

Mariko Kunitomo

**Art Music as a Universal Language:
Youth Orchestras' Reaction to Social Conflict**

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Abstract

The objective of this thesis is to identify the role of art music in the context of youth orchestra projects that directly deal with social conflicts of specific youth populations. Art music plays a major role in the positive influence of these youth orchestras that giving its young musicians the opportunity to learn and develop, both socially and personally, in a healthier or alternative manner. I argue that art music serves well in this particular context because it is a universal language that allows for the communication and expression amongst the musicians themselves and with others. It is this communicative nature of art music as a universal language that allows the young musicians of the youth orchestra projects to overcome social conflict.

I apply concepts from a wide variety of disciplines to support the idea of art music as a universal language. Three orchestras – the Retiro Youth Orchestra, El Sistema, and the West-Eastern Divan Orchestra – will be examined to understand specific youth orchestra contexts. The metaphysical explanation will be based on Arthur Schopenhauer's concept of the Will while cognitive neuroscience of music, linguistics, and philosophy of language will provide additional approaches to make sense of music as a universal language. Music's expressing an emotion as it exists in all human beings, i.e., as it exists as part of the Will, means that it can affect the entire audience and be readily understood at a universal level. It is this all-encompassing, communicative and affective nature of music that makes it a universal language.

Prologue

Having spent seven years of my youth as a member of the Boston Youth Symphony Orchestras, I have always believed in the invaluable importance of both youth orchestra projects and music in general. Specifically, orchestras foster a healthy way of learning and growth that helps the child develop into a stronger individual. Although I was not part of a youth orchestra that was aimed toward a specific social issue, I can say with confidence and a great amount of pride that my experience as a cellist in the Boston Youth Symphony Orchestra organization has greatly impacted my personal identity. My time there did not just influence my personal character (such as musical preference, learning style, social skills), but also shaped how I perceive and understand the world that I live in.

Despite having this firsthand experience and personal familiarity with youth orchestras, it was not until a couple of months into being a volunteer with the Orquesta Infanto-Juvenil de Retiro, or the Retiro Youth Orchestra, that a particular curiosity began to grow within me. From September of 2012 through May of 2013 I volunteered at the Retiro Youth Orchestra in the Retiro neighborhood of Buenos Aires, Argentina as an occasional substitute cello teacher and as a part of my fieldwork studies. As I worked closely with and observed both the musicians and teachers during the weekly rehearsals, I began to wonder *where*, exactly, the influential power of these orchestras came from, *how* the music was influencing the disadvantaged youth. It could be due to the simple sharing of a common activity or a common interest... but in that case, why not sports? Or why not even other forms of art, like painting or dance?

The Retiro Youth Orchestra and the Boston Youth Symphony Orchestra are only two examples of the growing number of youth orchestra projects throughout the globe. The El Sistema

orchestra project of Venezuela has gained world-wide recognition for fighting against social exclusion and fostering healthier youths; the West-Eastern Divan Orchestra, created by Daniel Barenboim and the late Edward Said, has been commended for addressing the Israeli-Arabic issue through music. Where does the orchestra's influence come from? What is it that allows an orchestra to address such complex social issues successfully? Why is it able to work in such a wide variation of contexts?

And so through the months, as I watched the teacher and students' interactions in sectional and orchestral rehearsals and occasionally filled in as the substitute cello teacher, I continued to ponder these thoughts and to reflect upon them in relation to the Retiro Youth Orchestra. Although an insufficiently funded project, the Retiro Youth Orchestra borrows the musical talent and expertise of arguably some of the best musicians in Argentina. The director himself, Nestor Tedesco, is a cellist of the Orquesta Estable of the Teatro Colón (the most prestigious Argentine orchestra), a professor at the Instituto Universitario Nacional de Arte (National Art Institute University), and is a recipient of both the Fulbright Scholarship and the U.S. State Department's State Alumni Member of the Month recognition.

Stanimir Todorov, one of the cello teachers at the Retiro Youth Orchestra, is another highly accomplished musician but brings a more international background to the youth orchestra project. Todorov began his musical studies in his homeland of Bulgaria, but his talent and musical career has since then taken him all over the world. As he studied with various prominent cellists and joined orchestras all over Europe, he has picked up multiple language and now speaks Bulgarian, English, French, and German (to name a few). Now having lived and worked in Buenos Aires for five years,

Todorov converses with his colleagues and the young musicians in a very *porteño* Spanish.¹ They call him “Estanimir”, he pronounces his “ll” in the Argentine way, and even uses the occasional “che”.²

My realization occurred to me one day while Stanimir worked with the usual group of cellists. Having become familiar with each other over the years, the four young musicians and Stanimir seemed very comfortable in rehearsal. Together, without fearing any language barrier, they would work through the music, talk about complicated passages, and critique each other’s playing and technique. The scene looked like your “typical” sectional rehearsal. Yet apart from the musical discussion, they would make jokes and occasionally go on tangents, poke fun at Stanimir’s (and my) Spanish, and ask each other about non-music related things. There we were, four young *porteño* teenagers, a Bulgarian professional cellists, and a Japanese-American college student, enjoying each other’s music and company at an elementary school in the Retiro neighborhood of Buenos Aires, Argentina.

Recognizing the serendipity, the pure coincidence of having such an assortment of individuals together in one room and working together, led me to realize how extraordinary and unique that particular orchestral space was, or perhaps, how extraordinary and unique the orchestral space is in general. As with any moment in time, there are an infinite number of ways and an infinite number of accounts that could explain how we ended up where we were when we were. Yet in this particular case, music plays a definite role. It was each of our passion and commitment to music and the orchestra that physically brought us to where we were at that moment, that seems to have

¹ Coming from a city that grew around a *porto* (“port” in Spanish), the people of Buenos Aires are referred to as *porteño* (roughly translating to “people of the port”). As an adjective, *porteño* refers to things that are of or pertain to Buenos Aires.

² Pronouncing words that begin with an “s” that is immediately followed by another consonant tends to be hard for Spanish speakers, and therefore an “e” sound often precedes the “s” sound. For example, the soda brand is pronounced “esprite” and the popular video messaging program is pronounced “eskype”. In addition, Argentines are notorious for their very distinct accent. The “ll” (double L), which normally pronounced like a “y”, is pronounced with what is similar to a “sh” sound. The “che” is also a token of Argentine Spanish and is a very casual way of calling upon someone. It is similar to the way “hey” or “dude” is used in the English language.

inspired each of our willingness to try and understand each other, and that created the common ground. In other words, the orchestra gave us a reason and an opportunity to see each other eye-to-eye, to see each other as equals.

These thoughts that I had during rehearsals and experiences I shared with the members of the Retiro Youth Orchestra are what inspired me to explore the idea of music as a universal language that can be shared through the orchestral community and experience. It was personally seeing and being part of this unique musical environment, but from a different position than before, that provided me with a new perspective on the positive impact that music and the orchestra can have upon a young, growing individual.

Introduction

The world of classical music is often treated as a dying one. The number of classical radio stations is dwindling, labor disputes plague American orchestras due to budget cuts and lack of donor support, free tours and concerts are being reduced or outright cancelled, and the average age of audience members continues to increase.³ With new musical artists and genres constantly being produced, sonatas and symphonies written by composers long dead seem hardly significant to our contemporary culture. Yet at the same time, there seems to be a surge in attention being given to a very particular niche within this “dying” culture: the world of youth orchestras. Youth orchestra projects located in countries all over the world and organized for a variety of different aims are taking advantage of music as an alternative method of peace-making and re-humanization.

Musical ensembles, such as the Retiro Youth Orchestra, foster a cooperative environment in which individuals are encouraged to put aside prejudices and judgments in order to learn about music and create it together. There is a timeless value, an inarticulable *something* about the instrumental music that the young musicians study that seems to help transcend the socioeconomic barriers, a *something* that makes the music a *universal language*. The goal of my research is to articulate this “something”, to identify possible explanations of why these youth orchestras’ are able to address social conflicts so successfully and in their humanitarian ways.

Although there have always been private youth orchestras that are created purely for their own sake (or for the music’s sake), the focus of this thesis is upon those that have particular social aims or target a particular youth population. To clarify, the orchestras and other musical ensembles

³ Dreyer, Les. "Sunday Dialogue: Is Classical Music Dying?." *New York Times* 24 Nov. 2012, sec. Opinion: n. pag. *New York Times*. Web. 4 Apr. 2014. 1.

that make up the New England Conservatory Preparatory School belong in the first category; they are audition-based groups which require a tuition, are created for competitive musicians, and are not explicitly driven or founded upon a particular social cause. In contrast, the Retiro Youth Orchestra belongs to the second category; it is one of several municipally funded orchestra projects of the city of Buenos Aires that is aimed to promote social inclusion and target youths of the lower income sectors. In this thesis, the question of music as a universal language will be explored through youth orchestras of the latter kind.

There has been increasing international attention given to these youth orchestras that specifically target youth populations involved in complex social issues tinged with political or cultural tensions. One of the most well-known examples is a large network of youth orchestras in Venezuela known as El Sistema. Created by Dr. José Abreu, the goal of El Sistema is to give children of impoverished neighborhoods throughout Venezuela the opportunity to become part of a safer environment and be socially included into a healthier community. Another example is Daniel Barenboim and the late Edward Said's West-Eastern Divan Orchestra. Based in Seville, Spain, this organization aims to foster a better understanding and cooperation between youths of the Israel and those of the Arabic countries. Members of this orchestra are Palestinian, Israeli, Arabic, even local Spanish, and, as Barenboim and Said explain themselves, they learn to re-identify the humanity in the "other".⁴

The thesis will examine these three, above-mentioned orchestras – the Retiro Youth Orchestra, El Sistema, and the West-Eastern Divan Orchestra – to identify the role of art music in the context of youth orchestra projects. I will argue that the influence that these youth orchestra projects have upon the youth who are victims of social conflict comes from art music being a

⁴ Barenboim, Daniel. *Music Quickens Time*. London: Verso, 2008. Print. 52.

universal language. It is precisely the universality of art music that helps the youths overcome social conflict. While music, as Schopenhauer shows, generally expresses emotions directly as they exist in all human beings (as part of what he calls the Will), I argue that music's ability to connect us directly to universal emotions is of particular importance for explaining the transformative nature and success of my chosen youth orchestras. It is this all-encompassing, communicative and affective nature of music that makes it a universal language. Thus art music allows the young musicians to find a deep connection with both the music and with each other regardless of their skill level or social background. With theories and approaches from metaphysics, cognitive neuroscience of music, linguistics, and philosophy of language, I will provide possible explanations as to how art music is a universal language, which in turn will explain its function in the youth orchestra projects.

The Retiro Youth Orchestra will serve a unique perspective because of my personal, firsthand experience working with the organization. However, because it functions at a relatively small (specifically municipal) scale, there is an unfortunate lack of information available. Therefore, the two other youth orchestra will be examined in order to function both as points of comparison and to provide a larger pool of information. The variations in geographical location, the demographic of its members, and the particular social issues that each orchestra address will help reveal the common elements that help define art music as a universal language.

Yet before embarking upon this exploration, it is important to explain what I mean when I say "universal language". The idea of a universal language, musical or otherwise, is one that runs very far back into history and can be traced along various timelines. In the Judeo-Christian tradition, the idea of a universal language is linked to the Biblical story of the Tower of Babel, of the original Adamic language that existed before the confusion of tongues. In medieval Europe, while the Catholic Church maintained power, Latin was the common language of learned individuals and was

widely used across the continent by those who studied the Bible and/or held positions of power. In the 17th century, Gottfried Leibnitz proposed the *characteristic universalis*, or the “universal characteristic”, the idea of a universal and formal language able to express mathematical, scientific, and metaphysical ideas. Unlike the Adamic language or Latin, the *characteristic universalis* was a strongly mathematical concept.

There have also been attempts at the actual creation of a universal spoken language. The most well-known example is from the 19th century. Doctor and linguist L. L. Zamenhof created Esperanto, the most widely spoken constructed, international auxiliary language. Having published his first book, *Unua Libro*, in 1887, Zamenhof’s goal was to create an easy-to-learn language that would transcend nationality and foster peace and understanding amongst people who use different languages. However, despite these admiral goals and its potential practicality, it has failed to be accepted and used by the wider community.

Although not necessarily meant for every-day communication and use, binary code may be the most universal of languages thus far. Binary code is the computer “language” that represents text or computer processor instructions using the digits 0 and 1. These two digits are combined into strings and can ultimately represent something as simple as a single letter or as complex as the program content on a CD. Binary code falls under the category of *formal* language. Whereas *natural* language refers to those that have arisen in an unpremeditated fashion – such as English, Spanish, Japanese, and French - *formal* language refers to those that have been constructed and that utilize a set of strings of symbols that function within established parameters. Because 0 and 1 are mathematical numbers understood throughout the world and the system is used globally for computer coding, binary code may definitely be considered a universal language.

Thus it is important to keep in mind that when I claim that music is a universal language, this is not to say that it is the *only* universal language that exists. However, my aim is to show that the way in which music is a universal language is different in nature and particularly unique from other candidates, such as, for example, binary code. In other words, although art music and binary code may both well be universal languages, the former is of a distinct kind.

As mentioned before, art music as a universal language is not a language in the typical sense; it is not of the same category as the various examples raised earlier. Firstly, by arguing that art music is a universal language, I am not suggesting that therefore, art music should or is capable of substituting or replacing any preexisting language. It is not meant to take on the functional role that English or any other language, natural or formal, plays in our daily lives. Secondly, art music is not a language in the strict sense that there is a signifier and a signified.⁵ An E flat accompanied by a C minor chord followed by a G accompanied by an E flat major chord does not have a direct relationship with any specific, identifiable, concrete object or idea in the way the word “cello” has a direct relationship with the concept of the four-stringed, wooden instrument that one plays sitting down and usually with a bow. This is not to say that musical phrases and pieces cannot transfer any semantic content; simply, that it does not do so in the same structured, rule-ridden way that the typical language does. Thirdly, although art music as a universal language shares some of the same defining characteristics of natural and formal language, it does not fall under either category.

Therefore, if art music is neither quite like a natural language nor a formal one, in what sense is it a language at all? I claim that art music is a language in the sense that it is a way to share, exchange, and communicate thoughts and emotions, and enhances understanding between two

⁵ The *signifier* is the form that the sign takes, whereas the *signified* is the concept that the signifier represents. For example, the word “hard” is the signifier for the concept of something that is solid and firm. This concept which “hard” refers to is then the signified.

individuals or a group of individuals whether it be personal information or something external to their individual being. Although this may be done in a very general and “vague” manner, art music is strongly communicative in nature to the point of being linguistic, causing the inevitable transference and exchange of thoughts and emotions.

It is necessary to maintain such a broad definition of language because the “language” that is being taken into consideration is relatively atypical and one that is not often considered strictly linguistic. Yet this is precisely why this idea holds particular relevance: it brings forth a new idea and a new understanding of what can be considered as a communicative tool. More specifically, it examines a communicative tool that is both universal and can be used in situations of social conflict and tension.

Another element that requires clarification before beginning is the definition of “art music”. I have resisted calling what I am speaking of simply “classical music”, for although most readers will understand the general idea of what I am referring to, namely the wide variety of Western music styles from the 9th century to the present, many others will agree with me that the term “classical” is hardly an accurate name for the genre. The term “Classical” refers specifically to the period in Western music from about 1730 to 1820, the period that includes composers such as Haydn and Mozart, and followed the Baroque and preceded the Romantic.

The more “politically correct” term that has been suggested is “art music”, an umbrella term to refer to the musical traditions implying advanced structural and theoretical considerations and a written musical tradition.⁶ While there have been suggestions of other names such as “serious music” or “erudite music”, I have chosen “art music” in order to avoid any unnecessary negative or

⁶ Arnold, Denis, and Percy Alfred Scholes. "Art Music, Art Song." *The New Oxford Companion to Music, Volume I*. Oxford: Oxford University Press, 1983. Print. 111.

elitist connotations that may be attached to the terms “serious” and “erudite”. My particular definition of art music as used in this thesis will be restricted to solo and ensemble *instrumental* works, and will therefore *exclude* repertoire that involves vocals or other kinds of performance. Therefore, although works such as operas, ballets, and musicals involve the intense participation of an orchestra and heavily rely upon music, they are not considered within the scope of this thesis. Otherwise, it includes all repertoire studied by the youth orchestra projects. However, it is important to keep in mind that the exclusion of these other kinds of repertoire is not to imply that the instrumental and musical elements in those contexts do not or are incapable of having the same powerful, communicative effects that will be explored and discussed in this thesis. The definition of art music is restricted in order to reference and encompass the specific repertoire that the youth orchestra projects have studied and performed more accurately.

This thesis will split largely into two parts. The first will be an exploration of three examples of youth orchestra projects, namely the Retiro Youth Orhcestra, El Sistema, and the West-Eastern Divan Orchestra. This first part will not only give information on what these orchestras are like, but also what role the musical universal language plays in each. The second part will then be the theoretical investigation of why instrumental music and the orchestra work well in these particular contexts of youths involved in social issues. I will argue that this is because the combination of instrumental music and the orchestral environment is a universal language, and will propose various possible explanations to make sense of this reasoning. These latter, theoretical sections will investigate this idea by examining the metaphysical nature of music through Arthur Schopenhauer. In addition, the linguistic nature of music will be explored through examining neurocognitive studies related to music, musical semantics, and the philosophy of language. Finally, I will look at kinesthetic aesthetic explanations to take into consideration the importance of the physical activity involved in this musical universal language.

By examining this issue through these variety of lenses, my research will not only help clarify the way in which art music can be a universal language, but also help understand how it can be used to alleviate social tensions and bridge social, economic, political, and cultural differences.

Chapter 1: The Youth Orchestras

This first chapter will explore in detail three different youth orchestra projects. They will be the Orquestas Infanto-Juvenil de Retiro (the Retiro Youth Orchestra from here on out) of Buenos Aires, Argentina, El Sistema of Venezuela, and the West-Eastern Divan Orchestra based near Seville, Spain. The purpose is to understand the different circumstances in which art music is being used to address social issues and the way in which it affects its members. Looking at these examples is meant to raise the questions “*Why* does art music work in these contexts? Why is it so successful in addressing such difficult social issues?”, questions that the second and third chapters will attempt to answer.

The Retiro Youth Orchestra

The Retiro Youth Orchestra is one of the many youth orchestras in Buenos Aires, Argentina that make up the “Proyecto Orquestas Infantiles y Juveniles”, the Children and Youth Orchestra Project. This municipally funded project aims to promote “social inclusion through learning to play an instrument and through the intense sharing and experiencing of the orchestral structure.”⁷ The organization falls under the Ministry of Education as part of the Undersecretary of Educational Inclusion, and includes 16 orchestras spread across 11 different centers located in distinct *barrios* throughout the city. Such neighborhoods include Retiro, Villa Lugano, Barracas, and Avellaneda. According to the city government’s website,

The objective is to promote and make more accessible the benefits of culture in social sectors that are traditionally estranged or distanced from this opportunity while also encouraging the participation of children and youths, not only in terms of

⁷ Tedesco, Nestor. Personal interview. 27 Apr. 2013.

creating music, but also as a chance for individual and collective learning. The project aims to stimulate the communities' musical culture, its development of expression, and the collective cooperation of their young instrumentalists.⁸

In addition, the website explains that through the orchestra, the young musicians find a space of social recognition and acknowledgement that offers them the opportunity and an alternative means to acquire values and habits of coexistence that help facilitate their learning and harmonious social integration. Having volunteered from September of 2012 until May of 2013 in Retiro, I will specifically focus upon the Retiro Youth Orchestra.

Although the majority of the students are not in a state of “danger” in terms of their basic needs and survival, most do come from the *villas* of the city. Officially called *villas miserias*, the term refers to the shanty town or slums of Argentina. They are an informal urban construct made up of homes often created by the occupants themselves, usually with discarded materials, and often lacking the most basic needs (such as a consistent water supply, electricity, sewage, and refuse collection). In the case of Buenos Aires, the great majority of the *villa's* residents are immigrants from the peripheral countries such as Peru, Bolivia, and Paraguay. Although basic infrastructure is sometimes laid down as the communities develop, they are essentially products of the inattention of public authorities and the local government due to their incapacity of responding to the housing needs of the rising urban population. This inattention is what ultimately leads to social exclusion and what makes it difficult for the inhabitants of the *villas* to take an active part in society.

Many of the members who participate in the Retiro Youth Orchestra are from Villa 31 in Retiro, the most “famous” of Buenos Aires' *villas*. Ironically, the borders of Retiro include, not only the *villa*, but also an incredibly affluent area of the city and one of the two main train and bus

⁸ "Buenos Aires Ciudad - Educación." *Buenos Aires Ciudad - Gobierno de la Ciudad Autónoma de Buenos Aires* | . Buenos Aires Ciudad, n.d. Web. 28 May 2013. <http://www.buenosaires.gob.ar/areas/educacion/dgie/orquestas.php?menu_id=31749>.

stations of Buenos Aires. In fact, it is almost cliché the manner in which the Villa 31 is literally located on the other side of the tracks from the affluent neighborhood. The Bandera Argentina public elementary school where the orchestra rehearsals take place stands on the opposite side of the Avenida Antártida Argentina from the station and kitty corner from the strip of *villa* houses that protrudes from the main Villa 31 neighborhood. Observing from an aerial view with Google Maps, one can see how the *villa* sprawls horizontally below and around the Autopista Presidente Arturo Illia, a very large, elevated highway that runs along the north of Buenos Aires and the southern banks of the Rio de la Plata. I have personally heard many say that the most “impressive” view of the *villa* is from standing on this *autopista* and looking across.



Fig. I Satellite map of Villa 31⁹

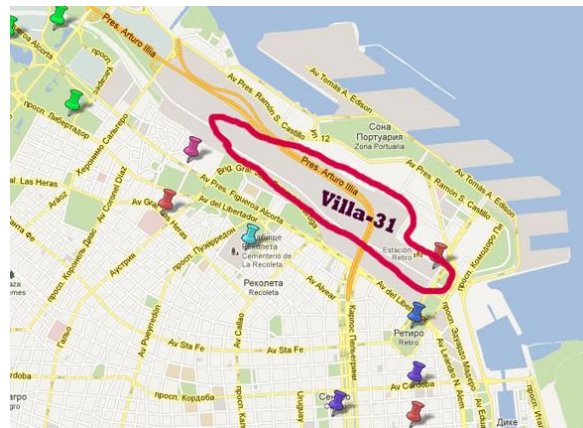


Fig II. Street map of Villa 31¹⁰

The Retiro Youth Orchestra and the Children and Youth Orchestra Project overall work to include youth from this sector of society by offering the opportunity to partake in a musical, cultural activity. “There were six teachers. Six teachers and thirty kids. With Claudio Spektor in the year ’89

⁹ Alvaro, Paula. "Recycled Materials Help Urbanize Buenos Aires' Slum." *TreeHugger*. N.p., 7 June 2011. Web. 10 Apr. 2014. <<http://www.treehugger.com/sustainable-product-design/recycled-materials-help-urbanize-shanty-town-installed-in-the-center-of-buenos-aires.html>>.

¹⁰ Lemos, Maxim. "Villa 31." *I live in Buenos Aires Travelling in Argentina and South America*. N.p., n.d. Web. 10 Apr. 2014. <<http://ru-ar.ru/villa31.htm>>.

in Villa Lugano”¹¹. The entire project began in a neighborhood in the southwestern corner of Buenos Aires. The idea came from Claudio Spektor, the project’s founder and general coordinator, who worked to acquire funds from the municipal government and put the plan into motion with the help of other musicians. Since its beginnings, the project has grown significantly; there are now approximately 1,800 students and nearly 250 teachers involved. The Retiro Youth Orchestra itself began in 2002 and is headed by Nestor Tedesco, one of the six founding musicians. Tedesco is a professional cellist of the Orquesta Estable of the Teatro Colón and conducts one of the two orchestras that rehearses at the Bandera Argentina elementary school in Retiro. Like the overall project itself, the number of young musicians that come to Retiro has grown since its initiation, and now the school hosts two full orchestras of differing levels and offers all instruments – strings, woodwinds, brass, and percussion.

The Retiro Youth Orchestra’s programme includes a very wide variety of repertoire. On one hand, the young musicians play “typical” art music, such as Ludwig van Beethoven’s *Symphony No. 1* and Jean Sibelius’ *Finlandia*. On the other hand, they play pieces that come from outside the genre of art music. For example, during the 8 months I worked as a volunteer, the orchestra frequently rehearsed orchestral arrangements of the Beatles’ “All My Loving” and “All You Need is Love” along with a medley of Queen’s greatest hits including “We Will Rock You” and “We are the Champions”.

Yet in addition to these familiar pieces, the young musicians also play orchestral arrangements of *música folklórica*, Argentine folk music, and other folk genres that come from the surrounding regions (such as Uruguay). *Música folklórica* refers to the genre of music that is inspired by the rhythms and styles that are characteristic of the Argentine provincial cultures, many which

¹¹ Tedesco, Nestor.

have indigenous or afro-hispanic colonial roots. Examples of sub-genres of *música folklórica* include the chacarera, zamba, milonga, and arunguita. One specific piece that almost all of the students were familiar with was “Candombe para José” or “El Negro José”, a popularized *candombe* – a Uruguayan music and dance style that originated from African slaves – that is now often used in rallying environments such as by *hinchas*¹² and performed by *murgas*¹³.

Although I was unable to conduct thorough and very in depth interviews with the young musicians themselves, some conversations I had with the cellists revealed some interesting patterns. One Saturday in November while Tedesco was busy in a meeting with the parents’ committee about an excursion to Mar del Plata (a city approximately four and a half hours away from the city of Buenos Aires), I asked three cellists about their personal background and interests. 17-year-old “Carlitos” Rios has only been playing cello for 4 years, but works hard to keep up with the others and helps out at the orchestras in Villa Lugano after the Saturday morning rehearsals in Retiro. Carolitos’ favorite subject is also English. In fact, he truly loves English. He would occasionally use simple English words such as “okay” and “thank you” during sectionals, aware of my presence and fluency in the language. I asked him how he became so interested in English, and he recounted how he and his friend saw the Disney film “High School Musical” and loved it so much that they watched it repeatedly until they had memorized all of the words. From there, his interest moved beyond just the scope of the film and to the English language as a whole. When asked about his dream job, he responded that he wanted to be an actor when he was little, but now wants to be a musician or a public translator.

¹² Literally meaning “fan” or “supporters”, the noun refers to the zealous, die-hard group of football team fans that have specific songs and chants associated with their team.

¹³ The name for street bands and performers. Formally used to refer to the particular group of percussionists and singers that perform in celebration of Carnival, the term can also be used to refer to any band of street musicians, often involving percussions and brass.

15-year-old Marisol Zarate also likes English. She joined the Retiro Youth Orchestra after she discovered that it was the reason why her best friend was always unable to meet up with her on weekends; and so one Saturday morning, her friend's mother took her to rehearsal and helped her become involved. Marisol admitted that she likes English, but she emphasized that she doesn't like learning through the classroom environment; she prefers to learn through songs. She loves Demi Lovato and Miley Cyrus, and the Disney stars in general, and explains how she picks up English words through their lyrics.

In both cases, music seems to have played a role in their developing enjoyment and general learning of the English language. Although the music that inspired their interest was American pop, a genre that stands relatively far from the art music that is the focus of this paper, it goes to show that they both took advantage of a non-traditional method in order to learn academic content. Although these small testimonials cannot be generalized to explain the entire youth orchestra project, or to even fully explain these two individuals themselves, Carlitos and Marisol's preference to learn in a musical manner may help partially explain their involvement in the Retiro Youth Orchestra. Understanding the youth orchestra as an alternative space for personal and social development, it aligns well with the two young cellists' preference in learning method. If they prefer to learn academically through a non-traditional method, it makes sense if they, consciously or unconsciously, prefer to learn socially and develop personally through non-traditional methods also.

The adult members involved in the Retiro Youth Orchestra and the Children and Youth's Orchestra Project of Buenos Aires in general have also expressed ways in which the orchestra provides a unique way to learn and grow. Adriana Weschler, a teacher involved in the municipal project who is often the "spokesperson" on behalf of those who work with the orchestras, has articulated the various important aspects of what the project delivers. In particular, she has

emphasized the socio-educative development that the orchestras offer to the young musicians who often struggle in their traditional academic settings. In an interview on the radio program *Otras voces... otras propuestas*, she explains,

We often enjoy the satisfaction of experiencing the school teachers' and directors' surprise when they see the children whom they don't know how to handle, those that they call 'excluded from the system', sitting in an orchestra, playing the clarinet, or there with their trombone or their trumpet, following the conductor's directions perfectly, reading music and playing in unison with others.¹⁴

In other words, the orchestras provide a unique opportunity, especially to those that are "excluded from the system". The orchestras can function as an alternative environment for personal and social development for those who are unable to find it in the academic setting.

Tedesco shares this idea of the orchestra being an alternative or additional space for social growth and learning. While explaining the project's goals in an interview I conducted in April of 2013, he talks about the orchestra's educational aspect. He says,

We have cases in which the kids, the ones who don't do well in school, are here, but continue to do poorly in school. But you always see them here [at rehearsal], they learn to play an instrument, they make friends, and they participate in a social context that's better than the one at school because this one suits them better.¹⁵

Like Weschler, Tedesco has observed students who do not perform well in their traditional academic settings but succeed in this unique, musical environment. There are certainly cases in which an academically poor student does well in the orchestra and transfers what he has learned back to his academic setting and goes on to improve in school. This scenario would be ideal and serves as one of the ways in which the success of many youth orchestra projects are measured.

¹⁴ Corbière, Emilio. "Orquestas Infantiles y Juveniles de la Ciudad de Buenos Aires en situación crítica ." *ARGENPRESS* [Buenos Aires] 20 Mar. 2013: n. pag. *ARGENPRESS*. Web. 15 Mar. 2014.

¹⁵ Tedesco, Nestor.

However this ideal progression is not always the case and improving academic performance is not the project's main goal. As we continue the interview Tedesco further discusses what makes music and the orchestra successful tools for addressing social inclusion, and explains the socio-educative component in relation to the children's backgrounds. He says,

They begin to notice that they are participating in a miniature model of society. The orchestra provides all of the elements to from relations that a child can, in a way, practice and develop as if he were truly coexisting with everyone else, in a society. This is especially important because most of the children probably don't live with the parameters and rules that a stable society could offer because many of them live in the *villas* where everything is a little problematic.¹⁶

Thus it is not just the children who are "excluded from the system" at school that benefit from the orchestras. The children who are entirely excluded from society itself are given access to experiences and opportunities for personal and social development typically offered by stables societies, but are lacking in theirs. Ultimately, the Retiro Youth Orchestras and the fourteen others that together make up the Children and Youth Orchestra Project of Buenos Aires are driven by a social goal: they are responding to the city youth's need for a different way to grow and develop into strong individuals and to be included as members of society.

El Sistema

El Sistema is a youth orchestra project that shares the same goals as the Children and Youth Orchestra Project of Buenos Aires. In fact, much of the recent increase of attention paid toward youth orchestras all over the world can be credited to its celebrated success. Formerly known as FESNOJIV (La Fundación del Estado para el Sistema Nacional de las Orquestas Juveniles e Infantiles de Venezuela/The State Foundation for the National System of Youth Orchestras of

¹⁶ Tedesco, Nestor.

Venezuela), the orchestra has now officially been renamed El Sistema Nacional de Orquestas y Coros Juveniles e Infantiles de Venezuela (or la Fundación Musical Simón Bolívar).¹⁷ El Sistema is a Venezuelan youth orchestra project founded by Dr. José Antonio Abreu that has centers throughout the country and now throughout the world. Dr. Abreu, now age 74, obtained degrees in both music and economics – the latter one from University of Pennsylvania – and has combined his expertise in these two fields to conceive this visionary project.

El Sistema's slogan, *Tocar y Luchar*, meaning “To Play and To Struggle”, comes from the title of the first article about the orchestras published in 1976. It encapsulates the spirit of the project's beginnings, of the determination and perseverance of both students and teachers alike, that has brought about its international success and made it such a global inspiration. El Sistema is an artistic and social model that aims at the pedagogical, occupational, and ethical rescue of children and youths, vulnerable due to their young age and socioeconomic situation, through participating in music. In fact, Dr. Abreu himself markedly states that El Sistema is not a “music program” but a “human development program through music”.¹⁸ The key here is that like the Retiro Youth Orchestra, being categorized as human development instead of music, the project falls under the *social* ministries of government instead of the *artistic* ones.¹⁹ Instead of treating the project as a music program that simply happens to have positive social effects, it is treated as a social program that

¹⁷ Simón Bolívar was the military and political leader of the late 18th and early 19th century that is credited for liberating much of Latin America from the Spanish Empire. Venezuela has demonstrated particularly patriotic sentiments toward Bolívar to the point that the country's official name was changed to La República Bolivariana de Venezuela in 1999.

¹⁸ Tunstall, Tricia. *Changing lives: Gustavo Dudamel, El Sistema, and the transformative power of music*. New York: Norton, 2012. Print. 71.

¹⁹ Specifically, El Sistema falls under the Ministerio del Poder Popular del Despacho de la Presidencia y Seguimiento de la Gesti Gestión de Gobierno de la República Bolivariana de Venezuela (The Ministry of the People's Power of the Office of the President and Monitoring of Government Management). In other words, the project is funded by the Venezuelan national government.

instrumentalizes music's power in order to help youths transcend social exclusion and become active participants of society.

The story of the organization's beginnings have now become legendary. In 1975 at the height of Venezuela's widespread social inequality, Dr. Abreu invited young music students of the Escuela Superior de Música José Ángel Lamas to a rehearsal in a garage, but only eleven showed up. The founder himself recounts,

It was a disheartening prospect. And I knew that this was a moment of truth: either something momentous had to happen, or it was over. I said to the eleven students. I told them this could be a historic moment. And I asked them to come with me on this journey. Twenty-five young music students came the next day. Then the day after that, there were forty-six [...] Within a month we had seventy-five young musicians.²⁰

In the 40 years of the project's activity, El Sistema has grown phenomenally. There are approximately 400 thousand students involved in Venezuela. Below are some numbers to encapsulate the sheer size and reach:

- 285 preschool-level orchestras (ages 4-6)
- 220 children's orchestras (ages 7-16)
- 180 youth orchestras (ages 17-22)
- 30 professional orchestras
- 360 choruses
- 1,355 affiliated choruses
- 20 luthier workshops
- 15,000 professors²¹

In addition, the idea has inspired affiliated and similar initiatives in 35 countries throughout the world including the majority of Central and Latin America, Australia, Austria, Canada, South Korea,

²⁰ Tunstall 59.

²¹"El Sistema." *El Sistema*. N.p., n.d. Web. 5 Apr. 2014. <<http://fundamusical.org.ve/>>.

Scotland, the United States, France, Japan, England, India, Portugal, and Trinidad and Tobago.

Although the Children and Youth Orchestra Project of Buenos Aires does not directly credit El Sistema for the inspiration, the Argentine youth orchestras are certainly part of the global trend that El Sistema seems to have started, or at least, has strongly defined.

El Sistema's extended financial and global support paired with their history have not only strengthened the organization's influence, but has also allowed for a more careful monitoring of the organization's effects. In the previous discussion of the Retiro Youth Orchestra, the measuring of the musicians' academic standing and progress was raised as one of the "concrete" methods through which one can measure the success of a youth orchestra project. A report prepared by the Inter-American Development Bank, which has supported El Sistema with substantial loans, shows evidence that members of El Sistema tend to have better academic achievement records and fewer behavioral problems than Venezuelan youths who are not part of El Sistema. Whereas the national high school dropout rate for teenagers is over 26%, the rate for El Sistema participants is only 6.9%.²² This data suggests that the personal and social development undergone in the orchestral environment can be and often is in fact transferred and applied successfully to the academic environment. Although raising these statistics is not and should not be the goal of any youth orchestra project, having this kind of concrete data does help illustrate one of the many benefits that these youth orchestras offer.

Global awareness of El Sistema's powerful social and musical influence has been spread even further due to national and institutional acknowledgements, as well as several "celebrities" that the orchestra has fostered. El Sistema has received awards from nations all across the globe such as Italy, Germany, Japan, and Brasil, and institutions such as UNESCO and UNICEF. In addition to

²² Tunstall 37.

these recognitions, musical “stars” have helped El Sistema’s presence. One is the double-bassist Edicson Ruiz, now 28, who at age 17 was the youngest member of the Berlin Philharmonic Orchestra and the second youngest to ever join.²³ Another is the young conductor Gustavo Dudamel, age 33, who is currently the musical director of both the Orquesta Sinfónica Simón Bolívar de Venezuela (OSSBV) and the Los Angeles Philharmonic. In addition to an incredible performance history, he was named one of the 100 most influential people in the world in 2009 by TIME Magazine. Dudamel has also followed in his maestro’s footsteps and began the El Sistema-inspired Youth Orchestra of Los Angeles (YOLA) that empowers its members to become “vital citizens, leaders, and agents of change.”²⁴

Yet El Sistema truly attracted the general public’s attention in 2009 when Dr. Abreu was awarded the TED Award, a prize “awarded to an extraordinary individual with a creative and bold vision to spark global change. By leveraging the TED community’s resources and investing \$1 million dollars into a powerful idea, the TED Prize supports one wish to inspire the world”.²⁵ With this one wish, Dr. Abreu expressed his desire to begin El Sistema USA, to export his visionary idea to the United States and begin to rescue a whole new population of socially excluded youths. This combination of musical “celebrities” and prestigious awards has helped increase El Sistema’s fame and awareness of its mission at a global level.

Like the Retiro Youth Orchestra, El Sistema’s programme includes a variety of repertoire, especially due to the wide range in level across the hundreds of orchestras that make up the entire organization. Musicians quoted by Tunstall have mentioned performing Beethoven’s *Symphony No. 5*,

²³ The youngest player to ever join was a harpist in the 19th century. See http://www.nytimes.com/2006/05/08/arts/music/08yout.html?pagewanted=all&_r=0

²⁴ "Youth Orchestra LA (YOLA)." *LA Phil*. N.p., n.d. Web. 10 Apr. 2014. <<http://www.laphil.com/education/yola>>.

²⁵ "TED: Ideas worth spreading." *TED: Ideas worth spreading*. N.p., n.d. Web. 15 Feb. 2014. <<http://www.ted.com>>.

Mozart's *Eine Kleine Nachtmusik*, Tchaikovsky's *Marche Slav*, and the march from Verdi's *Aida*, Rossini's *William Tell Overture*. Yet the Simón Bolívar Orchestra is also well known for performing pieces by Latin American composers such as Carlos Chávez, Gustavo Orozco – especially his *Mambo*, performed by the SBO at events such as the BBC Proms – and Arturo Márquez.

In her book *Changing Lives* Tricia Tunstall gives readers insight into El Sistema through talking with and interviewing the young musicians that make up El Sistema. Tunstall is a writer and a music educator who has spent several years researching El Sistema and is particularly interested in finding ways to adapt the model to the cultural and economic circumstances of the United States.²⁶ These conversations with the members of El Sistema help understand the function that art music plays specifically in the children's and youths' lives. 21-year-old trumpet player Fernando articulates the harmonizing effect of music in an orchestra, explaining that "When children are playing music together [...] all the differences in class, in race, everything – they disappear. They don't exist anymore. For a child, it gives the message that unity and harmony in the world are possible, that war is not necessary."²⁷ In other words, in this alternative environment created by art music, the young musician is able to put aside the "social baggage" that excludes him from society and that tends to impede him from accessing developmental resources. Art music creates the space to experience social peace, cooperation, and harmony, experiences that tend to be difficult for them to find in their frequently unstable lives, but that are important for healthy social and personal growth.

In addition, some of El Sistema's musicians identify the orchestra as a space for intercultural exchange. Although the members of the higher level orchestras, such as the Simón Bolívar Orchestra, do get the unique chance to go on international tours and experience foreign cultures,

²⁶ "Tricia Tunstall." *Facebook*. N.p., n.d. Web. 28 Mar. 2014.
<<https://www.facebook.com/TriciaTunstall/info>>.

²⁷ Tunstall 102.

there is a particular cultural exchange that happens *within* Venezuela through El Sistema's orchestras. Violinist Alejandro Carreño, formerly a member of the National Children's Orchestra (which is part of El Sistema) and now the concertmaster of the Simón Bolívar Orchestra, explains this intercultural exchange that occurs that helps strengthen one's pride and identity. He says that members of these orchestras come from distinct towns and cities,

But when you are sharing music with people from all over the country, now you are truly Venezuelan. The spirit of the whole country becomes your own spirit. You learn how to love each city, each town. Because when you make friends with someone, and that person talks with love and about his own town, you learn how to love that town. And when you go there, it's like you are home.²⁸

Although most of the musicians meet as strangers and come from different towns, they all share one thing: they are all Venezuelan. The orchestra and the creation of art music is the opportunity to see the different "Venezuelas", to recognize the various faces of one's own country and to find the common thread that creates the greater national identity. The sharing of a passion for music and a common identity is to acknowledge each other's membership in the same larger community and foster the sense of camaraderie.

A final idea that runs through many of El Sistema's members' narratives, is the force of art music's communicative power. Various moments that Tunstall illustrates throughout her book acknowledge this deep communicative nature of art music. Alejandro describes the experience of playing music with others as "something that goes very deep, and without words. Words have a limit, but the feeling in the music – there are no words for that."²⁹ At the Rinconada núcleo, the Baby Vivaldi Orchestra is made up of infants and their mothers that sing folk songs, tap rhythms, and imitate motions and noises. Although musical learning is certainly one of the goals, Josbel Pulce,

²⁸ Tunstall 116.

²⁹ Tunstall 128.

the núcleo director of Rinconada, emphasizes that the true aim in this context is more upon developing empathy.³⁰ Dan and Christine, two American musicians who spent time with El Sistema as the first Abreu Fellows³¹, did not speak Spanish fluently, but “both [found] themselves able to manage a variety of satisfying musical communications.”³² Each of these reflections and moments show how music is able to transcend verbal communication, whether it be to transfer emotions, a sensation, or something about music itself. In situations where words fail or where words simply have yet to develop, music allows for a humane exchange between individuals. Tunstall phrases this power well when she observes, “Whether the players are eight or twenty-eight, the true miracle of the youth orchestras of Venezuela is not how young they are but how deeply they communicate through music, with one another and with audiences.”³³ No matter the age, background, or musical aptitude of the musicians themselves or the audience members, there seems to be very profound and powerful communication that occurs through music.

The West-Eastern Divan Orchestra

The West-Eastern Divan Orchestra is an annual orchestral workshop that involves youths of ages 14 to mid-20s from Israel, Palestine, and Arab countries in order to address the Israeli-Palestine conflict. The idea for the orchestra was conceived through conversations between two friends, Edward Said – the Jerusalem-born, Palestinian cultural theorist – and Daniel Barenboim – the Argentine-born, Jewish, internationally acclaimed conductor – when the latter was invited by the artistic director of the European Cultural Capital of 1999 to put together a programme for the event.

³⁰ Tunstall 157.

³¹ The Sistema Fellows, formerly called the Abreu Fellows, is a Fellowship Program of the New England Conservatory that funds fellows to observe and participate in El Sistema in order to develop similar programs throughout the United States.

³² Tunstall 166.

³³ Tunstall 128.

This opportunity, paired with both friends' recognition for the need of an alternative way to address the Israeli-Arab conflict, brought about the idea of creating an ensemble which might begin a dialogue that was political and cultural as well as musical. "The idea was simple," Barenboim explains in an interview published in *The Telegraph*. "Bring together around 80 players, 40% from Arab countries, 40% from Israeli, 20% from Europe (originally East Germany, now Spain)."³⁴ Through this musical method, the two creators "hoped to replace ignorance with education, knowledge and understanding; to humanize the other; to imagine a better future."³⁵

In the same way the idea itself came to be, the philosophy and goal of the orchestra is based upon the idea of *dialogue*. As Barenboim explains in his book *Music Quickens Time* in which he discusses his involvement with and thoughts about the orchestra, "Separation between people is not a solution for any of the problems that divide us, and ignorance of the other certainly provides no help whatsoever [...] Our intention in the workshop was to start a dialogue, to take a single step forward and to find common ground between estranged peoples."³⁶ In fact, the name of the orchestra itself reflects the philosophy upon which the idea was conceived. "West-Eastern Divan" comes from a collection of poems by Goethe titled *West-östlicher Divan* that was inspired by the Persian poet Hafez. These poems deal with the idea of the "Other" that is reflected in the "Self", and the name fit perfectly with the orchestra's aim. And thus, such an orchestra was born:

The West-Eastern Divan Orchestra has proved time and again that music can break down barriers previously considered insurmountable. Through its work and existence, it demonstrates that bridges can be built to encourage people to listen to the narrative of the other. While music alone cannot resolve the Arab-Israeli conflict, it grants the individual the right and obligation to express himself fully while listening to his neighbor. Based on this notion of equality, cooperation and justice for all, the

³⁴ Hewett, Ivan. "West-Eastern Divan Orchestra: interview with Daniel Barenboim for the BBC Proms." *The Telegraph* [London] 19 Aug. 2008, sec. Culture: n. pag. *The Telegraph*. Web. 23 Feb. 2014. 1.

³⁵ "West-Eastern Divan Orchestra." *West-Eastern Divan Orchestra*. N.p., n.d. Web. 10 Feb. 2014. <<http://www.west-eastern-divan.org>>.

³⁶ Barenboim 53.

orchestra represents an alternative model to the current situation in the Middle East.³⁷

The undeniable impact and success of this endeavor turned what was supposed to be a one-time workshop into an annual event. Participants witnessed how “once the young musicians agreed on how to play even just one note together they would not be able to look at each other in the same way again.”³⁸ Three years later, the orchestra was moved to a town called Pilas (near Seville) in Spain. This move held symbolic value, for this southern, Andalusian region has a long history of coexistence between Christians, Jews, and Muslims. Now, in this new location, the orchestra aims to recreate the creative exchange expressed in the region’s Mudéjar art³⁹ but now through using Western classical music as the common aesthetic to share amongst people of different cultures.⁴⁰ Thus the orchestra consists of youths, not just from Israel, Palestine, and surrounding Arab countries, but also of local musicians that give a sense of belonging to the Spanish location.

Through the political reality that the musical participants bring with them cannot be ignored, the West-Eastern Divan Orchestra’s agenda is not a political one, but is driven by the need for a humanitarian approach to overcome an otherwise difficult and delicate barrier. Participating in the workshops is an opportunity for these youths to participate in discursive dialogue with the “Other” and experience the equality that is denied at home. As Barenboim explains: “The diversity of the group lends itself to the peaceful coexistence of various national identities and, beyond that, to the liberation of each one’s preconceptions about the others.”⁴¹ In other words, the “neutral ground” that music creates offers the participants the rare chance to transcend the political and social

³⁷ www.west-easter-divan.org

³⁸ Barenboim 54.

³⁹ A style of art of the Andalusian region which was born from the intricate style of Arab art and architecture that was adapted by the region’s Christian rulers and Jewish neighbors.

⁴⁰ Barenboim 58.

⁴¹ Barenboim 61.

restrictions of their surroundings and experience a new and independent sense of ideological freedom that exists outside of the usual parameters.

Since its initiation, the West-Eastern Divan Orchestra has accumulated an impressive track record. With its very first performance in 1999 where the ensemble performed Beethoven's Seventh Symphony and was accompanied by Yo-Yo Ma as soloist for Schumann's cello concerto, the orchestra has gone on tour of both South America and Asia. It has participated in renowned festivals in Lucerne and Salzburg, has played in the legendary Waldbühne amphitheater in Berlin, and has performed in the annual BBC Proms held in London. In addition, the ensemble has also travelled to symbolic locations such as Ramallah in the Occupied Territory (Palestine) and the Joint Security Area between North and South Korea, where their humanitarian philosophy finds itself strongly relevant. Yet since its earliest days, the orchestra's goal has been to perform in all countries that are represented by its musicians in order to spread its humanitarian vision to those regions that are most directly affected by the Israeli-Arab conflict.

The story of one particular Palestinian, Ramzi Aburedwan, as told by Daniel Barenboim in his book *Music Quickens Time* helps illustrate the ideological barriers that art music helps transcend. Ramzi is a Palestine that grew up in a refugee camp in Ramallah, a city located in the central region of the West Bank. During his youth, he harbored strong hatred of Israeli oppressors and had never seen or heard Western musical instruments as a child. Yet at age 17 he began to play the violin, and soon joined a month-long workshop for stringed instruments held by a Jordanian musician, an experience that began the transformation of his identity and personal perspective. As Barenboim describes, "At the end of the month [...] he had discovered a way to leave behind the hopelessness of the refugee camp, of the occupation – music became his opportunity to go beyond the walls,

borders and roadblocks in his environment, both literally and figuratively.”⁴² Then, as he continued on to other workshops and festivals that took him outside of his country, even as far as the United States, Ramzi “wanted to share with the world what he had discovered, what allowed him to think outside of the limitations of the Israeli-Palestinian conflict, and to transcend the political and social restrictions of his surroundings.”⁴³ Becoming involved in the world of art music, Ramzi was, for the first time, becoming aware of possibilities and realities that existed outside of the tension and conflict-ridden world that he had grown up in. Art music introduced him to a different perspective, one that allowed him to see and think beyond the “borders and roadblocks” that had previously restricted both his physical and ideological freedom.

In addition to this perspective-broadening effect as seen in Ramzi’s story, Barenboim articulates a particularly metaphysical understanding of the communicative nature of art music. Repeatedly, throughout the book, Barenboim references the wordless-ness of music, or the inexpressibility of music’s effects through words. He says how “music possesses a power that goes beyond words”, or that “[the] humanistic idea in music [...] basically can’t be expressed in words.”⁴⁴ Yet it is precisely art music’s lying outside of spoken language that makes it so powerful. According to Barenboim, art music is able to give individuals, like Ramzi, the ability to transcend the physical and ideological borders and roadblocks that restricted defined his former world because it does not contain limited associations as words do. Because the language of art music is significantly more flexible and is not defined by conceptual and grammatical rules, it allows one to think outside of the typical cultural and ideological parameters.

⁴² Barenboim 75.

⁴³ Barenboim 77.

⁴⁴ Barenboim 93, 117.

Thus the entire philosophy that creates the foundation of and drives the West-Eastern Divan Orchestra seems to rely on this strongly metaphysical and abstract interpretation of art music's effects, especially when placed in these contexts of ideological contention. Music is understood as, not simply communicative, but linguistic in its nature in a way that transcends the spoken language. Thus in this space where not only ideological but linguistic differences and miscommunication can cause further conflict and heightening of tension, art music functions as the universal language shared by all. As a universal language, art music creates the common grounds upon which individuals from all sides of the Israeli-Palestine conflict can see each other through a new perspective and free from the physical and mental roadblocks that restricted them before.

Chapter 2: A Schopenhauerian Reading

This chapter will explore art music as a universal language in the context of the youth orchestra projects through a philosophical lens, namely, through the metaphysical and aesthetic philosophy of Arthur Schopenhauer. Schopenhauer was a German philosopher who lived in the late 18th until the mid-19th century and notorious for his heavily pessimistic philosophy. He is best known for his book *The World as Will and Representation* (“*Die Welt als Wille und Vorstellung*”) published initially in 1818, in which he explains his concept of the Will and how it permeates through his entire philosophy.

The World as Will and Representation consists of four parts: epistemology, ontology, aesthetics, and ethics. Although Schopenhauer uses all four parts in order to fully develop and elaborate upon the concept of the Will, this second chapter will specifically focus upon his writing on aesthetics. Schopenhauer explores the relationship between the Will and art, analyzing the ways in which the various forms of art represent the Will in their differing ways. Ultimately, he concludes that music is metaphysically superior to the other arts because of the very direct relationship it has with the Will. In fact, he calls music a “universal language” because of this supposed superiority and music’s ability to be understood by all.

Although there is a wide selection of philosophers who discuss musical aesthetics and who are perhaps less controversial to apply here, I chose Schopenhauer’s perspective because much of the language he uses resonates with those spoken by members of the youth orchestra community, specifically those of Daniel Barenboim and Edward Said of the West-Eastern Divan Orchestra. Schopenhauer’s token Romantic understanding of music and art in general has influenced and been shared by other prominent musicians and thinkers such as Richard Wagner and Friedrich

Nietzsche.⁴⁵ Furthermore, it provides additional thoughts and possible explanations that support the ideas that are put forth by Barenboim and Said in explaining their youth orchestra project. General criticisms and issues with Schopenhauer's metaphysical explanation of art will be addressed in the latter part of the chapter in order to emphasize that a single approach or a single method is not enough to understand the full picture of art music as a universal language. Yet before discussing the links between Schopenhauer's musical aesthetics and Barenboim and Said's thoughts on music, an in-depth reconstruction of Schopenhauer's general metaphysical view is necessary.

Schopenhauer's Metaphysics and Musical Aesthetics

The metaphysical concept of the Will is the foundational bedrock of Schopenhauer's entire philosophy. The Will is the essence of all existence, not just of human beings, but of the entirety of nature. Yet before examining the Will, it is important to take into consideration the historical-philosophical context that surrounds this idea. Schopenhauer's concept is mainly a response to Immanuel Kant. Although I will not get into an in-depth explanation of Kant's metaphysics, some discussion is necessary because Schopenhauer himself equates his concept of the Will to the Kantian concept of *thing-in-itself* but with a few revisions.

Ding an sich in the original German, *thing-in-itself* refers to the noumenon. As opposed to the phenomenon, which is how the "thing" appears to the observer (and therefore is physical), noumenon refers to the essence of the "thing" as it exists free from the observer's perception of it, free from representation (and therefore is metaphysical). There are three token characteristics of Kant's thing-in-itself. First of all, the Kantian version is *mind-independent*, in that it exists

⁴⁵ For Edward Said's thoughts on Richard Wagner's anti-Semitism, see *Edward Said's Translocations: Essays in Secular Criticism* edited by Tobias Döring and Mark Stein.

independently of the perceiving individual. Second of all, it is the *cause* of our sensations, and therefore is part of a cause-and-effect relationship. Lastly, the thing-in-itself is *unattainable*: the individual can never arrive at a full understanding or acquire full knowledge of it.

Contrastingly, although the Will does share basic characteristics with the thing-in-itself, ultimately, Schopenhauer's version is mind-dependent, is not part of a cause-and-effect relationship and is, in fact, attainable. To put it very simply, Schopenhauer splits the world into Will and representation (as the title of his text suggests). On one hand, the Will is the subjective, the noumenon; it is the immediate identity of a thing and is the source of all representation. On the other hand, representation is the objective, the phenomenon; it is the identity of a thing as perceived externally. In defining the difference between the two concepts Schopenhauer explains,

All representation [...] all *object*, is *phenomenon*. But only the *will* is *thing-in-itself*; as such it is not representation at all, but *toto genere* different therefrom. It is that of which all representation, all object, is the phenomenon, the visibility, the *objectivity*. It is the innermost essence, the kernel, of every particular thing and also of the whole.⁴⁶

Up until this point, the Will sounds very much like the thing-in-itself. It is the name of the noumenon which all phenomenon represents.

Yet the Will branches off significantly into a different direction when considered in relation to the human individual. The first point of contention and the foundational difference between Kant's thing-in-itself and Schopenhauer's Will, is that while the thing-in-itself exists wholly independent and external to the individual, the Will is the essence of the individual's identity and existence. Schopenhauer argues this point by comparing the way an individual acquires knowledge of the world around him and the way an individual acquires knowledge of himself.

⁴⁶ Schopenhauer, Arthur. *The World asand Representation, Volume I*. New York: Dover Publications, Inc., 1969. Print. 110.

For most individuals, the body is the starting point for understanding the world that we live in. As individuals observing the world, people generally gather information and knowledge through the sensory organs that perceive what lies external to their beings. This method is also used in order to understand an individual's own actions and physical presence. However, this is not the *only* way in which information is acquired about oneself; for if it were so, "he would see his conduct follow on presented motives with the constancy of a law of nature, just as the changes of other objects follow upon causes, stimuli, and motives."⁴⁷ In other words, if an individual acquired knowledge about himself only through the same methods he acquires knowledge of the external world, then the individual's actions would be straightforward and part of a simple cause-and-effect relationship that governs much of nature.

Yet this is certainly not the case. It is through this disparity that Schopenhauer arrives at the conclusion that the individual acquires further knowledge of himself and his inner workings through the Will. It is through the Will - "the inner [...] incomprehensible, nature of those manifestations and actions [...] a force, a quality or a character" - that the individual understands his inner being in a way that is not just through external observation of his objective existence. Schopenhauer explains that for the individual, the Will is "the key to his own phenomenon", that which "reveals to him the significance and shows him the inner mechanism of his being, his actions, his movements."⁴⁸ It is through the Will that the individual gains more immediate and direct knowledge of his inner identity.

Thus, this particular relationship between the Will and the individual shows that the body is not just the individual as object, but also the individual as subject. Schopenhauer elaborates upon the connection between the object and subject within the individual through describing the relationship between the "act of will" and the "action of the body". The "act of will" refers to "the inner [...]"

⁴⁷ Schopenhauer 99-100.

⁴⁸ Schopenhauer 100.

incomprehensible, nature of those manifestations and actions [...] a force, a quality or a character” described earlier, the force that drives actions. “Action of the body” refers to just that: the physical manifestation of the “act of will”. Here lies the second point of contention between Kant and Schopenhauer: instead of linking these two concepts with a cause-and-effect relationship as Kant does, Schopenhauer describes them as two different manifestations of the same thing. Understood as such, he describes,

The act of will and the action of the body [...] do not stand in the relation of cause and effect, but are one and the same thing, though given in two entirely different ways, first quite directly, and then in perception for the understanding [...] The action of the body is nothing but the act of will objectified, i.e., translated into perception.⁴⁹

In other words, subject and object as they exist within the individual are not fully divided and independent of each other, but are in fact strongly linked. Using Schopenhauer’s own imagery to further clarify the relationship, subject and object are simply two different faces that make up the same coin. It is in fact through this double knowledge that the individual acquires knowledge of himself, not as representation and as object, but what it is *in itself*, directly, as subject. Such is the third point of contention between the Kantian thing-in-itself and Schopenhauer’s Will: whereas Kant claims that the individual cannot acquire knowledge of the thing-in-itself, Schopenhauer argues that the individual in fact can because the thing-in-itself, understood as the Will, is the immediate and subjective knowledge that exists within and is accessible by the individual.

Yet, it is important to keep in mind that it is only possible for the individual to acquire such direct and subjective knowledge when it is knowledge of the individual himself. When perceiving the external world, the individual does not see or have direct access to the metaphysical and subjective

⁴⁹ Schopenhauer 100.

side; he sees the various elements of the external world just as objects, and therefore, as representations.

As such, this comparison between Kant's thing-in-itself and Schopenhauer's Will has helped define the metaphysical implications of the latter concept. To summarize, the Will is the noumenon, the metaphysical essence that lies at the source of all representation and existence, and also the force that drives all humans and all of nature. Unlike the Kantian thing-in-itself, the Will is mind-dependent, is not part of a cause-and-effect relationship, and can be attained by the individual.

Now that the definition of the Will has been clarified, a few other metaphysics-related concepts need to be understood in relation to the Will before fully going into Schopenhauer's musical aesthetics. The First of these is the Platonic Idea.⁵⁰ Establishing the relationship between the Will and the Idea will be important for the upcoming discussion about the metaphysical qualities of art music in comparison to the other forms of art. Schopenhauer begins Book Three on aesthetic, by defining the difference between the Will and the Idea as follows: "Idea and thing-in-itself [the Will] are not for us absolutely one and the same. On the contrary, for us the Idea is only the immediate, and therefore adequate, objectivity of the thing-in-itself."⁵¹ The Idea, the timeless patterns for the individual things perceived and experienced in space and time, are object (unlike the Will which is subject) because it is the timeless pattern for the Will itself, and therefore is a *representation*. As Schopenhauer puts it, "indeed it is even the whole thing-in-itself, only under the form of representation."⁵² However, the Idea differs from the typical object, in that although it is a representation, it has yet to be individuated into particulars by the *principle of sufficient reason*, the second concept that must be defined in relation to the Will.


⁵⁰ From this point forth the Platonic Idea will be simply referred to as "Idea" with a capital "I".

⁵¹ Schopenhauer 174.

⁵² Schopenhauer 175.

The principle of sufficient reason refers to the concept of rationalizing in order to understand something. Often associated with Wilhelm Gottfried Leibnitz, it is the human tendency of placing things and events in relation to time, space, and causality. Therefore, the principle of sufficient reason can also be understood as the epistemological or “organized” form of the mind. Whereas the Idea is the *direct* objectification of the Will, the individual acquires knowledge of the *indirect* objectification of the Will through applying the principle of sufficient reason to the Idea itself or to what is perceived. Although it is precisely through this method that humans make sense of the world, it is also through it that the whole-ness and entirety of the Will becomes divided into individuals and particular objects, bringing the individual further and further away from understanding the Will directly as subject.

Ultimately the metaphysical hierarchy can be illustrated as follows:

1. The Will/thing-in-itself (*metaphysical realm*)
2. Platonic Idea (*metaphysical realm*)
-  [application of the principle of sufficient reason]
3. Phenomenal world as perceived by individual (*physical realm*)

This difference, between the Will and Platonic Idea, although seemingly minor, will be important in comprehending the metaphysical distinction between music and the other forms of art.

Understanding the Will as the foundation of Schopenhauer’s metaphysics as such, now his aesthetic analysis of music can be explored ultimately in order to make sense of art music as a universal language in the context of the youth orchestra projects.

Schopenhauer’s musical aesthetic proves relevant to understanding the role of art music in the youth orchestra projects because Schopenhauer himself calls music a universal language. He argues that music is superior to the other forms of art because of the very direct relationship it has with the Will. This in turn is what makes it a universal language that can communicate to and be

understood by all. In this particular aesthetic exploration, it is important to keep in mind that Schopenhauer's definition of "music" and my definition of "art music" do indeed have some overlap but *are not* one in the same. When Schopenhauer uses the term "music" he is referring to the Western musical tradition that includes the Baroque, Classical, and Romantic time periods including operas.⁵³ However, I argue that although there is a discrepancy between the musical content that we are considering, the metaphysical and aesthetic thoughts that Schopenhauer proposes pertain to my definition of art music also.

In the direct discussion of Schopenhauer's metaphysics and musical aesthetics, I will refer to art music simply as "music" for the sake of remaining consistent with Schopenhauer's language and avoiding confusion. However, I will return to using the phrase "art music" when moving on to the application of Schopenhauer to the youth orchestra projects and the discussion leaves the specific sphere of Schopenhauer's philosophy.

Schopenhauer focuses a large part of Book Three upon determining the ways in which the Will is represented by each form of art. This metaphysical evaluation of the arts is precisely which makes up his aesthetic philosophy. In simple terms, the more direct the relationship the form of art has with the Will, the more aesthetically pure and superior the medium. As he goes through the various art forms – such as architecture, sculpture, painting, and poetry – Schopenhauer ultimately isolates music from the others as aesthetically superior because the subject matter of music cannot be pointed toward or connected back to a particular representation found in the phenomenal world or to an Idea. Placed in terms of the metaphysical hierarchy, music's subject matter cannot be identified in *3. Phenomenal World* or *2. Platonic Idea* as with the other mediums of art.⁵⁴

⁵³ For my definition of art music, refer to the Introduction of this thesis, pages xii-xiii.

⁵⁴ Schopenhauer 331.

However, despite being unable to identify particular content matter, at the same time, music seems to have the very powerful and effective ability to move the “inmost nature of man.” Schopenhauer claims that there is something that sets music apart, something that makes it “entirely and deeply understood by [the individual] in his inmost consciousness as a perfectly universal language.”⁵⁵ How, exactly, is music able to communicate to man’s “inmost consciousness”? What is the extra something that makes music a universal language?

Schopenhauer answers by claiming that, whereas the other forms of art are mere representations, music is in fact the direct copy of the Will itself. It is precisely the lack of “copy of copies” that makes music so impactful. In describing this metaphysical nature of music, he explains,

Thus music is as *immediate* an objectification and copy of the whole *will* as the world itself is, indeed as the Ideas are, the multiplied phenomenon of which constitutes the world of individual things. Therefore music is by no means like the other arts, namely a copy of the Ideas, but a *copy of the will itself*, the objectivity of which are the Ideas.⁵⁶

Whereas other forms of art are objectifications of the Idea which is then objectifications of the Will, music does not consist of these layers and has a direct relationship with the Will. This directness comes from the afore-mentioned lack of particular content matter in music. Consequently, music is situated on the metaphysical hierarchy at the same level as the Idea. Just as the Idea is the direct objectification of the Will, so is music; therefore, music stands at a higher level on the hierarchy than that of the other forms of art. As Schopenhauer puts it so eloquently, “For this reason the effect of music is so very much more powerful and penetrating than is that of the other arts, for these others speak only of the shadow, but music of the essence.”⁵⁷ To have a direct relationship with the Will means to have a direct relationship with the universal, metaphysical essence that lies at the source of

⁵⁵ Schopenhauer 256.

⁵⁶ Schopenhauer 257.

⁵⁷ Schopenhauer 257.

all existence. Thus music proves aesthetically superior because it directly represents this inner kernel of being of both humans and of the entirety of nature.

Yet, because music is indeed a physical phenomenon – of sound waves and vibrations – one would think that it still resides in the physical realm along with the other forms of art. However, Schopenhauer's placement of music within the metaphysical realm is not to deny its physical nature. The metaphysical evaluation of the various mediums of art does not depend on the *form* but upon the nature the *content matter*. Non-musical forms of art, such architecture, sculpture, and painting, are representations of an Idea. Schopenhauer defines a genuine work of art as one that has captured the Idea. To this he adds, "In its powerful originality [the genuine work of art] is drawn only from life itself, from nature, from the world."⁵⁸ In other words, even the most authentic and masterful work of art can only go so far as representing the Idea. The artist acquires knowledge of the Idea through "life itself, from nature, from the world," i.e., as represented by the *phenomenal* world. Therefore, both the artist and the content matter of non-music art forms have a distant and indirect relationship with the Will.

In contrast, as expressed by Schopenhauer, "In [music] we do not recognize the copy, the repetition, of any Idea of the inner nature of the world."⁵⁹ In other words a listener cannot find the particular or direct representation of an Idea or a representation of the phenomenal world in the same way he could in the other forms of art. A melody, harmony, accompaniment, or any component of a musical work cannot represent, for example, a tree in the particular and direct way a painting, sculpture, or even poetry can, no matter how abstract or deformed the representation in these other forms may be. This absence of such representation, paired with the deep, profound, and universal effect that music seems to have upon all humans, leads Schopenhauer to conclude that

⁵⁸ Schopenhauer 235.

⁵⁹ Schopenhauer 256.

therefore, music has a direct relationship with the Will itself. Thus we can summarize and state that Schopenhauer identifies music as aesthetically superior to the other forms of art because of its existence as a direct copy of the Will itself, and not as a copy of any Platonic Idea or of a representation in the phenomenal world.

However, how does music's aesthetic superiority translate into its being a universal language? This can be answered through connecting music's metaphysical nature back to the previous discussion on understanding the Will as it exists in the individual. Just as Schopenhauer considers the action of the body and the act of Will as two different manifestations of the same thing, he defines the relationship between the phenomenal world and music in the same way. Placing music as metaphysically equivalent to the Idea raises questions about its relationship with the physical world. What implications does music's direct relationship with the Will have upon how the metaphysical and physical world are understood? To clarify the relationship, Schopenhauer explains that "we can regard the phenomenal world, or nature, and music as two different expressions of the same thing."⁶⁰ This means that the phenomenal world is the indirect, objective expression of the Will and music is its more immediate, direct, and subjective counterpart. Therefore, music encompasses the universality and the entirety of the phenomenal world but in an abstract and metaphysical way.

Music's ability to represent the phenomenal world in its encompassing and metaphysical manner is precisely the reason why it is a universal language. Not only does music objectify the Will as it exists in the world surrounding the individual, but it also objectifies the Will as it exists *within* him. Music has the ability to express and resonate with the act of will: the abstraction of an individual's particular experiences and the metaphysical essence that drives his existence. Because

⁶⁰ Schopenhauer 262.

the Will exists in all human beings, music's affective nature applies to *all* individuals. To illustrate this point, Schopenhauer explains,

For [music] never expresses the phenomenon, but only the inner nature, the in-itself, of every phenomenon, the will itself. Therefore music does not express this or that particular and definite pleasure, this or that affliction, pain, sorrow, horror, gaiety, merriment, or peace of mind, but joy, pain, sorrow, horror, gaiety, merriment, peace of mind *themselves*, to a certain extent in the abstract, their essential nature, without any accessories, and so also perfectly in this extracted quintessence.⁶¹

When Schopenhauer says “joy, pain, sorrow, horror, gaiety, merriment, peace of mind *themselves*”, he is not referring to the particular instances of these emotions as actions of the body but to the emotions as part of the act of will. In other words, music does not express the specific and particular moments when an individual experiences these emotions but expresses them in their most abstracted form as they are understood by and exist as a part of all human beings.

The implication made here by Schopenhauer is strongly abstract. One may think, how can something function as a language if the manner or nature of referencing and expression is vague and general, if it doesn't represent something in a more direct way? Yet it is precisely due to the abstract nature of music that permits music's universality. Expressing an emotion as it is experienced in a particular instant runs the risk of decreasing the number of people who will be able to relate to or be affected by the expression. However, music's expressing an emotion as it exists in all human beings, i.e., as it exists as part of the Will, means that it can affect the entire audience and be readily understood at a universal level. It is this all-encompassing, communicative and affective nature of music that makes it a universal language.

⁶¹ Schopenhauer 261.

As Applied to the Youth Orchestras, Part I

Now that Schopenhauer's metaphysical and aesthetic understanding of art music has been thoroughly explained, it can be related to Daniel Barenboim and Edward Said's West-Eastern Divan Orchestra in order to make sense of how art music is a universal language in the overall context of the youth orchestra projects. Because of the heavily ideological nature of the conflict that the West-Eastern Divan Orchestra addresses, namely, the Israeli-Palestine conflict, the orchestra's creators' understanding of music's function in this context has taken on a strongly metaphysical nature. Although Barenboim does not explicitly name Schopenhauer nor mention the Will, he describes the metaphysical character of art music in a way very similar to Schopenhauer's. In fact, both have explicitly described art music as a universal language.

As a universal language, art music creates the common ground upon which the various members of the West-Eastern Divan Orchestra begin to listen to and understand each other. A large part of the social tension that exists between individuals that come from opposite sides of the Israeli-Palestine conflict is rooted in their differing cultural and ideological beliefs and experience of the conflict. It arises from the differences in the very fundamental elements that create and define their personal identity. Because the source of conflict resides at such a fundamental level, it becomes difficult to find outlets through which they can connect with one another and therefore see each other in a more empathetic and humane manner. Barenboim explains that, in this kind of context, art music provides this outlet or common ground to help overcome the cultural and ideological barriers that separate the various groups. When discussing this particular role of music in the orchestra, Barenboim calls art music a "universal metaphysical language", and state:

The universal metaphysical language of music becomes the link that these young people have with each other; it is a language of continuous dialogue. Music is the common framework – an abstract language of harmony in contrast to the many

other languages spoken in the orchestra – which makes it possible to express what is difficult or even forbidden to express in words.⁶²

Amongst a group of individuals where even simple communication risks misunderstanding, art music allows the young musicians to see each other as fellow human beings instead of simply as the “other” from the opposite side of the conflict. This “link” that Barenboim refers to can be understood in terms of Schopenhauer as the Will as it exists in each human individual and as expressed by art music. The Will is the main and fundamental element that each and every one of the orchestra’s participants have in common and can attempt to identify and recognize in each other.

Although members of the other orchestras do not identify art music as a universal language as explicitly as Barenboim, applying Schopenhauer’s concept of the Will can serve as a possible explanation of art music’s role in those contexts. As a universal language that “links” the members of the West-Eastern Divan Orchestra together, music can also help the young musicians of the other orchestras to identify the commonality that exists between themselves and the others. In each of the youth orchestra projects – the Retiro Youth Orchestra, El Sistema, and the West-Eastern Divan Orchestra – the participating musicians face a particular kind of barrier that significantly defines their social and personal parameters, whether it be a socioeconomic or ideological in its nature. However, in the orchestral environment, these various socioeconomic or ideological differences that separate or even isolate some of these young musicians are put aside. As 21-year-old Fernando, trumpet player in El Sistema, says himself, “When children are playing music together [...] all the differences in class, in race, everything – they disappear. They don’t exist anymore. For a child, it gives the message that unity and harmony in the world are possible, that war is not necessary.”⁶³

⁶² Barenboim 55.

⁶³ Tunstall 102.

Although there are various possible ways in which this “disappearance” of differences can be explained, the Will offers a metaphysical explanation to make sense of this situation.

Similar to the way Barenboim describes art music as the element that “links” the members of the West-Eastern Divan Orchestra to one another, art music can help all of the young musicians identify a commonality that exists amongst all of them in order to put aside their differences.

. In describing how the Will exists in all humans, Schopenhauer writes,

“[The individual] will recognize that same [W]ill not only in those phenomena that are quite similar to his own, in men and animals, as their innermost nature, but continued reflection will lead him to recognize the force that shoots and vegetates in the plant, indeed the force by which the crystal is formed, [and] the force that turns the magnet to the North Pole [...] all these he will recognize as different only in the phenomenon, but the same according to their inner nature.”⁶⁴

The Will, as explained previously, exists in all humans but also in all of nature. Therefore, if an individual is capable of recognizing it in the force of nature “that shoots and vegetates in the plant” or “by which crystal is formed” or even “turns the magnet to the North Pole” as Schopenhauer says, one would imagine that he is also capable of recognizing it in the other human individual also. Considering this “inner nature” that is the same amongst all of humanity, art music, as the direct objectification of the Will, can help lead individuals such as the young musicians of the youth orchestra projects to recognize this commonality that they share. Although this may not be a conscious and articulable recognition, it can help explain why many musicians such as Fernando finds himself and others being able to put aside their differences when playing in an orchestra. As a universal language, art music allows for the recognition of the common humanity in oneself and others.

⁶⁴ Schopenhauer 109-10.

A Note on Genius

The concept of genius, of an inherent or *a priori* ability arises often in the discussion of artistic talent, especially in discussion of the ability to play instruments. Genius is often understood as a very rare and exclusive quality, a special gift that blesses a very select few and is superior to skill or talent that is developed *a posteriori*. However, Schopenhauer sees it a little differently. He claims a universal potential to understand the content matter of art, whether it be painting, poetry, or music, due to an element of “genius” that resides within all individuals. Before beginning the metaphysical evaluations of the various forms of art, Schopenhauer defines genius as the “capacity for knowing, independently of the principle of sufficient reason, not individual things [...] but the Ideas of such things, and of being oneself the correlative of the Idea, and thus no longer an individual, but the pure subject of knowledge.”⁶⁵ Therefore, according to Schopenhauer, genius is the ability to skip the process of rationalizing and acquire knowledge of the Idea in a direct manner. In other words, it is to have a direct relationship with and understanding of the Idea.

Yet unlike the common understanding of genius, Schopenhauer claims that this capability exists in all men: “for if not, they would be just as incapable of enjoying works of art as of producing them; they would have no susceptibility for the beautiful or the sublime.”⁶⁶ In other words, Schopenhauer takes the fact that all kinds of individuals are able to enjoy the beauty of art as proof of the underlying “genius” characteristic that exists within everyone. Though not all are able to *produce* genuine works of art to express the Idea, all are able to *experience* the Idea as observers or as the audience. Though a seemingly counterproductive point to emphasize at first, this definition of genius in fact supports the idea of art music as a universal language. Though the various members of the youth orchestra projects may be divided in terms of their skill level, i.e., in terms of *creators* of

⁶⁵ Schopenhauer 194.

⁶⁶ Schopenhauer 194.

genuine art, they are all capable of *experiencing* and *being perceivers* of genuine art. This human ability to recognize the expression in art music, whether it be consciously or unconsciously, is what makes art music universal.

This universal potential to recognize expression in art music is discussed, not only by Schopenhauer, but has also been the topic of a much more contemporary individual's conversation. Though this specific example does not come directly from one of the youth orchestra projects examined in this thesis, it comes from an individual who has long been involved with many others. Benjamin Zander is a British conductor in the United States who conducted New England Conservatory's incredibly prestigious youth orchestra for forty-five years before creating his own Boston Philharmonic Youth Orchestra in 2012. In his TED Talk⁶⁷ titled "The Transformative Power of Classical Music", Zander raises this idea of the universal nature of music through arguing that no individual is tone deaf, and that musical intuition lies within everyone.⁶⁸ He first identifies three groups of people:

1. People who are passionate fans of classical music.
2. People who don't mind it.
3. People who simply do not consider classical music to be a part of their life ("You might hear it like second-hand smoke at an airport").⁶⁹

⁶⁷ Standing for "Technology, Entertainment, and Design," TED is a global set of conferences that run under the slogan "Ideas worth spreading." The conferences bring together "thinkers and doers" from all over the world and from an incredibly wide variety of fields to give talks on a topic of their choice in eighteen minutes or less. For more information: <http://www.ted.com/pages/about>

⁶⁸ Zander, Benjamin. "Benjamin Zander: The transformative power of classical music." *TED - Ideas Worth Spreading*. TED, n.d. Web. 12 Apr. 2013. <http://www.ted.com/talks/benjamin_zander_on_music_and_passion.html>.

⁶⁹ Zander, Benjamin.

Zander adds a fourth group to this list: people who consider themselves tone-deaf. Zander combines references to daily life and a musical demonstration in order to prove this last group wrong and convince everyone that, in fact, all actually love classical music.

Zander's first order of business is to eliminate from the audience members that fall under group four: people who think that they are tone-deaf. To these individuals he assures,

If you were tone-deaf, you couldn't change the gears on your car, in a stick shift car. You couldn't tell the difference between somebody from Texas and somebody from Rome. And the telephone. The telephone. If your mother calls you on the miserable telephone, she calls and says, "Hello," you not only know how it is, you know what mood she's in. You have a fantastic ear. Everybody has a fantastic ear. So nobody is tone-deaf.⁷⁰

Through these variety of examples from daily life, Zander is implicitly claiming that the basic human skill that allows us to derive meaning from sound, whether it be purely aural (the changing of gears on your stick-shift car) or related to language (distinguishing accents or identifying your mother's voice), is the same skill used to understand musical expression. Therefore, all individuals who are capable of making these aural distinctions in daily life are also capable of understanding, or at least be affected by, musical expression. This unique ability to affect all audience members is precisely what makes art music a universal language, not just in the small sphere of Zander's talk or of the youth orchestra projects, but in all contexts.

Zander's musical demonstration of Chopin's Prelude in E-minor awakens and forces the audience to acknowledge this universal musical intuition. Zander works through the beginning of the exposition, step-by-step, analyzing the function of each note change or shift in harmony in relation to what has preceded or what will follow. In this particular piece, he identifies a descending movement: B, A, G, then F. Following this he asks, "So we have B, A, G, F. And if we have B, A,

⁷⁰ Zander, Benjamin.

G, F, what do we expect next?” And in response, the entire audience, both in unison and relatively in-tune, sings an E. Although the individuals that make up this TED Talk’s audience differs significantly from those that make up the youth orchestras, the existence of a universal musical intuition serves as a possible explanation for how art music can have the same powerful effect upon youths who come from such varying geographic locations, socioeconomic circumstances, and ideological backgrounds.

In a slightly different but similar demonstration, Bobby McFerrin reveals the same musical intuition. Bobby McFerrin is an American vocalist, the author of the popular reggae track “Don’t Worry, Be Happy”. Although he has no known relationship to any youth orchestra, like Zander’s TED Talk, the musical points that McFerrin makes through his musical demonstration support the idea of a universal musical intuition. At the World Science Festival’s event “Notes & Neurons: In Search of the Common Chorus,” McFerrin conducts an interactive demonstration with the audience in which he exhibits the power of the pentatonic scale.⁷¹ He begins by hopping and singing a single note repeatedly, as if jumping on a single key that belongs on an enormous keyboard. He motions the audience to sing the same note in sync with his hopping, establishing a relationship with the physical location on the stage and a musical note. He then hops a pace over to stage right and sings one note up, establishing the location-note relationship once again but for a new note. After hopping between the two notes continuously for a few seconds, he then hops a pace further to the right, a “key” that had yet to be introduced to the audience. Despite this new “key”, the audience, again both in unison and relatively in-tune, recognizes and understands the musical pattern and sings one note higher.

⁷¹ "Bobby McFerrin Demonstrates the Power of the Pentatonic Scale." *YouTube*. YouTube, 23 July 2009. Web. 3 Nov. 2013. <<http://www.youtube.com/watch?v=ne6tB2KiZuk>>.

This display of musical intuition is even more impressive and carries the audience further when McFerrin hops, not just one pace to the left or right of a key the audience is already familiar with, but a leap toward unknown terrain. He first introduces a lower, non-adjacent note by taking a larger step to stage left and singing it himself. This introduction is meant to establish a sense of harmonic orientation amongst the audience; otherwise, the three adjacent notes first introduced could belong to a wide variety of musical keys, and correctly guessing the note of a new, non-adjacent “key” would be less likely. He then familiarizes the audience with the four keys – three old and adjacent, one new and non-adjacent – by “playing” the audience. While he directs the audience members’ singing by stepping on the “keys”, he improvises a melody to accompany them. Yet the moment when the audience is truly surprised is when, without warning, McFerrin takes a leap towards stage left to a brand new, non-adjacent note from the initial non-adjacent note to test the audience’s musical intuition. Despite this musical challenge, once again, the audience intuits correctly and sings the note McFerrin intended.

Although formally, McFerrin’s demonstration was meant to prove the power of the pentatonic scale, just like Zander’s TED Talk, it ultimately reveals the inner musical intuition the lies within all individuals. With a little bit of guidance and what we referred to earlier as harmonic orientation (which can be understood as a form of familiarity), the audience members of both demonstrations were successfully able to understand the musical impulses and expressions that were intended by Zander and McFerrin.

Yet how does the existence of a universal musical intuition relate to art music as a universal language? A universal ability to understand a form of expression implies a universal form of communication, i.e., a universal language. Art music is exactly this. Art music is a universal language not only because it resonates with the individual at a deeply metaphysical level, but also because it

communicates to and effects a part of his human intuition. In other words, art music speaks to the individual through universally appealing to the very subjective and perhaps irrational – or simply a-rational – side of the human identity. Therefore, this metaphysical explanation suggests that art music as a universal language helps address the social conflicts faced by the young musicians of the youth orchestra projects because of its ability to communicate with a part of the individual's identity that is inherent to being human.

However, ultimately, this metaphysical explanation cannot provide the full account of why art music is a universal language. The fact that Schopenhauer's metaphysical thoughts on music have been echoed by Daniel Barenboim or that they seem to be supported by Benjamin Zander and Bobby McFerrin's musical demonstrations does not make up for the various philosophical criticisms of his metaphysical view. Although I will not get into the specific critiques of Schopenhauer's view (for they are ample and belong in a different thesis), they will be addressed in a general manner in order to emphasize that a purely metaphysical approach is not sufficient to explain the powerful effect of art music in the youth orchestra projects.

Putting aside the various internal inconsistencies and logical errors, one can argue against Schopenhauer's general approach to metaphysics. Schopenhauer subscribes to a dualist view of the world. Although this stance cannot be conclusively defined as correct or incorrect – for if this were possible much of philosophy's questions would be answered – it is hardly an uncontroversial one. Schopenhauer is a dualist insofar as he splits the physical world of the senses – the phenomenal world – and the non-physical world of the Idea and the Will – the noumenal world. The image or understanding of the phenomenal world is a result of the perceiving individual's application of the principle of sufficient reason to what is objectively perceived. Therefore, the phenomenal world as is and as can be understood by the individual is, in fact, a construct of the mind. This dualist view not

only proposes the existence of a non-physical realm, but it also implies that what is real is *not* the phenomenal world which humans perceive on a daily basis, but the noumenal world that is not perceived objectively in the same way.

There are various positions that oppose dualism, such as monism (the view that *one* reality or substance can explain what exists) and solipsism (the view that one's mind is the only thing whose existence can be confirmed), that therefore reject the idea of art music as a universal language as explained by the Will.⁷² Thus it is important to keep in mind that this Schopenhauerian, metaphysical account is not the *only* explanation of why art music succeeds in the youth orchestra projects, but simply a *possible* or *partial* one. Other methods need to be considered instead of, or at least, in addition to this metaphysical approach in order to fully understand how art music functions in the context of youth orchestra projects.

⁷² For an example of such a rejection or criticism, refer to Patrick Gardiner's *Schopenhauer* (1997).

Chapter 3: A Linguistic Reading

Whereas the second chapter focused heavily upon a single theory, namely Schopenhauer's metaphysical understanding of art music, this third chapter will offer multiple possible explanations of art music as a universal language from various linguistic approaches. Thus far, in this exploration of art music's role in the youth orchestra projects, the metaphysical approach serves well to explain art music's universality. The approaches included in this chapter – semantics, cognitive neuroscience, and philosophy of language – will serve to emphasize the linguistic nature of art music as a universal language. Although each of these disciplines are very distinct and do not necessarily complement each other, through revealing the similarities between art music and language, they in turn provide possible explanations of art music as a universal language.

There will be three different parts for the different approaches, each that will be related back to the youth orchestra projects in order to make sense of art music's role in those contexts. The first part will be a study of two particular neurocognitive studies that reveal related ways in which the human brain attempts to make sense of language and music. The second, which will be a semantic analysis of art music, will be based upon Joseph Swain's concept of semantic range. The third and final part will return once again to a philosophical and more abstract explanation, examining the nature of language itself and what similarities it may share with the nature of art music.

Cognitive Neuroscience

Investigating the idea of music as a universal language through studies in cognitive neuroscience reveals the similarities that underlie music- and language-processing in human beings. The purpose of drawing these biological parallels are two-fold. First of all, like the semantic

approach, it is meant to help articulate some defining characteristics that are shared by art music and natural language to explain art music as a communicative tool, i.e., a language. Namely, these neurocognitive studies, aim to prove the existence of semantic content and syntactic rules in music that are similar to how they exist in natural language. Second of all, this neurocognitive approach is also meant to demonstrate the universality of art music as a language through establishing a biological characteristic that exists in all human beings. Whereas the metaphysical approach offered a very abstract explanation of art music's universality, these neurocognitive studies will provide a significantly more concrete one.

Within the past two decades, the study of the cognitive neuroscience of music has grown significantly. This subfield of neuroscience focuses upon the brain-based mechanisms that play a part in the cognitive processing of music. Unlike other related branches such as music psychology or cognitive musicology, the cognitive neuroscience of music is based upon direct observations of the brain using various techniques such as electroencephalography (EEG) and magnetoencephalography (MEG) amongst others. Organizations and institutions that focus specifically upon research of music perception, cognition, and/or neuroscience have begun to develop and increase in numbers over the recent decades. The SMPC (the Society for Music Perception and Cognition) is a non-profit organization that hosts biennial conferences to provide researchers with both the community and opportunity to present their research in the area. BRAMS (the International Laboratory for Brain, Music, and Sound Research) jointly affiliated with the Centre for Research on Brain, Language, and Music of McGill University, has a similar aim to SMPC, but more focused upon the neuroscience aspects.⁷³

⁷³ For more information on either of the organizations, refer to their websites: <http://www.musicperception.org/> for SMPC and <http://www.brams.org/en/> for BRAMS

Three key technical terms need to be defined in order to ensure clarity when discussing the results and significance of the music-related neurocognitive studies that will be examined in this section. The key terms will be listed below along with their abbreviations as they will be used in this section.

- **EEG – Electroencephalography:** A method of reading brain activity, the recording of electrical activity along the scalp that results from voltage fluctuations from ionic current flows within the neurons of the brain. EEG is read visually on charts as waveforms.
- **MEG – Magnetoencephalography:** The magnetic counterpart of EEG. Electrical activity necessarily creates correlating magnetic fields which are the data for MEG. MEG is also read visually on charts as waveforms.
- **ERP – Event-Related (brain) Potentials:** EEG brain responses to a known sensory, cognitive, or motor event. Specific ERPs are identified through the averaging of EEG readings from multiple trials in which the known and controlled event occurs. ERPs are characterized by four key elements:
 1. Polarity (positive or negative)
 2. Latency (amplitude maximum)
 3. Scalp distribution (location of activity)
 4. Functional significance (previously established significance associated to activity)

An identified and established ERP is “named” by its polarity (P or N for negative or positive) and by a number, indicating its latency in milliseconds. For examples, the N400 is a negative ERP with a latency of 400 milliseconds.⁷⁴

The N400 Study

Many would reject the idea that music can transfer specific semantic concepts. However one of the prime focuses of one particular N400 study (conducted by Stefan Koelsch, Elisabeth Kasper, Daniela Sammler, Katrin Schulze, Thomas Gunter, and Angel D. Friederici) was to provide

⁷⁴ Koelsch, Stefan. *Brain and music*. Chichester, West Sussex: Wiley-Blackwell, 2012. Print. 47.

neurophysiological evidence to prove otherwise. Although a listener may intuitively associate musical patterns or passages to a referent, there had yet to be a physiological link between underlying cognitive operations and the processing of semantic information.

The N400 is an ERP that establishes this physiological link through comparing the *semantic priming effect* of linguistic and musical stimuli. The semantic priming effect is the highly consistent increase of ease with which an individual will process a word if preceded by a semantically related context.⁷⁵ For example, the phrase “She sings a song” facilitates and eases the processing of a semantically *related* word such as “music”, yet does not do so for semantically *unrelated* words such as “sock”. It has been previously established that the N400 elicited by words is highly sensitive to the changes in semantic relations: it weakens for words that are preceded by semantically congruous context.⁷⁶ For instance, if placed in the context of the previous example, the N400 reading would weaken if the phrase “She sings a song” is followed by “music”, but would strengthen if followed by the word “sock”.

In this particular N400 study, parallel linguistic and musical methods were used in order to compare the N400 as it reacts⁵ to linguistic and musical stimuli. In trials that tested linguistic stimuli, the primer was a sentence; in those that tested musical stimuli, the primer was a musical excerpt. In both cases, the primer was played on loud-speakers, which was then followed by the visual representation of a target word – the word to be chosen as related or unrelated to the prime. After the target word had disappeared from the screen, participants indicated whether the prime and the target were meaningfully related or unrelated by pressing one of two response buttons. Half of the

⁷⁵ Halliday Schiling, Hildur Elisabet. "Semantic priming by words and pictures in lexical decision and pronunciation tasks." *Electronic Doctoral Dissertations for UMass Amherst*. UMass Amherst, 1 Jan. 1998. Web. 10 Apr. 2014. <<http://scholarworks.umass.edu/dissertations/AAI9909217>>.. 1.

⁷⁶ Koelsch, Stefan, Elisabeth Kasper, Daniela Sammler, Katrin Schulze, Thomas Gunter, and Angela D Friederici. "Music, language and meaning: brain signatures of semantic processing." *Nature Neuroscience* 7.3 (2004): 302-307. *UCSD Cognitive Science*. Web. 17 Feb. 2014. 302.

target words were concrete nouns, such as “needle” and “stairs”, while the other half was abstract nouns, such as “wideness” and “narrowness”. The participants were not familiar with any of the musical excerpts used in the experiment, for familiarity with them would defeat the purpose of the study. Results of these methods would be measured in two different ways: 1) The participants’ categorization of the stimuli as related or unrelated, and 2) EEG readings of the N400.⁷⁷

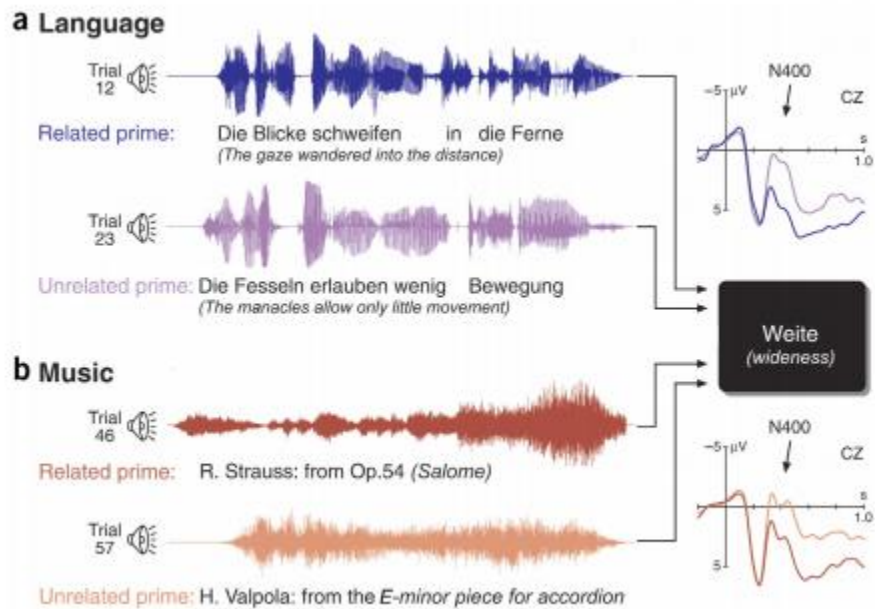


Fig III. Examples of the four experimental conditions preceding a visually presented target word, which in this case is “wideness.” (a) Examples of language stimuli for a related prime (blue) and unrelated prime (purple). The graph immediately to charts the grand-averaged ERPs elicited; the purple (unrelated prime) returns to a much higher point than the blue (related prime). (b) Examples of music stimuli for related prime (red) and unrelated prime (orange). The graph to its right shows that the brain reacted to related and unrelated musical primes in the same way it did to related and unrelated language primes.⁷⁸

The results the study show that both musical and linguistic primes succeed in priming target words. Of the participants’ responses, 92% of target words were categorized correctly as related or unrelated when presented after a sentence, and 80% were categorized correctly after a musical

⁷⁷ “Music, language and meaning: brain signatures of semantic processing.” 302.

⁷⁸ “Music, language and meaning: brain signatures of semantic processing.” 303.

excerpt. The ERP in question also behaved as expected. As hypothesized, the N400 was larger when the target word was presented after semantically unrelated linguistic and musical stimuli. In other words, the N400 has an inverse relationship with the relatedness of the target word and prime: the more unrelated the target word to the prime, the stronger the N400. In addition, the observed N400s did not differ between the language and music domain with respect to latency, amplitude or scalp distribution, nor did they differ in location, orientation, or strength.

It is clear that this particular neurocognitive comparison suggests that the human brain semantically processes music in a very similar, if not the same way that it processes natural language. Yet what conclusions or implications can be drawn from these results? To reemphasize, the purpose of examining neurocognitive studies such as this N400 experiment is to provide a possible explanation of how art music is a universal language; first by proposing that art music is semantically rich and therefore linguistic in nature, and second by establishing its universality through identifying a biological commonality that exists amongst all human being involving the processing of art music. Therefore, the goal of this study and of this entire neurocognitive approach *is not* to prove that art music and natural language have the same semantic systems, or to prove that art music contains fixed semantic content in the same way natural language does. These kinds of conclusions would be extrapolations and illogical assumptions that the evidence does not support.

What *can* be concluded, however, is that music is capable of transferring much more semantic content than previously thought. Because of this, the human brain processes and works to make sense of art music in the same way it does natural language. Whether or not art music does or is capable of having fixed semantic content, the brain attempts to assign semantic meaning to it in a way that makes art music meaningful in itself.

The P600 Study

Another important ERP component in the study of the cognitive neuroscience of music is the P600. Unlike the N400 which is elicited when the brain processes semantic incongruities, the P600 reflects the processing of *syntactic* incongruities in both language and music.⁷⁹ The goal of this study was to determine whether the P600 is a language-specific ERP or whether it can be elicited by nonlinguistic (but rule-governed) sequences also. In this particular study, music was used as the nonlinguistic but rule-governed sequence.

In more specific terms, the P600 is elicited by words that are structurally difficult to integrate into meaningful sentences. Osterhout & Holcomb's 1991 study concluded that the P600 was the electrophysiological marker of the syntactic garden-path effect. The garden-path effect is when a grammatically correct sentence starts in such a way that a reader is most-likely to misinterpret the intended meaning. For example, the sentence "The horse raced past the barn fell" forces the reader to reinterpret the meaning after reading the word "fell". The sentence could be "The horse raced past the barn [and] fell" or "The horse raced past the barn [that] fell". But in fact, because there is no "and" or "that" before "fell", the actual meaning of the sentence is "The horse – [that was] raced past the barn – fell". Because these syntactic integration difficulties elicit the P600, it is said that the P600 reflects a monitoring component of the brain that (re)checks whether one's perception of sequential information was veridical.⁸⁰ This ERP had previously been studied in relation to music by Besson and Faita (1995) yet never in direct comparison to language. This particular P600 study

⁷⁹ Patel, Aniruddh D., Edward Gibson, Jennifer Ratner, Mireille Besson, and Phillip J. Holcomb. "Processing Syntactic Relations in language and Music: An Event-Related Potential Study." *Journal of Cognitive Neuroscience* 10.6 (1998): 717-733. *brainmusic.org*. Web. 2 Feb. 2014. 717.

⁸⁰ Koelsch 67.

shows that harmonically and melodically deviant notes played at the end of a musical excerpt elicit the same P600 ERP as observed in Osterhout & Holcomb's studies involving linguistic stimuli.

As in the N400 experiment, in this more recent P600 study conducted by Patel *et al.* (1998), musical and linguistic stimuli methods were structured in parallel ways to allow for a direct comparison between the two domains. For the linguistic stimuli, the structural content before a fixed target phrase were manipulated so that the target phrase was either easy, difficult, or impossible to integrate. Below are a set of examples:

- A. Some of the senators had promoted *an old idea* of justice. - easy
- B. Some of the senators endorsed promoted *an old idea* of justice. - difficult
- C. Some of the senators endorsed the promoted *an old idea* of justice. - impossible

Although sentences A and B are both grammatical, B is harder to integrate; because C is both ungrammatical and hard to integrate, it should generate the largest P600.

The musical stimuli were phrases of chords created based upon the musical “grammar” of the circle of fifths. Instead of a target “phrase” as in the linguistic stimuli, the musical stimuli had a target chord which was either in key (tonic – in the key of the musical phrase), nearby out of key (three steps clockwise on circle), or distant out of key (five steps clockwise on circle) which were either easy, difficult, or impossible to integrate into the preceding context.

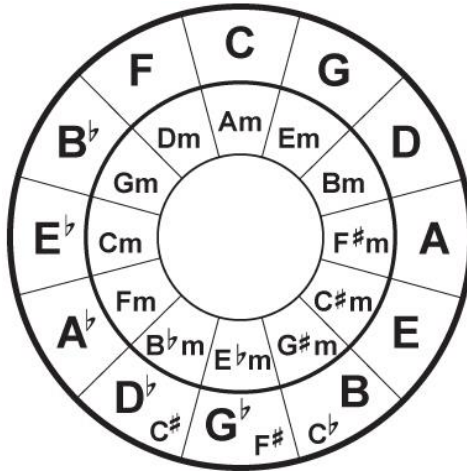


Fig. IV The Circle of Fifths⁸¹

For example, for the key of C major, three steps clockwise is A, a note that is not the most harmonically pleasing in relation to the C, but not dissonant either. Contrastingly, five steps clockwise is B, only one half step away from C and therefore a strongly dissonant note. Because of the particular way in which the circle of fifths is structured upon the harmonic relationships between these twelve notes, the note that is located five steps clockwise to any tonic note will always be more dissonant than the note that is located only three steps clockwise. This harmonic “grammar” of music was used in this study in order to determine the syntactic congruity or incongruity of the target chord.

It was hypothesized that the musical phrase with the distant out of key chord would elicit the strongest P600. In both the musical and linguistic experiments, subjects listened to the stimulus and were asked to judge whether it was acceptable – sensible and grammatically correct/sounding normal – or unacceptable – semantically bizarre or grammatically incorrect/sounding odd.

⁸¹ "Circle of Fifths." *Gitarist Guitarist*. N.p., n.d. Web. 13 Apr. 2014. <http://guitaristguitarist.com/images/circle_of_fifths.jpg>. 1.

Just as in the N400 study, the results of the linguistic and musical experiments were very similar. Although the percentages at which subjects judged the sentences or musical phrases as acceptable differed slightly (as shown in Fig. II), the overall trend was the same for both. The more difficult the integration of the target phrase or chord, the less it was likely that the subject would judge it acceptable. Yet more importantly, the differences between the P600s that were observed between the two experiments were statistically insignificant. For both domains, the more difficult the integration of the target phrase or chord, the stronger the P600 was elicited.

Linguistic Experiment		Musical Experiment	
Ease of Integration	% Judged Acceptable	Distance of Key	% Judged Acceptable
Easy	95%	Tonic	80%
Difficult	61%	Nearby out of key	49%
Impossible	4%	Distant out of key	28%

Fig. V Results of P600 Study⁸²

The principle result of this P600 study is that the ERP elicited by syntactically incongruous words in language and harmonically incongruous chords in music are statistically indistinguishable in amplitude and scalp distribution. This data suggests that the P600 is an ERP that reflects the *general* process of knowledge-based structural integration, and therefore, *is not language specific*. Just as it was concluded in the N400 study, the statistical insignificance of the difference between the EEG readings of the linguistic and musical experiments *does not* imply that music and language have the same syntactic systems or, as languages, are equivalent or interchangeable in any way. However, it

⁸² Patel *et al.* 724.

can be concluded that the syntactical way in which music and language are structured are similar enough that the human brain attempts to deconstruct and make sense of them in the same way.

Although only two specific studies were examined in this section on the neurocognitive approach, there have been various other components that have been examined to compare the human brain's processing methods of music and language. These include the ERAN (an EEG reading named the Early Right Anterior Negativity) and the mERAN (the MEG equivalent of the ERAN) which are affected by syntactic irregularities specifically related to the disruption of musical or linguistic structure or expectation, and the N5 which reflects general syntactic integration. In each of these studies, researchers drew the conclusion that many of the processes that were previously thought to be language-specific are in fact not so; they are also responsible for processing and making sense of music.

Although the significance of this neurocognitive analysis in terms of understanding art music specifically as a language will be discussed along with the other linguistic methods at the end of this chapter, the universal aspect will be explained here because it is specific to this method. This neurocognitive approach that differs so starkly from the other methods used throughout this thesis helps ground the discussion of art music as a universal language upon scientific and very concrete grounds. The conclusions that the studies suggest are based upon tangible, empirical evidence that comes from an established field of science, specifically a biological one.

It is this biological basis that supports the universality of art music as a universal language. These neurocognitive findings are the discoveries of particular patterns in the way the human biological system processes and makes sense of music. Because these are neurocognitive and therefore biological patterns, they do not depend upon whether or not the individual is “musical” or upon his socioeconomic background or cultural-ideological upbringing. Although individuals with

certain cerebral deficiencies or disabilities may be exceptions, the neurocognitive ability to process and make sense of music exists in all human beings. This means that it is a potential, a capacity that exists in each and every one of the young musicians of the youth orchestra projects. It is an empirical fact that holds true for all human beings and, therefore, is a universal reality.

However, because the fact that all humans have the neurocognitive capacity to process and make sense of music was established through comparisons to the way the human brain processes natural language, this means that natural language must be universal in the same sense. Within the scope of cognitive neuroscience or even human biology, this is true. This particular universal characteristic that natural language and art music share, the universal characteristic that is supported by the neurocognitive studies examined in this section, is a specifically *biologically* universal characteristic. It is only by stepping outside of this particular scientific discipline and looking at the question of art music as a universal language through other lenses that the difference between the biological universality of natural language and what I propose is the greater universality of art music as a language becomes evident. It is only through the interdisciplinary approach that the role of art music in the youth orchestra projects can be explored and art music as a universal language can be understood.

Swain's Semantic Range

As Schopenhauer mentions in his metaphysical understanding of art music, the universality of music comes from expressing, not a particular “pleasure, this or that affliction, pain, sorrow, horror, gaiety, merriment, or peace of mind”, but from expressing these sentiments in their broadest sense, in their most essential nature, as a part of the Will. Referencing in such an abstracted manner is precisely what allows each listener to identify and experience the same emotion through the music while, at the same time, being able to do so subjectively. The abstraction creates the freedom and

space for listeners to personalize the experience in a very individual manner. In other words, the abstract nature of what music expresses is precisely what allows art music to simultaneously be a subjective and a universal experience.

This abstract metaphysical characteristic of art music can be understood through the linguistic lens in terms of its semantic nature. When art music is referred to as or compared to a language, one of the strongest criticisms that arises is that music cannot represent or symbolize an object or idea in the same way language does. Susanne Langer, a renowned 20th century philosopher of mind is a strong proponent of this view. Very much against the Romantic view that music is capable of expressing or communicating anything, Langer argues, “Yet [music] is not, logically speaking, a language, for it has no vocabulary... for tones lack the very thing that distinguishes a word from a mere vocable: fixed connotation, or ‘dictionary meaning.’”⁸³ In other words, Langer, along with other critics such as Eduard Hanslick and Etienne Gilson, attack music’s ability to successfully establish semantic relations between musical patterns and any kind of object or idea. On one hand, this claim is very true. No piece of music, no matter how innovative or genius, will ever be able to refer to a chair in the same way the word “chair” does. On the other hand, however, it only takes a slight change in perspective to understand that Langer’s claim is not *completely* true.

Examining the semantic nature of art music reveals that art music and language have much more in common in their linguistic characteristics than may be initially perceived. Joseph P. Swain is an advocate of this view. Swain is an Associate Professor of Music at Colgate University who has written various publications regarding music criticism, critical theory, and music and language perception.⁸⁴ In his essay “The Range of Musical Semantics”, Joseph P. Swain defends music from

⁸³ Langer, Susanne. *Philosophy in a new key: a study in the symbolism of reason, rite, and art*. 3d ed. Cambridge: Harvard University Press, 1957. Print. 228-9.

⁸⁴ "Colgate Directory." *Jay Swain*. Colgate, n.d. Web. 10 Apr. 2014.
<<http://www.colgate.edu/facultysearch/facultydirectory/jswain>>.

accusations of what he has named “conventionalism”. Critics who accuse music of “conventionalism” claim that there is no logical force that supports the representations that we find and make between music and imagery or music and ideas of the external world. For example, these critics may argue that “there is nothing at all natural about listener associations between the darker emotions and the minor mode or between a dotted rhythm trumpet figure and a sword.”⁸⁵ This is claim is certainly true in music; there is no “logical force” that exists as such. However, as Swain points out, this claim also holds true for virtually all words in any natural language. Contrary to intuition, there is in fact no logical explanation that justifies the relation between the spoken word “chair” and its referent in the world, i.e., the physical chair itself. The association that seems so obvious and intuitive to English-speakers is also a result of convention.

Swain then continues to discuss examples in classical music where the relationship between a musical pattern and its referent has been well established and accepted as commonplace, nearly as much as the words that we use in language. A storm “appears” in Vivaldi’s *Four Seasons*, in Beethoven’s *Pastoral Symphony*, in Rossini’s overture to *William Tell*, in Wagner’s *Die Walkurie*, and in Verdi’s *Othello*. Here we have examples of German and Italian composers of various and distinct styles that spread from the late 17th century to the early 20th century. Yet each one of them has used very fast notes set in a minor key in particular passages to connote a storm. Other common pairings are trumpet fanfares that bring forth images of a battle or military, or long drawn, grandiose chords imitating an organ to symbolize the church, both as a religion and an institution. These “conventional” patterns that persist throughout various styles that arose from the distinct regions and time periods of tonal music are proof that semantic associations can be established in music in the same way they are established in the natural languages.

⁸⁵ Swain, Joseph P. "The Range of Musical Semantics." *The Journal of Aesthetics and Art Criticism* 54.2 (1996): 135-152. JSTOR. Web. 20 Nov. 2013. 136.

Yet despite these conventional associations between musical patterns and referents that have been loosely established over various periods of musical tradition, they still seem significantly more abstract or vague than the conventional associations that exists between words and their referents in the natural language. However, this difference in specificity does not imply that art music and natural language are of different kinds. In other words, just because art music cannot reference in the same specific manner that natural language can does not mean that the two belong in separate categories or cannot fall under the same category as language. In fact, these two communicative forms reference objects and ideas in the same way, simply at different degrees. Swain explains this through his concept of *semantic range*.

Swain's concept of semantic range is an explanation of how one reference, whether it be of art music or natural language, can be associated with multiple referents. A reference's semantic range can be visually imagined as a circle that includes its various referents. Therefore, the wider the reference's semantic range, the larger this imaginary circle. Often those who criticize the vagueness of art music's way of referencing a referent fail to notice that the same vague nature can be found in the semantics of natural language also. To illustrate this similarity, Swain lists the various meanings of the word "floor" thought of by his class of college freshmen:

1. part of the building that one walks on
2. the level of a building: "seventh floor"
3. a bottom surface: "ocean floor"
4. a minimum value: "salary floor"
5. to astonish: "he was floored by the announcement"
6. to accelerate a car as fast as possible ⁸⁶

⁸⁶ Swain 138-9.

This list of half a dozen meanings clearly demonstrates “semantic elasticity”, a semantic flexibility that allows references such as the word “floor” to reference such a variety of referents.⁸⁷ Returning to the imagery of semantic range as a circle that contains all of a reference’s possible referents, the semantic elasticity describes the ability for the circle’s boarder to stretch the semantic range.

Therefore, the greater the semantic elasticity of a reference, the greater the semantic range, and the larger the number of referents that are associated with a particular reference. As Swain points out, even in the realm of language in which semantic relations between reference and referent seem concrete and established, the specific reference-referent association can only be successfully identified through examining the context in which the reference is used. Therefore without context and as an isolated term, “floor” proves to be much more semantically abstract than may be initially perceived.

These same ideas of semantic range and elasticity can also be applied to make sense of musical semantics. Just as a single linguistic reference of the natural language has a particular semantic range depending on its semantic elasticity, a single musical pattern (a note, melody, chord, passage, etc.) has its own. The only difference is that the semantic range and elasticity of music is far greater than those of language, thus creating the relative “vagueness”. For example, listeners may hear the opening two bars of Chopin’s Prelude in E Minor and easily identify the sadness (as opposed to joy or anger) due to the minor key.⁸⁸ However, if asked to be more specific, some may respond that they imagine “somebody they love who is no longer with them” or “a grave”, whereas another may have identified “suffocation”.⁸⁹ Taking into consideration the fact that this Prelude is

⁸⁷ Swain 139.

⁸⁸ This is the same piece performed by Benjamin Zander in the TED Talk mentioned in the previous chapter, and can be listened to in full at this following link: <http://www.youtube.com/watch?v=l1OWaAJdNt0>

⁸⁹ These examples are inspired by reactions to the entire piece by professional musicians. The first example is based upon Benjamin Zander’s description of the Prelude in his TED Talk (mentioned in the previous chapter). The second is based upon the epithet “above the grave” given by Alfred Cortot, a Franco-Swiss pianist and conductor of the

written in the minor key and was chosen by the composer himself to be played at his funeral, all of these responses make sense; they are all contained within the semantic range of the two bars that function as the reference.

Yet even when these two bars are placed within the context of the entire piece, the disagreements over the exact meaning persist. Zander's imaginative description and Cortot and Bülow's epithets were stated in reaction to the entire piece, not just the first two bars.⁹⁰ Therefore why does the disagreement and inability to identify a specific referent remain unresolved? This is because the semantic elasticity of music is flexible to such a degree that it does not necessarily allow for a definitive meaning even when placed in the entirety of its original context. Although placing a musical pattern into its full context (i.e. the entire musical piece) will certainly clarify its referent and narrow down the possibilities, the semantic range still remains much wider than it would be for a word in a natural language.

Such is the semantic distinction between art music and language. It is important to see here in Swain's analysis of art music and natural language's semantic natures that the difference between them is not in *nature* but in *degree*. Therefore, the word "floor" and the first two bars of Chopin's Prelude in E Minor are of the same semantic kind. In fact, Swain's concepts of semantic range and elasticity complement the findings of the N400 study. If the semantic nature of art music and natural language are indeed the same as Swain claims, then it makes sense why the human brain attempts to semantically make sense of them through the same neurocognitive processes. Ultimately, this semantic comparison shows that the communicative nature of art music and of natural language have deep, underlying similarities that help support the idea of art music as a kind of language.

late 19th and 20th century. The third ("suffocation") is the epithet given by Hans von Bülow, a mid-late 19th century German conductor, pianist, composer, and devotee of Chopin.

⁹⁰ The Prelude in E Minor is in fact very short, usually lasting no more than 3 minutes.

Philosophy of Language

This section will address the idea of music as a language through the lens of the philosophy of language. Unlike linguistics which is the *scientific* study of language, the philosophy of language explores language through examining the nature of meaning, speech acts, cognition, and how it relates to truth and the world on a more foundational level. This approach will be used in order to respond to two general objections against music as a language that may arise after the comparison between the semantics and neurocognitive similarities between music and natural language.

A Response to Gilson

Even after demonstrating the similarities between the linguistic nature of music and language through semantic comparison and neurocognitive studies, there will remain those who continue to argue against the consideration of music as a kind of language. One of the main and commonly supported arguments comes from Eduard Hanslick, a German music critic of the 19th century. He argued that although music may be able to awaken particular emotions within the listeners, it is ultimately unable to represent or express such emotions themselves. In other words, music fails to be a language because it is unable to transfer semantic content. Many others followed in this argument, including Etienne Gilson, a late 19th and 20th century French philosopher who was elected as an “immortal” of L’Académie Française.

Gilson agrees with Hanslick’s analysis of art music and claims that it functions in a way too distinct from natural language to be considered as a language at all. The way in which he compares art music and natural language is very direct and concrete; he focuses upon the particularly functional aspects that define natural language which he claims art music does not have. Gilson argues that every part of speech in the normal language “performs a well-defined function which

contributes to the definition of the meaning of words and sentences of which the language is composed,” but that nothing similar exists in music.⁹¹ He claims that whereas the smaller components that make up natural language have designated purposes and roles that help make sense of its larger components, art music does not have such a system. He is stating that the smaller components that create musical pieces – a single note, rest, chord, cadence – do not help create the larger nuances or overall meaning of the piece itself. Gilson’s claim leads to the larger implication that because the smaller parts of art music do not mean anything or function to create meaning, the larger parts cannot do so either, ultimately leaving art music meaningless and unable to express in any way.

Yet anyone has gone through any kind of musical training must have heard this phrase at some point or other: “Every note is important.” Having undergone six years of piano training and eight years of cello training during my youth, this was a rule, a musical truth that, no matter which instructor I practiced with or which conductor I played under, seemed to follow me wherever I went. All different kinds of music guides emphasize this point in various different ways. A guide to the Suzuki Piano Method consisting of thoughts collected from ten master teachers of piano, stresses that “there is something unique about the sound of every note because to the player every note is important – as it is to the listener.”⁹² In her instructional guide for music teachers, flautist and music instructor Bonnie Blanchard claims that “every note is like a word in a solemn vow,” drawing a direct comparison to natural language itself.⁹³

⁹¹ Supićić, Ivo. "Expression and Meaning in Music." *International review of the aesthetics and sociology of music* 2.2 (1971): 193-212. JSTOR. Web. 11 Mar. 2014. 205.

⁹² Comeau, Gilles. *10 Teachers' Viewpoints on Suzuki Piano*. Vanier, Ont.: CFORP, 1998. Print. 79.

⁹³ Blanchard, Bonnie, and Cynthia Blanchard Acree. *Making Music and Enriching Lives: A guide for all music teachers*. Bloomington: Indiana University Press, 2007. Print. 142.

An article in *The Christian Science Monitor* suggests a larger implication that can result from the brushing aside of any single, musical note as lacking function or a meaning. While reflecting upon the various thoughts that occur while practicing piano, the author contemplates the importance of each note and realizes, “It’s not just that the sound of one piece could change if a note were left out. If we lost a note for good like middle C, for example, the whole of music could change. Every symphony ever written and every song ever sung would be missing something essential.”⁹⁴ If Gilson’s claim were true, that a system of smaller components giving meaning to the larger ones does not exist in art music, then the disappearance of middle C should not so strongly effect symphonies and songs in the way that it does.

In addition, through defining music as lacking semantic content or capability, Gilson is refusing to accept any other kind of semanticity other than that of the natural language. This means that, according to Gilson, natural language is the only actual language that exists, and therefore, he is in fact dismissing the possible existence of all other kinds of languages.⁹⁵ Yet Ivo Supićić – Croatian musicologist, editor of the *International Review of the Aesthetics and Sociology of Music*, and a leading scholar of musical sociology – explains that Gilson is in fact committing a huge mistake by excluding these other semantic and linguistic possibilities. Art music *is* indeed a language, simply that it is a language that uses different kind of semanticity.

Unlike natural language, musical semanticity does not arise from “expressions and terms characterized by unambiguous or universally accepted meanings” but acquire meaning “only in mutual co-presence, in the whole that they form in a work of music.”⁹⁶ Thus, similar to Swain’s explanation discussed earlier, the semanticity of music depends heavily, if not solely, upon its

⁹⁴ "Music Notes and the One and Only You." *The Christian Science Monitor* [Boston] 12 Nov. 2002: n. pag. *The Christian Science Monitor*. Web. 12 Apr. 2014. 1.

⁹⁵ Supićić 208.

⁹⁶ Supićić 209-10.

musical context (i.e. the musical composition) and the presence of each and every part which creates the whole piece. This is why, as Supićić puts it, “Music possesses a special kind of contextual and conceptually undetermined semanticity.” In other words, although the content-matter may be more ambiguous, art music still has semantic content that depends on the contextual completeness of the piece.

Gilson also makes an attack on music syntax in attempt to dismiss it from the realm of language, yet fails to succeed. Continuing with his very concrete and direct comparison between language and music, Gilson adds that “What is particularly important is that one cannot change the order of notes in a musical motive without turning it into a new motive” whereas “In the spoken language [...] word-order can be changed and even words themselves can be replaced by others, but meaning is preserved.”⁹⁷ There are two very problematic aspects with this claim. First of all, whether or not the original meaning is preserved when word-orders or words themselves are changed or replaced in spoken language is highly debatable. Each word, even when synonyms are used, tends to have very particular nuances and connotations associated with it that are not completely interchangeable with others. Especially when considering verbal exchanges in the spoken language, certain term-connotation relationships are strongly tied to particular regions and the risk of misinterpretation or miscommunication runs very high if one were to accept Gilson’s claim on linguistic syntax.

Secondly, to simply dismiss music as a language on the basis that its syntactic structure is too strict does not hold any ground. The formal languages – such as mathematics, logic, and computer coding – are systems of symbols that are strictly constrained by syntactic rules. In other words, they depend solely upon the very specific order and structure with which the symbols are organized. To

⁹⁷ Supićić 206.

reject musical language due to its syntactic formality would also imply the rejection of all formal languages. Therefore, in order for him to maintain his argument and his position on the a-semanticity of music, Gilson would need to find a way to reject an entire branch of an established kind of language.

A Non-Assertive Language

A second strong objection against the idea of art music as a language within the sphere of the philosophy language, is that unlike natural language, art music is incapable of making an assertion or a declarative statement. In the philosophy of language, “assertion” is not simply a statement but specifically refers to “a speech act in which something is claimed to hold, e.g. *that there are infinitely many prime numbers*, or, with respect to some time *t*, *that there is a traffic congestion on Brooklyn Bridge at t*, or, of some person *x* with respect to some time *t*, *that x has a tooth ache at t*.”⁹⁸ To put it simply, it is a type of speech act to which a true/false judgment can be applied. Understood in this sense, the objection is true. Indeed, music is unable to make such statements that can be considered true or false; one would not be listening to a Tchaikovsky symphony and suddenly exclaim “That’s false!” in response to a musical passage.

Yet simply because art music cannot make assertions does not mean that it cannot be a language. First of all, within the realm of natural languages, there are several types of speech acts to which a true/false judgment cannot be applied. For example, an interrogative sentence – one that forms a question – cannot be true or false. One cannot respond to “Can you close the door?” with

⁹⁸ Pagin, Peter. "Assertion." *Stanford University*. Stanford University, 22 Jan. 2007. Web. 1 Apr. 2014. <<http://plato.stanford.edu/entries/assertion/>>. 2.

“That’s false!” Below are two more examples to demonstrate the inapplicability of a true/false judgments upon the specific speech type.

Imperative	Exclamatory
“Close the door!”	“What a door!”
“That’s false!”	“That’s False!”

These examples of interrogative, imperative, and exclamatory sentences being responded with “That’s false!” show how a true/false judgment does not make sense for these speech acts. Yet, while this holds true, they are considered and accepted as part of natural language. Therefore, to simply reject art music as a language because it cannot make assertions does not make logical sense. If music were dismissed on such grounds, a large part of what we accept as natural language would also need to be dismissed.

Secondly, there is another category of language that does not function under true/false judgments either: formal language. “Formal language” refers to a system of symbols – such as logic, mathematics, and computer coding – that is strictly constrained by syntactic rules. In these contexts, when used within their set of rules, there is no true or false, right or wrong because the string of symbols does not have any semantic meaning until it is assigned. Officially, formal language is defined as “a (possibly infinite) set of finite-length strings composed from a given alphabet, no more nor less” or “a language designed for use in situations in which natural language is unsuitable, as for example in mathematics, logic, or computer programming. The symbols and formulas of such languages stand in precisely specified syntactic and semantic relations to one another”⁹⁹ Considered as such, music certainly seems to fit many of these requirements. Music’s “given alphabet” is musical

⁹⁹ “Formal language.” *Dictionary.com*. Dictionary.com, n.d. Web. 1 Apr. 2014.
<<http://dictionary.reference.com/browse/formal+language>>. 1.

notation – all the notes, “do” through “ti”, with their sharps and flats, note lengths, rests, etc. – which is strung together into musical passages of finite lengths, and these passages possibly have an infinite set of combinations. Although musical notation may not have “specified syntactic and semantic relations to one another”, i.e., syntactic and semantic relations that are predetermined or defined external to the piece of music, art music certainly seems to be used when natural language is “unsuitable” (for example for an artistic endeavor or to express one’s emotions). Therefore, it is clear that although music does not fulfill all of the “requirements” to be purely natural language or purely formal language, art music shares enough characteristics with each category that, although it cannot be considered as one or the other, it can certainly be considered as a language.

As Applied to the Youth Orchestras, Part II

The purpose of using these three approaches – cognitive neuroscience, semantics, and philosophy of language – to understand art music is to see the various characteristics of various disciplines that art music shares with language. The more closely and successfully these parallels can be drawn, the clearer it becomes that art music is in fact a kind of language. Using such different perspectives in examining the comparison is central to making this point because, the more similarities that can be discovered from such disparate viewpoints, the more likely that the two components do in fact have deep, underlying similarities that define their communicative natures.

The exploration of the language-related parallels that exist between art music and language is crucial in finding explanations for the role of art music in the youth orchestra projects. The successful argument of art music as a language that has both semantic and syntactic significance, art music as a communicative tool that allows for the transferring of ideas, can help explain a series of particularly interesting moments experienced in the youth orchestra projects. Whether it be coming

from one of the young musician's personal experiences or from the conductor's philosophical musings, there have been various instances in which art music has demonstrated a unique communicative power that differs from that of simple language.

In the case of El Sistema, Tunstall recounts a variety of moments, some which were briefly presented in Chapter One, in which art music in the youth orchestras demonstrates its deeply communicative nature.¹⁰⁰ One of these in particular especially helps illustrate this point. In the discussion of the various age groups that make up El Sistema's network of orchestras, Tunstall realizes that it is not just the amount of experience or the young musicians' vivacity that makes their performances so powerful or that allows the youth orchestras to respond to the Venezuelan youth's social issues so effectively. Upon this thought she reflects, "Whether the players are eight or twenty-eight, the true miracle of the youth orchestras of Venezuela is not how young they are but how deeply they communicate through music, with one another and with audiences."¹⁰¹ If art music were truly semantically meaningless and unable to express things as Langer and Gilson claim, then explaining "how deeply [the musicians] communicate" would be a very hard task. However understanding art music as a language helps make sense of what is occurring in this kind of situation. It is the art music that serves as a communicative tool that allows the young musicians to communicate amongst each other and with the audience in such a profound and moving way. It is art music's ability to carry meaning in the same way language does, that results in the "true miracle" Tunstall has experienced.

Daniel Barenboim's more philosophical thoughts can also be understood in terms of art music as a language. Throughout *Music Quickens Time*, Barenboim explicitly states how art music

¹⁰⁰ Refer to Chapter I of this thesis, Pages 14-15.

¹⁰¹ Tunstall 128.

often succeeds in moments that natural language fails. Below are a series of his quotes that express this thought.

Music is the common framework – an abstract language of harmony in contrast to the many other languages spoken in the orchestra – which makes it possible to express what is difficult or even forbidden to express with words.¹⁰²

Music possess a power that goes beyond words.¹⁰³

[Ramzi] saw in music not just a combination of sounds, but he understood the fact that every musical masterpiece, as it were, a conception of the world. And the difficulty lies in the fact that this conception of the world cannot be described in words – because were it possible to describe it in words, the music would be unnecessary. But he recognized that the fact it is indescribable doesn't mean it has no meaning.¹⁰⁴

Though these instances can be metaphysically explained by Schopenhauer's concept of the Will, they can also be understood through the consideration of art music as a language as proposed in this chapter. Accepting that art music is capable of carrying meaning and semantic significance explains why Barenboim claims that it can express the forbidden or impossible that words cannot articulate. In this moment, art music becomes a universal language instead of just another simple language, because it is able to express and communicate in a way that surpasses all words in any language and in a way that can be understood – at least neurocognitively – by all human beings.

Additionally, the semantic range and less structured semantic system that defines art music as a language is precisely what allows it to be universal. Although this point may be the most common and strongest argument against the consideration of art music as a language, it is

¹⁰² Barenboim 55.

¹⁰³ Barenboim 93.

¹⁰⁴ Barenboim 123.

simultaneously where it draws its greatest strength. A strict and structured system of associations between reference and referent also implies a particularly *limited* variety of options. As Barenboim puts it, “Music makes the West-Eastern Divan possible because it does not contain limited associations as words do. Music teaches us that there is nothing that does not include its parallel or opposite as the case may be.”¹⁰⁵ The flexibility of possible associations between musical references and their referent in turn allows for the flexibility of possible associations between the referents themselves. Ideas and concepts that formerly did not belong together can now coexist and make sense. Therefore, this semantic liberty that is unique to art music can help explain why, in the context of the youth orchestra projects, individuals who come from opposing sides of the Israeli-Palestine conflict are more willing to recognize the other as fellow humans and participate in a common activity in a more peaceful manner. It can help explain why children from the *villas* of Buenos Aires that participate in the youth orchestras experience a healthier way to socially and personally develop that isn’t so restricted by their socioeconomic background or even the typical rules of their traditional academic settings. The semantic liberty that art music permits the young musicians of the youth orchestra projects allows for the liberty of thought, the freedom from the former cultural and ideological roadblocks that restricted and so strongly defined the parameters of their daily lives.

¹⁰⁵ Barenboim 157.

Conclusion

Though the variety of approaches and methods explored in this thesis may not provide definitive answers, they are meant to provide possible and even likely explanations as to why and how art music plays such an influential role in youth orchestra projects that address specific social conflicts. Despite the difference between geographies, the demographics of the musicians and teachers, and the particular social conflicts that the projects deal with, each of the youth orchestras examined in this thesis has demonstrated how art music is deeply communicative in its nature. Its strong resemblance to language and its unique ability to appeal to all human beings, whether it be in a metaphysical or a neurocognitive manner, show how it is a universal language.

The objective of this thesis is to identify the role of art music in the context of youth orchestra projects that directly deal with social conflicts of specific youth populations. Art music plays a major role in the positive influence of these youth orchestras that give its young musicians the opportunity to learn and develop, both socially and personally, in a healthier or alternative manner. I will argue that art music serves well in this particular context because it is a universal language that allows for the communication and expression amongst the musicians themselves and with others. It is this all-encompassing, communicative and affective nature of art music that makes it a universal language and allows the young musicians of the youth orchestra projects to overcome social conflict.

The diversity of disciplines involved in explaining and understanding art music as a universal language does not necessarily complement one another, but offers a variety of different perspectives to make sense of a common phenomenon. The metaphysical lens based upon Schopenhauer's metaphysics provides a particularly Romantic and almost spiritual understanding of art music that

strongly appeals to a sense of universal harmony and interconnectedness. The linguistic lens that examines art music's strong similarity to language, whether it be natural or formal, provides a more concrete or functional understanding of how art music can be the language that "speaks" to all. Despite the inconsistencies in details between each of the approaches' explanations, it is by following the common thread that runs through all of them that we can more successfully identify the phenomenon behind art music's influential power. Within the scope of this thesis, this common thread is the deeply communicative way in which art music effects those who experience it.

There are a variety of different but related paths that branch off from this initial question that can be pursued for further research but cannot be answered within this thesis. For example, this thesis has limited the idea of a universal language to the genre of art music. However neurocognitive studies not mentioned in this research have demonstrated that the ways in which the human brain reacts when improvising jazz is very similar to the way it reacts when having a linguistic conversation.¹⁰⁶ Finding research and evidence in this way would redefine the scope of the question to include other genres of music. Another direction that could be taken beyond this thesis is to explore the kinesthetic elements that play a role in the effectiveness of the youth orchestra projects in addressing social conflicts. Various child development and education outlets have identified the physical movement and participation as an important learning method.¹⁰⁷ The physical involvement and common activity that the young musicians experience in the youth orchestras may foster the sense of community and teamwork in the same way that sports teams do. These are just two examples from the innumerable other paths that can be taken from where this thesis leaves off.

¹⁰⁶ Lafrance, Adrienne. "How Brains See Music as a Language." *The Atlantic* [Washington DC] 19 Feb. 2014: n. pag. *The Atlantic*. Web. 20 Feb. 2014.

¹⁰⁷ Levy, Annie. "Kinesthetic Skill and Emotional Resilience: some observations from the classroom | Urban Arts Partnership." *Urban Arts Partnership*. Urban Arts Partnership, n.d. Web. 13 Apr. 2014. <<http://www.urbanarts.org/kinesthetic-skill-and-emotional-resilience-some-observations-from-the-classroom/>>. 1.

Ultimately, the research presented in this thesis that helps us understand art music as a universal language can serve a wide variety of purposes. It can inspire new or the continued research into neurocognitive studies related to music, a field that has recently shown particular growth, or into new educational methods to accommodate each student's learning style. The research can help demonstrate the social and educational importance of the youth orchestra projects that deal with social conflict in order to defend those that already exist or inspire others to establish new ones in their own communities.¹⁰⁸ Or, for those of us who face the dwindling world of art music with heavy hearts, this thesis can help defend the social, educational, and cultural relevance that the genre holds in today's society.

¹⁰⁸ The Children and Youth Orchestra Project of Buenos Aires continues to defend their cause and their mission against the conservative city government that has cut off their budget and has caused problems in the administrative side of the project. For further information refer to <http://lafabricaportena.com/cultura/la-crisis-de-las-orquestas-infantiles-entrevista-a-adriana-weschler/#.U03GgPldUcR>. For additional reading on how the El Sistema could be brought to the U.S., refer to Eric Booth's essay "El Sistema's Open Secrets" that can be found at http://www.kidznotes.org/wp-content/uploads/2009/11/El-Sistema-Booth-essay_2.pdf.

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