

EXPOSURE TO THE CONCEPT OF INTELLIGENT LISTENING: AN ANALYTICAL APPROACH IN POSTDOCTORAL RESEARCH

A exposição ao conceito de audição inteligente: uma abordagem analítica em pesquisa pós-doutoral

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Abstract

The objective of this article, is to verify the results achieved from the dissemination of the concept, Intelligent Hearing - AUIN, carefully constructed by us and validated in research, exposed and disseminated in symposiums, congresses, colloquiums and national and international scientific meetings during the period of implementation. post-doctoral internship, as well as its application in an instrumental teaching project for young people from a poor community in the city of Rio de Janeiro. The methodological contribution of the Methodological and Theoretical Triangulation proved to be more adequate to the research assumptions since the concepts of Hypothetical Adornian Triad, Hypothetical Hearing Plans and Smart Hearing were articulated together in the analysis undertaken. Supported by these concepts that give a character of relevant meaning for studies in music education, we understand that such concepts should be democratically made available as a way of returning to society what is researched and produced by the academic and scientific community. We conclude that the conceptual appropriation of Smart Hearing by the academic community and for music students is significant and of relevance for the sound education process to be consolidated or at least, to awaken a "closer look" to this theme in all its solidity.

Resumo

O objetivo deste artigo, é verificar os resultados alcançados a partir da difusão do conceito, Audição Inteligente - AUIN, por nós cuidadosamente construído e validado em pesquisa, exposto e difundido em simpósios, congressos, colóquios e encontros científicos nacionais e internacionais durante o período de realização de estágio Pós-Doutoral, bem como sua aplicação num projeto de ensino instrumental para jovens de uma comunidade carente na cidade do Rio de Janeiro. O aporte metodológico da Triangulação Metodológica e Teórica, se mostrou mais adequado aos pressupostos da pesquisa uma vez que os conceitos de Tríade Adorniana Hipotética, Planos Hipotéticos de Audição e Audição Inteligente, foram articulados conjuntamente na análise empreendida. Apoiados nestes conceitos que conferem caráter de relevante significado para os estudos em educação musical, entendemos que tais conceitos devam ser democraticamente colocados à disposição como forma de retorno à sociedade do que é pesquisado e produzido pela comunidade acadêmica e científica. Concluímos que a apropriação conceitual de Audição Inteligente pela comunidade acadêmica e para os alunos de música é significativa e de relevância para que o processo de educação sonora se consolide ou ao menos, desperte um "olhar" mais atento a esta temática em toda sua solidez.

Key-words: *Music Education; Cultural Industry; Soundscape; Smart Hearing.*

Palavras-chave: *Ensino de Música; Indústria Cultural; Paisagem Sonora; Audição Inteligente.*

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INTRODUCTION

This research, at the Post-doctorate level, aimed to verify the results achieved from the dissemination of the *Intelligent Hearing concept - AUIN*, carefully constructed and validated by us in research, exposed and disseminated in symposiums, congresses, national and international scientific colloquiums and meetings during the period of this research, as well as its application in an instrumental teaching project for young people from a needy community in the city of Rio de Janeiro, Brazil.

In the intrinsic relationship established between art and society, we see that music has always been linked to its time and to the social environment as a whole. The composer, the musician, through his artistic work, his idiosyncrasies, transfers to his musical production what his social time bequeaths him, thus his art becomes inseparable from his relationship with his daily life, even if, through this art, he seeks to distance himself from his reality or from the experience in which this reality presents him.

Initially, we proposed for this study the elaboration of a series of three articles to reflect on the concept of *Intelligent Hearing* and its interface with what we call the *Adornian Triad*. *Hypothetical Hearing Plans - TAH* and *Hypothetical Hearing Plans - PHA*, based on the perspective of Music Education. However, we realized that we could do more and, in addition to the publications, we deepened the study around the understanding of **whether access to the concept, Intelligent Hearing, contributes to awareness of the sound environment by the academic community and young music students**. This gave characteristics of more in-depth and systemic scientific research.

We have realized in our research that when we assign to others the responsibility of choosing what to listen to for us, we give up our right to "auditory discernment" and, in addition, we give a "power of attorney" with autonomy to the "*managers*" to establish a consumer market with its own rules that will be imposed on society. In fact, this contributes nothing to music as an art and manifestation of the spirit and, even less, to the teaching of music in its specificities and, although musical activity is present in practically every human social structure and the sense of hearing is alert most of the time, sound acuity does not seem to be an area of study to be contemplated by music teaching.

Therefore, seeking to continue the process of constructing knowledge about the theme of sound acuity, we propose this investigation to understand **whether the concept, Intelligent Hearing, effectively contributes to reflections on music teaching in the sense of a paradigm shift for sound education**.

We began to establish the State of the Art.

1. CONTEXTUALIZATION OF THE STUDY - “STATE OF THE ART”

It is the State of the Art of a scientific work, establishing what has been produced on a certain theme or subject, that is, what is effectively known about something, about a theory, about an area of knowledge. It is, in itself, the “State of Knowledge”. In this way, seeking to establish knowledge about the concept of *Intelligent Hearing*, we focused, even before the conceptual construction in question, on knowing what we had on the subject as established and proven knowledge. As our research question presupposes the appropriation and dissemination of such a conceptual structure, it is necessary to perceive what we have established as knowledge.

Our study, in itself, creates an interface between music, education and environment and we perceive this triad as inseparable.

, composers have used soundscapes as a theme for their artistic production. However, it was Schafer, around the 1970s in Canada, who coined the concept of Soundscape, on which we have based our studies since our Master's degree. According to Schafer (1991), the soundscape is formed by any and all sounds that propagate through a given environment, and as such, we perceive it as constantly changing. Noise pollution, an integral part of our soundscape, is present in society's daily life, including where music is constructed. Failure to pay attention to this reality brings serious problems to human life, art and health. He shows us that: “Noise pollution occurs when man does not listen carefully. Noises are the sounds we have learned to ignore” (2001, p.18).

In what we call *Hypothetical Hearing Planes - PAH* and the *Hypothetical Adornian Triad - TAH*, based on Copland and Adorno, we understand how the panorama of musical hearing is currently processed. We then realize that studies related to selective hearing have been of concern to relevant researchers for quite some time, however, in the construction of the concept we went beyond the studies undertaken by them.

Realizing the importance of a concept that contributes to sound studies, focusing on the understanding of the relationship between soundscape, sonic environment and music education, we began researching the existence of such a conceptual approach. Thus, we realized that the concept of hearing that we proposed had no precedents in music education, at least not with the intended meaning.

The concept we proposed and built, *Intelligent Hearing - AUIN* – is articulated with the *Adornian concept* of cultural industry and the hearing plans proposed by Adorno and Copland, based on the principle of auditory autonomy and respect.

Conscious listening is confused with a cold and extrinsically reflective behavior when faced with music. With impetus, the emotional type opposes attempts to give them a structural listening – perhaps, with more impetuosity than the cultural consumer, who, in the end, would be willing to do this for the love of culture (ADORNO, 2011, p. 68).

There is a need to develop auditory sensitivity in a broad way, so that we can “intelligently” select the sounds we want to hear, preserve or eliminate from our lives. A human being who is not very attentive to the sounds that are heard is like someone who sees but does not see, and we educators have a greater task than teaching theoretical rudiments about our art or sciences. Thus, we realize that for Music Education, in its studies and applications, today, the concept of *Intelligent Hearing* has no scientific precedent.

The concept of hearing that we construct has, in *Adorno's philosophy* and in *Schafener's proposal for musical education*, an inherently heuristic foundation and is, in itself, a dialectical concept, since (...) if what is real has entered the concepts, it is legitimized in them and grounds them in an intelligent way” (ADORNO, 2010, p.21).

Hearing, which we propose to study, translates into the sound and educational framework of auditory practice, whether musical or not. *Intelligent Hearing* occurs when the listener, based on his own awareness, puts into use his power of “auditory discernment”; when the listener is able to select the sound that will be processed by the auditory organ, listening to what he has selected to hear.

In compliance with what was planned in our specific objectives regarding establishing the **State of the Art**, knowing that the State of the Art is the State of Knowledge on a specific subject, we found that for the development of auditory acuity that is part of the conceptual proposal, the academic community needs to appropriate such proposal, which we have shown to be practically non-existent.

2. METHODOLOGY

From the proposed axiom, disseminating the concept of *Intelligent Listening* , understanding how access and such conceptual appropriation occurs in the academic community and perceiving its contributions to the teaching of young music students, it became evident that the methodological contribution of Methodological and Theoretical Triangulation, with a qualitative matrix, would be the most appropriate for our research needs. Therefore, we rely on it scientifically. “Qualitative research is useful for identifying relevant concepts and variables (...)” (GOLDENBERG, 2003, p.63) and thus, it lends itself harmoniously to the objectives proposed in the research .

As described in the introduction to this work, we initially proposed for this study the elaboration of a series of three articles to reflect on the concept of *Intelligent Hearing - AUIN*, and

its interface with what we call the *Adornian Triad*. *Hypothetical - TAH* and *Hypothetical Hearing Plans - PHA*. These articles would be published with the aim of disseminating the concept constructed in the Doctorate. *After* realizing that we could do more and establish other bases for the research in question, in addition to the publications, we proposed a problem that allowed us to change the methodological approach, which at first would be bibliographical research and here it moves to Methodological and Theoretical Triangulation, with a qualitative matrix, as it better fits what is proposed in the research problem .

There are many possibilities and there are countless methodological contributions that may seem interesting for the path of knowledge in scientific research, but the choice must be made with care and methodological criteria so that the planned result is achieved .

Triangulation overcomes the limitations of a single method by combining several methods and giving them equal relevance. It becomes even more productive if several theoretical approaches are used, or at least considered, for the combination of methods." (FLICK, 2009, p. 32).

Methodological approach, there is a harmonious triangulation between bibliographical research, conceptual approach and field research. Such reflections are supported by a vast bibliographical review, highlighting Adorno, Copland and Schafer as the main theorists , and are included in Theoretical Triangulation .

Triangulation , according to Cunha, "This research methodology consists of a way of observing the same phenomenon from three or more different points (...) (2009, p. 91), thus translating into a fruitful path for the research proposed here, as it is a work of a theoretical and practical nature.

Understanding that, in triangulation by theory, we use a set of theories to interpret the same data, we realize that, in choosing the methodological procedure of Triangulation with a qualitative pattern, in the theoretical articulation between *Intelligent Hearing – Auin –, the Hypothetical Hearing Plans - PAH and the Hypothetical Adornian Triad - TAH* , are the most appropriate to our research intentions .

3. THEORETICAL DIFFUSION

Here we describe where the concept, Intelligent Hearing, was effectively presented as a new theory so that, in the data analysis phase, we can begin to understand the results of the proposed exposition.

3.1. *Exposure to the proposed concept - AUIN*

The concept, *Intelligent Hearing*, carefully constructed by us and validated in recent PhD research, is based on heuristic and is configured as a dialectical concept, as it is based on strongly theoretical principles originating in teaching practice in the music teaching environment, especially and primarily in Brazil.

The decline of music in schools (in Brazil) has distanced music educators, creating a gap between the music practiced in the era before law 5692/71 and the non-music of today's schools. Some things are immediately evident to the attentive ear: many school teachers no longer know how to sing or play an instrument. Students and teachers have an almost unique musical reference, which is imposed on them by the media. Habits of listening to and practicing music have been abandoned and are no longer part of school life (FONTERRADA, 2008, p. 14).

For decades, in Brazil, we have been deprived of music education, which, as Villa-Lobos proposed, should be accessible to everyone: students, teachers, parents, the community and society as a whole. For him,

Collective singing, with its power of socialization, predisposes the individual to lose, at the necessary moment, the selfish notion of excessive individuality, integrating him into the community, valuing in his spirit the idea of renunciation and discipline in the face of the imperative of the social community [...] music is a basic and irreplaceable element in the spiritual formation of a people. Its function is not limited to the importance of aesthetic formation, but assumes an eminently socializing character (VILLA-LOBOS, 1991, pp. 114-15).

From this point on, we realize that the Cultural Industry and its overwhelming market power began to dictate the rules of what society should choose as “good for consumption”, as if art could be a pure object of purchase and sale.

We noticed in our study that, with the attentive “look” at sound acuity, beginning at the doors of the 21st century, without auditory preparation, whether appreciative or not, the consumer market, the cultural industry, takes advantage of the self-alienation to which the inattentive listener submits himself, thus, the “(...) element of aesthetic appearance, the distance of art in relation to empirical reality, is reestablished in the *hits* to the extent that, in the effective psychic economy, appearance takes the place of that which is really denied to listeners” (ADORNO, 2011, p. 94).

Thus, the search for a conceptual construction that would at least allow us to reflect on this issue seemed urgent and of extreme relevance to studies and proposals in music education in my country.

Adorno tells us that: "The tendency to vice is innate to social constitutions and cannot be easily repressed" (2011, p. 77), therefore, it is not an easy task to encourage more attentive listening on the part of contemporary society; just as it is not an easy task to lead our peers, music educators, to understand that sensitive listening is an initial phase of the process of social musicalization or that selective listening is necessary prior to systemic music teaching itself; and even more so that *Intelligent Listening* can and should be developed socially even if not directly linked to appreciative or musical listening.

In the search for construction, consolidation and, consequently, theoretical foundation that would support our investigative intentions, we sought to establish the conceptual bases that, in their tangencies and possible convergences scientific, effectively contribute to what we propose.

Understanding that concepts represent an idea, an abstraction. Ander-Egg tells us that:

(...) concepts are abstractions, that is, logical constructions developed by the scientist, in such a way that they can capture or learn a fact or phenomenon represented by them (logical symbolism), expressed through a conceptual sign (grammatical symbolism) (*In LAKATOS and MARCONI*, 1986, p. 99).

As described above, the concept, *Intelligent Hearing*, which we coined and in this work, we seek to make at least accessible, has a dialectical foundation. in the way it is born. Translating the concept here, it is, *Intelligent Hearing*, the auditory discernment itself since it translates into the sound and educational framework of the auditory practice, musical or not and accessible to the whole society.

Roederer shows us that,

Hearing confers a survival advantage: the interpretation of acoustic information provided by language and the environment has fundamental biological importance (...) Music may be a quite natural by-product of the evolution of speech and language (2002, pp. 33-4).

Thus, we began to present it at national and international symposia, congresses, and colloquia during our postdoctoral internship (2017/2 to 2019/2), with the aim of presenting the concept and verifying how it would be received by the academic community, understanding whether access to the concept, *Intelligent Hearing*, contributes to raising awareness about the sound environment on the part of the academic community, as well as perceiving what the application of the concept would be directly inserted in the planning of a music teaching project, thus contributing to new knowledge that is presented in this postdoctoral study.

3.2. Scientific events and conceptual exposure

Making the *AUIN* concept accessible to the academic community so that, once conceptual appropriation has occurred, it can be widely discussed and applied to music lesson plans and effective music education policies, was the effort undertaken in presenting the work at international scientific meetings.

We present 4 articles, which were published in books, annals, proceedings and indexed journals, in addition to 3 abstracts, and another 2 in press³, for publication in a book of abstracts of scientific meetings.

The proposed conceptual exposition was carried out in a fruitful manner, meeting the initially proposed objectives of disseminating the theory and also the new objectives highlighted from the scientific depth that the research indicated.

3.3. Music teaching

Following the plan for the proposed theoretical and conceptual dissemination, we were able to put our theoretical assumptions into practice in an instrumental music teaching project in a Basic Education institution, which operates in the community complex in Copacabana, Rio de Janeiro, Brazil.

The project began in August 2017, with the aim of forming an orchestra with young people who had never played a symphonic instrument. Realizing the

chaotic sound universe in which the young people were inserted, we put forward the assumptions of sound ecology, assumptions contained in the core of the concept, Intelligent *Hearing*, which we propose, based on access to sound material before even teaching the rudiments of music theory. In this way, we implemented a “Listening” project developed from the *Hypothetical Hearing Plans - PHA*, of *Adornian Triad Hypothetical -THA* and the *concept*, Intelligent *Hearing* - *AUIN*, through practice instrumental symphonic. All this in a sound and perceptive way, without any theoretical approach on the part of the students, at least, in a conscious way.

The sound universe in its specificities, instrumental timbres, body sounds, attention to safe and comfortable dB (A) levels for human beings, was our focus in the teaching plan, always based on the theory evidenced in our scientific study.

The instruments used were:

³The summaries are described in subtopics 5.2 and 5.3.

Violins, violas, cellos, double bass, transverse flute, recorder (soprano, alto, tenor and bass), alto and tenor saxophone, trumpet, French horn, trombone, tuba and, in a playful way, orchestra practice .

The project continued throughout the period of this post - doctoral internship, effectively described and analyzed , in the analysis and discussion phase of the results of this scientific article.

4. ANALYSIS AND DISCUSSION OF RESULTS

Moving on to the analysis of the data collected in the research and, consequently, to the discussion of its results, we established the categories of analysis that were initially described as our specific objectives, in this way, we will weave our analytical perspective one by one.

Our categories of analysis are now: **State of the Art, concept diffusion, Intelligent Hearing, understanding how access and conceptual appropriation, Intelligent Hearing, occurs in the academic community, the understanding of conceptual contributions to music teaching for young people.** Knowing that the **State of the Art** seeks to establish what is known about a given subject and is in itself the “State of Knowledge”, we realize that our concept - *AUIN* -, as we base and construct it, does not find, with the intended meaning , precedents in music education studies , **translating into new knowledge** that needs to be appropriated by the scientific and academic community, so that it can integrate our teachers' lesson plans and reach students as a new way of constructing knowledge.

Understanding **how access to and appropriation of the concept of Intelligent Hearing occurs in the academic community** was the next step , translated into one of the specific objectives of this scientific work. However, for this to be possible and measurable, we should use another step, also initially described as a specific objective ; it is the dissemination **of the concept itself . Therefore, we will highlight** the 4 articles presented and published in books, annals, proceedings, magazines and indexed periodicals , as we initially proposed, giving a brief account of how the process took place.

Article 1 - “Smart listening, inclusion in the musical universe through distance education: a feasible proposal”⁴.

This article was not presented at a scientific event, but it was accepted and published in the book: “TRAINING AND SUPERVISION: Techniques, approaches and experience in Distance Education”, which brought together articles from around the world about distance learning and its possibilities. Here, we understand how the concept of Intelligent Hearing contributes to actions of inclusion in music education by society. At this point, it is opportune to establish the concept we are dealing with: Intelligent Hearing, the auditory discernment itself. The impact of this publication was so relevant that the course planned from this scientific article was approved at the Federal University of Maranhão, RESOLUTION No. 3,385 -CONSEPE, April 9, 2024, and is in the implementation phase.

Article 2 - “From the hypothetical Adornian triad - TAH - to the hypothetical hearing plans - PHA: reflections on the concept of intelligent hearing”⁵.

In this work, presented node At the 1st International Symposium on Art Research, held at the Polytechnic Institute of Viseu, Portugal, we sought to explain how the proposed concept, *Intelligent Hearing*, was constructed, that is, by presenting the solid foundations on which it is based. The convergences between the ideas of Adorno and Copland, in theoretical triangulation evidenced in this post-doctoral research, regarding the construction of knowledge and the hypothetical processes of human hearing, with our conceptual theory are at the same time broad and finely tuned. The *hypothetical Adornian triad* - enlightenment, freedom and reason -, the *hypothetical plans of hearing* - indifferent, general, meaningful and conscious -, and the proposed *intelligent hearing* converge in the sense that they are abstractions with heuristic characteristics. The discovery of new terminologies and ways of thinking are richly exposed in such theories, thus, the dissemination of such thoughts and conceptual approaches becomes urgent. By making such convergences accessible and highlighting the possibilities of appropriating knowledge for effective music teaching, our work was well received, even though our European

⁴ Published in 2017, in the book: TRAINING AND SUPERVISION: techniques, approaches and experience in Distance Education. In the European Review of Artistic Studies, Portugal. With ISSN registration 1647-3558 and ISBN 978-989-54004-0-9.

⁵ Presented in 2017, at the 1st International Symposium on Art Research, at the Polytechnic Institute of Viseu, Portugal. Published in| EUROPEAN REVIEW OF ARTISTIC STUDIES, in Book of Minutes with registration ISSN 1647-3558 and ISBN: 978-989-95781-9-7.

colleagues experience a reality different from that experienced in Brazil, where the study should have more resonance.

Article 3 - “Music teaching and its relationship with the soundscape as an instrument in the construction of intelligent listening”⁶.

This work was presented node I International Symposium on Research in Art, but in a different environment; at the University of Trás-os-Montes and Alto Douro, Portugal, where we discussed the inseparable relationship between music and environment, seeking to understand the place that music education occupies in the face of the sonic chaos to which we are exposed in everyday social life. We focused on the concept of cultural industry, coined by Adorno and Horkheimer around 1943, establishing analytical reasoning with the concept of soundscape inaugurated by Schafer. In this study, we describe our field research carried out with the Study and Research Group on Sound Ecology - GEPES and briefly report the results in light of the proposed theory.

Article 4 - “From the hypothetical Adornian triad - TAH - to the hypothetical hearing plans - PHA: reflections on the concept of intelligent hearing - AUIN”⁷.

The article that, already mentioned above, it was selected for presentation at three other international events, I quote: X INTERNATIONAL SYMPOSIUM OF MUSIC - at the UFRJ SCHOOL OF MUSIC, Rio de Janeiro, at the 4TH International Conference on Music Education in Sobral -CE, Fortaleza, Brazil and Seminars on Research in Teaching, Training and Musical Creation. X Piaget Music Festival, Viseu, Portugal. This work has been the object of much interest and has been revised for each new exhibition, thus aiming at serious reflection on the ways of approaching the proposed episteme. We emphasize that this article was also presented at the I Colloquium of Critical Theory in Recife, at the

⁶Presented in 2017 , at the 1st International Symposium on Art Research, at the University of Trás-os-Montes and Alto Douro, Portugal and published in EUROPEAN REVIEW OF ARTISTIC STUDIES, under registration I ISSN 1647-3558 and ISBN : 978-989-95781-9-7.

⁷ Article presented also at the IX INTERNATIONAL SYMPOSIUM ON MUSIC - “Music, University and Socialization of Knowledge” - Proposal: Discursive strategies in the relationship between art, culture and science - at the UFRJ SCHOOL OF MUSIC, Rio de Janeiro, 2018, published in Book of Abstracts, under the registration of ISBN 978-85-65537-15-5 and accepted for presentation at the 4TH INTERNATIONAL CONFERENCE ON MUSIC EDUCATION IN SOBRAL-CE, Fortaleza, Brazil. 2019. RESEARCH SEMINARS IN TEACHING, TRAINING AND MUSICAL CREATION. X PIAGET MUSIC FESTIVAL . Proposal: Communication/Cultural Policies - Research Communication. Viseu, Portugal, 2019. Preliminary for publication,

Federal University of Pernambuco, Brazil, in 2019. What becomes relevant in this further communication is that it takes place in an eminently philosophical colloquium and territory well occupied by researchers dedicated to Adornoian studies of Critical Theory. Adorno is one of our most relevant scholars to support our theory; He was a philosopher and musician, however, his philosophical production is what makes him stand out in academia, as he was one of the founders of the Frankfurt School. To our delight, our impressively positive theory was well received, which allowed us to contact other researchers in the arts, such as cinema and theater, based on our scientific point of view regarding the Cultural Industry and its academic and scientific results.

The article, “From the hypothetical *Adornian triad - TAH - to the hypothetical hearing plans - PHA: reflections on the concept of intelligent hearing - AUIN*”, was **presented** at two more international scientific events and published in the book of abstracts. They are: IX INTERNATIONAL SYMPOSIUM OF MUSIC - “Music, University and Socialization of Knowledge” - Proposal: Discursive strategies in the relationship between art, culture and science - SCHOOL OF MUSIC UFRJ, Rio de Janeiro, in 2018 and Research Seminars in Teaching, Training and Musical Creation. X Piaget Music Festival. Proposal : Communication/Cultural policies - Research communication. Viseu, Portugal, in 2019.

Following the same perspective of results, the theoretical presentation was well accepted, with a significant impact on new studies in music education, especially in the presentation at the Federal University of Rio de Janeiro, Brazil.

On to the next category of analysis , which is the **understanding of conceptual contributions to teaching music to young people** , **We report on the activity in an instrumental** music teaching project at a Basic Education institution that operates in a community complex in Copacabana, Rio de Janeiro, Brazil.

In 2017, after talking to the administration of an educational institution that operates in the Pavão/Pavaozinho/Cantagalo community complex, in Copacabana, Rio de Janeiro, Brazil, I accepted the invitation to lead the process of creating a musical proposal that included the formation of an orchestral musical body with young residents of this community complex. Forming an orchestra with young people who have never played a symphonic instrument, and having such a short period of only 9 months to do so, is not an easy task ; quite the contrary , it is an extremely complex mission in the Morinian sense that it translates. Morin contributes to the understanding of the term "complex" as we address it in this thesis; According to him, " (...) complexity is a fabric (complexus: that

which is woven together) of constituents heterogeneous inseparably associated (...)" (2011, p. 13). Thus, thinking about the sound context in which the young people in question were inserted, and here I highlight: gunshots, funk dances, and extreme noise pollution that the proximity between homes provides, I realized the opportunity to plan a pedagogical action , based on what the concept, *Intelligent Hearing , bequeaths us, that is*, auditory discernment and access to the sound environment in order to enable awareness on the part of the society in question .

That said, I glimpsed the possibility of experiencing *in loco* the episteme pursued in our scientific activities.

We believe that music education should not be planned in a way that is disconnected from the social environment as a whole. The content and actions surrounding this environment must be contextualized and meaningful; the environment in which we are inserted and influence must also be present in the daily planning of the teaching of our music educators, thus building knowledge of an art that occurs over time and does not allow us to neglect the sound environment around it.

If we want to hear soft sounds, such as the sounds of birds, the rustling of leaves in the wind, among others, we will have to reduce the sounds of machines in urban centers; this is a fact. Therefore, music, in a balanced way in its attentive look at the sound quality of our environment, can give us the sensitivity necessary for the development of this more attentive hearing.

We believe that our initial objective of forming an instrumental body, based on a project called "Attentive Listening" developed by the *Hypothetical Hearing Plans - PHA* , the *Hypothetical Adornian Triad - THA* and the concept of *Intelligent Hearing - AUIN*, was fully achieved and exceeded expectations.

Continuing with the analysis and discussion of the results, we arrived, through Methodological and Theoretical Triangulation , at the moment of answering the question initially proposed for this study.

The qualitative approach provides a humanistic interaction character and does not require statistical data to have scientific and methodological reliability . Therefore, the triangulation between methodologies gave us flexibility in the studies, without giving up scientific rigor in dealing with the data and without contamination of the sample.

We moved freely through the bibliographical approach, inherent to all scientific research, through field research with participant observation and through the conceptual refinement that is inherent to philosophical research. At the same time, we were able to use theoretical triangulation that enabled the study of different theories in solidifying the concept that we constructed and validated in recent research. It is, in itself, the conceptual reflection that was made between the *Hypothetical Hearing Plans - PHA*, by Aaron Copland, from *Adornian Triad Hypothesis - THA*, of Theodor Adorno and the concept, *Intelligent Audition - AUIN*, thought by us, the possibility of using triangulation in the collection and analysis of the data presented here in detail.

In this investigation, we seek **answers** to understand whether access to the concept, Intelligent ***Hearing***, can contribute to awareness of the sound environment by the academic community and young music and arts students.

Based on the theory, we conclude that the concept of *Intelligent Hearing - AUIN* -, disseminated in this work in several opportunities for scientific meetings, is a relevant concept, brought a positive surprise in the exhibition and needs to be available to academic and scientific knowledge so that it can be accessed by our students, parents, school, community and society in a broad and unrestricted way. In the search for scientific knowledge, where philosophy, “(...) is based on the sense consolidated at the end of the 19th century, as a triumph of solid research work over the dialectical-speculative illusion (...) (ADORNO, 2015, p. 99), we realize that from this research, the search for the proposed hearing is fundamental for the development of teaching and research in music.

Through the practice applied to the instrumental music project, we conclude that, as the researcher of this work and, therefore, having access to the core concept of the study, the knowledge reached the students who should be the main actors involved, and it proved to be effective so that proposals linked to sound acuity, not only musical, but of the social environment as a whole, are feasible in all their concreteness. Thus, it is essential that the music teacher has access to and appropriates the conceptual proposal and puts it into practice in his/her teaching work.

Therefore, through methodological and theoretical action, we found that, both in the empirical study and in the theoretical exposition, the concept, Intelligent *Hearing*, contributed to raising awareness of the sound environment, being relevant and of vital importance for the objectives outlined in this research.

FINAL CONSIDERATIONS AND FUTURE PERSPECTIVES

Our research, based on the pillars of the methodological and theoretical triangulation methodology, reflected and sought convergences between the ideas of Adorno and Copland, in theoretical triangulation evidenced in this Post-Doctoral internship research, regarding the construction of knowledge and hypothetical processes of human hearing.

Our conceptual theory is both broad and fine-tuned. Thus, we found that the *hypothetical Adornian triad* - enlightenment, freedom and reason -, the *hypothetical plans of hearing* - indifferent, general, meaningful and conscious -, and the proposed *intelligent hearing* converge in the sense that they are abstractions with heuristic characteristics. The discovery of new terminologies and ways of thinking are richly exposed in such theories, thus, the dissemination of such thoughts and conceptual approaches is urgent and the proposed objectives were achieved, evidenced in the presentations made at scientific meetings already reported.

The methodological triangulation that made the path possible, the scientific way of reaching an end between bibliographic research, conceptual approach and field research, through the qualitative matrix, effectively contributed to the planning and practical development in the “Attentive Listening” project - *symphonic orchestra* - , undertaken from the *Hypothetical Hearing Plans - PHA* , of *Adornian Triad Hypothetical -THA* and the concept, *Intelligent Hearing - AUIN*, with young music students from a Basic Education institution , in a community in Rio de Janeiro, Brazil.

We realized in the development and analysis of the proposed research that music teaching requires a stage prior to systematic teaching; this stage is the development of careful and selective hearing, that is, the development of sound acuity, as a form of sound education that prepares for music teaching. Willems, grounds us in the moment that “(...) advocates the need for auditory preparation to take place prior to teaching a musical instrument, since listening is the basis of musicality” (in FONTERRADA, 2008, p.139).

Sound education today is essential for the education of future generations, and therefore for the establishment of an ecologically balanced and socially prepared relationship for the teaching of music. It becomes imperative “(...) to teach sounds before teaching signs (...)” (PESTALOZZI *apud* FONTERRADA, 2008, p. 60) and only through sound education in music education will our society become more harmonious in terms of sound. The new music educator must, therefore, rethink his/her lesson plan and, above

all, redo it, placing the auditory development of his/her students in the foreground, in such a way that “(...) the new music educator will encourage sounds that are healthy for human life and will rage against those that are hostile to it (...)” (SCHAFFER, 1991, p. 123).

Our specific objectives, steps taken in building understanding about the proposed research problem, allowed us to verify that, once accessible, the concept of *Intelligent Hearing* contributed decisively to “attentive listening” developed in our young musicians in training. Therefore, for this to occur, the research showed us that scholars on the subject need to appropriate this concept in order to grant society broad access to it.

Given the clarity that this investigation is not exhaustive, we emphasize that, “An idea or theory should not simply be instrumentalized, nor impose its verdict in an authoritarian manner; it should be relativized and domesticated” (MORIN, 2004, p.29). Thus, with humility and rigorous theoretical foundation of interlocutors who enlightened us in this search for the construction of knowledge, we conclude that access to the concept of *Intelligent Hearing* effectively contributes to raising awareness about the sound environment on the part of the academic community, young music and arts students and society as a whole.

As a **future perspective** and continuation of our studies, experiments and research, we highlight the “Specialization Course in Music Teaching, area of concentration in Sound Education”, which was planned by us, is in the implementation phase and seeks to fill a gap in teacher training in arts, specifically in music, in Brazil.

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