenty extended techniques for the cello, the elaboration of ten free improvisation exercises with extended techniques from the researcher's personal experimentation, and the design of a method based on the information collected. This research was supported under the theoretical framework of practice-based research methodology which in Latin America is referred to as artistic research. As a result, the investigation created a method with a brief explanation of twenty extended techniques for cello and ten exercises focused on teaching these techniques with free improvisation.

The aim of this method is to contribute to educational practices, in the sense that it facilitates the development of contemporary music playing and composing skills for both students and teachers at the university level. It also points out the lack of contemporary music teaching in Colombia. The next phase of the project will be to validate its usefulness with music teachers and students in various cities of the country.

Keywords: *Musical teaching method, practice-based research, contemporary music, extended cello techniques, free improvisation.*

1. Introduction

What is the meaning of contemporary music, extended techniques, and free improvisation?

Students from the Music Program at the Universidad Autónoma de Bucaramanga (UNAB) pondered this question after a visit from the Chilean composer Jeremías Iturra who premiered his work for strings, *Estudio sobre un itinerario terrestre* (Iturra, 2019) at the University in 2019. For two weeks, the composer led rehearsals of the piece, a process which due to the lack of experience in contemporary techniques by the conductor and orchestra members, necessitated explanation of how to execute several elements written in his work. Iturra also offered conferences related to this type of music as well as other related subjects such as free improvisation and extended techniques.

The lack of knowledge in these subjects pointed out a gap in the teaching of contemporary music in higher education institutions nationwide. The experience led to the research question: how to facilitate an approach to extended techniques on the cello from free improvisation? The goal of this project was to create a musical teaching method for extended cello techniques using free improvisation as a guide.

The following specific objectives served as a basis for creation of the method: the description of twenty cello extended techniques, the elaboration of ten free improvisation exercises with extended techniques from the researcher's personal experimentation, and the design of a method based on the information collected. The research was developed using the methodology of practice-based research known as artistic research in Latin America and research-creation in Colombia.

2. Literature review

This research is pertinent in the field of music education, specifically at the bachelor's level in Colombia since it intends to be useful in the teaching and learning of contemporary music for both

university students and teachers. Correspondingly, the project provided the method called *El violonchelo desde una mirada contemporánea* (The Violoncello from a Contemporary Perspective) (Russi Guzmán, 2021) as a didactic element that facilitates educational processes.

The project is current within the field of academic music as it is part of a problem previously worked on by other studies internationally. An example is the thesis *Educación y música contemporánea: encuentros y desencuentros entre compositores* (Education and Contemporary Music: Meetings and Disagreements Between Composers and Teachers) by Ana Urrutia Rasines and Maravillas Díaz Gómez (2013). The researchers list projects that have focused on the lack of contemporary music teaching in different countries and educational levels. They show research carried out from 1982 to 2011 in countries such as Spain, Portugal, Brazil, and France. They concluded that this has been a subject of pedagogical interest around the world and that teachers, while manifesting a lack of knowledge, have an interest in learning the topic and could give courses and conferences on contemporary music after training.

One of the papers that contributed to the creation of the method was Ellen Fallowfield's PhD thesis called *Cello map: A Handbook of Cello Technique for Performers and Composers* (Fallowfield, 2009). This document focused on the presentation of new and traditional techniques to define a "global technique". The author started from the explanation of physical actions that modify the sound of the cello and then sought to connect them, hence the term "map". The relevance of the text relies on the association between the actions carried out by the instrumentalist and the sounds that they produce on the cello.

Another referent was the doctoral thesis by Valerie Welbanks entitled *Foundations of Modern Cello Technique: Creating the Basis for a Pedagogical Method* (Welbanks, 2016). This text focused on presenting extended cello techniques as a linear progression of traditional technique and the contribution to a methodological approach to contemporary music. This document provided an explanation of the origin, development, and interpretative suggestions for the execution of the techniques, as well as part of the definition of the term extended techniques.

3. Methodology

This project begins with a brief definition of the term "extended techniques", describes a selection of twenty extended techniques for cello and includes an explanation of how each technique is notated and performed. Next, the term "free improvisation" is defined and an explanation of the creation of the method *El violonchelo desde una mirada contemporánea* is explained. This section is divided into four parts: writing a draft, individual experimentation, indirect self-observation and feedback and finally, corrections. Ultimately, the last section entailed compilation of all the prior information into the official design of the method.

3.1. Definition of extended techniques

The term "extended techniques" has been adopted in recent decades due to its importance in contemporary compositions. Current discussions look for technical differences between artistic periods to delimit them. At the moment, the term does not have a standardized definition since two aspects must be considered: an explanation of the idea to be defined and a list of the techniques that would be considered "extended". Although the term is vernacular among contemporary music specialists and well known within the profession, there is still no consistent definition supported by musicological texts (Fallowfield, 2009, p.27). In the doctoral thesis *Foundations of Modern Cello Techniques: Creating the Basis for a Pedagogical Method* (Welbanks, 2016, pp. 32-33) the author indicated that to be able to interpret any repertoire written in the 20th and 21st centuries, the performer must have at least a basic notion of extended techniques.

Accordingly, extended techniques in this investigation were defined as the unconventional execution of an instrument through its manipulation and exploration to achieve new sounds that are outside the traditional catalog of sounds emitted by this instrument. Additionally, the term refers to a group of techniques that regained importance after the mid-20th century and were created to adapt to contemporary composers' intentions while searching for elements to enrich their pieces.

3.2. Free improvisation

Within western academic music, free improvisation is an act of artistic and social creation that reflects a performer's identity and may involve the public as a participant in the piece. Its beginnings reveal the fickle quality of society from the 1960s to date with music constantly evolving and being in a state of constant innovation. In this way, free improvisation may be considered to be a part of contemporary music based on two arguments. The first, from the definition of contemporary: which is existing, belonging, and relative to the temporality of another person or thing. The second argument is made by Wade Matthews, in his article *¡Escucha! Claves para entender la libre improvisación* (Listen! Keys to Understand Free Improvisation) (2001). He states that free improvisation inherited the musical changes that occurred from the end of the 19th century to date.

3.3. Creation process of the method *El violonchelo desde una mirada contemporánea*

The creation of this method was divided into two phases: elaboration of the ten exercises followed by a period of testing their applicability. Both activities focused on the experimentation carried out by the researcher with the use of autoethnographic elements explained in the book *Investigación artística en música: problemas, métodos, experiencias y modelos* (Artistic Research in Music: Problems, Methods, Experiences and Models) (López-Cano & San Cristóbal Opazo, 2014). This research understands autoethnography as a strategy that describes and analyzes the personal experience of the researcher aiming to identify cultural aspects, phenomena, or events to which he/she belongs or participates.

One of the tasks proposed by autoethnography corresponds to indirect self-observation. This element was used for this research, consisting of observing the subject, in this case the researcher herself, from a video or audio recording that captures the actions carried out and allows analysis and reflection of what is recorded (López-Cano & San Cristóbal Opazo, 2014, pp. 152-153). From indirect observation, the researcher derived four steps to elaborate the exercises.

The first step consisted of writing a draft based on the 20 selected techniques. Each exercise was divided into three levels that progressively increase in difficulty to add a didactic and motivating component to the exercise. Additionally, several of these exercises contain elements of contemporary music in addition to extended techniques. Each level has an estimated length that varies between 20 seconds and two minutes to control the length of the improvisation. Different graphic elements were also used as independent variables to facilitate the creative process and give a context to improvisation.

The second step focused on the individual experimentation of the researcher by reading and executing each exercise. Later, the researcher had to assimilate the instructions and play the levels in the corresponding order. The prior action happened after a period of at least two days from the moment the exercise was written in order to forget the initial intention when created and thus increase the objectivity of the new reading by the interpreter-researcher.

The third step used the indirect self-observation strategy mentioned above, which consisted of the audio and video recording of step two. The recordings were divided into two moments: the reading and experimentation process and then the final improvisation of each level. The first recording made it possible to identify how long it took to read the instructions and assimilate them before starting the experimentation. The second recording showed how long it took to expose, develop, and conclude a musical idea with the requested elements under the time limits.

The last step was feedback and editing based on the review of the audiovisual material. A period between experimentation and review was also expected to ensure greater objectivity. This section sought to reach conclusions regarding whether the wording of the exercise was easy and quick to understand or if it took too long to process and start playing. It also made it possible to delimit a standard duration of the improvisation so that the necessary seconds or minutes per level could be established.

3.4. Designing the method *El violonchelo desde una mirada contemporánea*

The method *El violonchelo desde una mirada contemporánea* is divided into four sections: *Datos de la misión* (Mission Data), *Conociendo los aliados* (Meeting the Allies), *Caja de herramientas* (Toolbox) and *Los universos paralelos* (Parallel Universes). The first section serves as an introduction in narrative style where the student acts as an explorer that must navigate through ten different universes represented by each exercise. This section also summarizes all the definitions previously mentioned.

The purpose of the next section is to give a brief explanation of the 20 extended techniques, each of which contains a summarized description and a QR code that redirects the reader to an explanatory video made by the researcher. To avoid language barriers, this material does not contain text and focuses on helping viewers to understand the performance and recognize the technique's sonority.

The third section contains a list and brief explanation of four composing elements common in contemporary music. These do not represent an in-depth description, as they are simply needed to create awareness of their existence and to ensure the exercises' execution as a creative tool for the improvisations.

The last section lists the ten exercises known in the method as Universes. In this segment, each universe requires that the cellist use one of the four contemporary compositional elements while improvising. Each exercise has an Objectives Section and a Levels Section. The Objectives Section seeks to explain to the interpreter two specific functions of each exercise. The Levels Section consist of a three-part division that progressively increases in difficulty through more complex instructions or the incorporation of more elements. Each exercise uses more than one technique as a base.

Levels I and II are designed so that the cellist first improvises with each of the techniques without using all of them at the same time. These levels require the interpreter to learn the execution of each technique individually. Additionally, both levels have a duration between twenty and thirty seconds

depending on the difficulty or discomfort generated by the improvisation. Level III is based on an improvisation that uses all the techniques practiced in Levels I and II. This level lasts for one or two minutes in order to give the interpreter more time to combine all the components, both the extended techniques used, and the compositional element used in contemporary music and indicated in each universe.

4. Conclusions

Once the investigation was completed, it was possible to answer the research question: how to generate an approach to extended techniques on the cello using free improvisation? In this case the answer was with the creation of a musical teaching method for cello that uses extended techniques and free improvisation. The three specific objectives proposed by the project were also achieved. Each of them generated their own conclusions.

The first objective focusing on the description of the extended techniques required an extensive bibliographic search, which consisted mainly of academic texts. As most of the items in the bibliography were written in English, the question arises as to what have been the contributions to extended techniques in Spanish speaking countries and can they be accessed with the same ease with which Anglo-Saxon texts are accessed?

The second objective, the elaboration of ten free improvisation exercises, was based on the use of autoethnographic tools, specifically indirect self-observation. This made possible the systematization of a creative activity that was the main element allowing the project to rest in the practice-based research framework. The usage and presentation of the four contemporary music compositional elements brought out questions related to the importance of studying these theoretical aspects both in music theory and instrument interpretation classes and the need to unite theoretical and practical studies when obtaining new knowledge.

The third objective, the design of the method, required a process of synthesis that made it easy to read and understand for the student. It was important to manage a narrative that was attractive to the cellist and to give it a didactic character. The motivation of this objective was to venture into the fusion of extended techniques and free improvisation with teaching since, during the creation of the literature review, no similar element was found on a national level.

Ultimately, the creation of the method *El violonchelo desde una mirada contemporánea*, aims to facilitate learning and teaching contemporary music for Colombian cellists. As a result, the increase in contemporary music studies opens more lines of action for Colombian cellists expanding their area of expertise and supporting the relationship between academic preparation and professional development. This study also aids in the interpretation and dissemination of pieces by composers at a local, national, and international level and seeks to development the contemporary music scene in Colombia, allowing the country to grow musically with the intention of turning into an exponent of this genre worldwide.

References

- Fallowfield, E. (2010). *Cello map: A handbook of cello technique for performers and composers* [Doctoral dissertation, University of Birmingham] Retrieved May 15, 2023, from: <https://etheses.bham.ac.uk/id/eprint/960/>
- Iturra, J. (2019). *Estudio sobre un itinerario terrestre*. Bucaramanga.
- López-Cano, R., & San Cristóbal Opazo, Ú. (2014). *Investigación artística en música: problemas, métodos, experiencias y modelos*. Barcelona: Escola Superior de Música de Catalunya.
- Matthews, W. (July 2001). *¡Escucha! Claves para entender la libre improvisación*. Retrieved May 15, 2023, from: http://www.wademathews.info/Wade_Matthews/Escucha_Claves_para_entender_la_libre_improvisacion.html
- Russi Guzmán, L. (2021). *El violonchelo desde una mirada contemporánea*. Bucaramanga.
- Urrutia Rasines, A., & Díaz Gómez, M. (2013). Educación y música contemporánea: encuentros y desencuentros entre compositores y docentes. *Revista da ADEM*, 21(30), 11-24. Retrieved May 15, 2023, from: <http://www.abemeducacaomusical.com.br/revistas/revistaabem/index.php/revistaabem/article/view/78>
- Welbanks, V. (2016). *Foundations of modern cello technique: Creating the basis for a pedagogical method* [Doctoral dissertation, Goldsmiths College, University of London]. Retrieved May 15, 2023, from: <http://research.gold.ac.uk/20163/>