

**A GREAT WAVE IN THE EVOLUTION OF THE MODERN CELLIST:  
DIRAN ALEXANIAN AND MAURICE EISENBERG, TWO MASTER  
CELLO PEDAGOGUES FROM THE LEGACY OF PABLO CASALS**

by

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## **Abstract**

Pablo Casals (1876-1973) ranks amongst the most influential figures in the history of the violoncello. Casals never held a permanent teaching position, neither did he commit his teaching philosophy to paper. This thesis examines three selected aspects of expressive tools: intonation, vibrato, and portamento – as interpreted by Casals – and defines how they are reflected in methods of two cellists with first-hand access to Casals's knowledge: Diran Alexanian (1881-1954) and Maurice Eisenberg (1900-1972).

The first chapter presents two extensive biographical accounts of these authors. Alexanian taught at the *École Normale de Musique* and was succeeded by his student Eisenberg. Both cellists spent their later careers teaching in the USA. Their relationship to Casals is discussed as well: Alexanian was Casals's trusted colleague, while Eisenberg his favourite student. Alexanian's method *Traité théorique et pratique du violoncelle* was published in 1922 and Eisenberg's *Cello Playing of Today* first appeared in 1957.

All subsequent chapters contain a historical overview of the expressive tools under consideration, how Casals contributed to their development, and how the methods of Alexanian and Eisenberg discuss Casals's contributions. Each chapter contains a critical discussion of the tools' applicability to the playing of today.

The second chapter provides an analysis of Casals's expressive use of intonation, discusses its practical relevance and how it is often erroneously taken for a tuning system. The third chapter introduces how vibrato developed from an occasional ornament to a crucial component of sound production and how Casals brought the "continuous vibrato"

to cello playing. The fourth and final chapter offers a detailed discussion of Casals's right-hand technique and his use of portamento.

My research demonstrates that not all of the content of Alexanian's method identifies with Casals's ideas – Alexanian never studied with Casals and had his own strong views. Alexanian's treatise, however, forms a bridge between two different eras, before and after Casals's hugely influential contribution to cello playing. In comparison, Eisenberg's method is in total accord with Casals's ways of playing and his presentation of methodology is more comprehensive. Eisenberg's method presents the definitive written legacy of Casals's ideas.

## **Lay Summary**

Pablo Casals was a famous Catalonian cellist and teacher. He is recognized as one of the twentieth century's greatest musicians in addition to being a major catalyst for the advancement of cello playing which has had major repercussions since the beginning of that century through today. Although Casals never published his teaching principles, he encouraged the conception of two cello methods: Diran Alexanian's *Traité théoretique et pratique du violoncelle* (1922) and Maurice Eisenberg's *Cello Playing of Today* (1957). In different ways, both works reflect Casals's ideas and together they form the most significant part of his teaching legacy. This thesis examines Casals's views on interpretation and cello technique and defines the extent of his influence on the two methods of Alexanian and Eisenberg.

## **Preface**

This dissertation is an original, unpublished, independent work by the author, Oskar

Falta.

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## Introduction

Pablo Casals's musicality and revolutionary way of playing are regarded as milestones in the development of modern cello technique and performance practice. As a performer, conductor and a political activist, Casals had little time left for teaching. Probably the most significant pedagogical contribution of Casals took place at the École Normale de Musique in Paris. Together with his chamber music colleagues, the pianist Alfred Cortot and the violinist Jacques Thibaud, Casals founded the institution in 1919 and invested a significant sum in the enterprise. He became one of its artistic directors and kept visiting the school every summer to give lectures and master classes.

Casals appointed his like-minded and faithful colleague Diran Alexanian as the full-time cello instructor at the École in 1921. Prior to the establishment of the École Normale, between the years 1910-14, Alexanian wrote a revolutionary cello method influenced by Casals's ideas and principles, *Traité théorique et pratique du violoncelle*, published in 1922. When Alexanian left for the United States in 1937 to further his teaching career at the Peabody Institute and at the Manhattan School of Music, he was succeeded at the École by Maurice Eisenberg, on Casals's recommendation. An American of German birth, Eisenberg was Alexanian's own disciple and his teaching assistant at the École since 1929.

Eisenberg was active as a performer and a teacher in France, but, at the beginning of the Second World War in 1939, he had to flee back to America. There, Eisenberg was on faculty at the former New York College of Music from 1945, at the Longy School of Music from 1952 (where he taught 6-8 times a year) and in 1964 he joined the faculty of

the Juilliard School, where he remained until his death in 1972. In 1953, at Casals's behest, Eisenberg established the International Cello Centre in London and in 1957 published his own cello method, *Cello Playing of Today* – an enhancement of Alexanian's ideas, drawing material from Eisenberg's own teaching experience and his collaboration and friendship with Casals over many years.

Due to the peripatetic nature of their teaching, the pedagogical impact of Alexanian and Eisenberg was global. Their methods could be considered an amalgamation of Casals's ideas on technique and interpretation and today stand for what one could say is in effect a method that Casals never wrote himself. Because both authors were close to Casals on both a professional and personal level, their treatises represent the most comprehensive compilation of Casals's teaching legacy.

Besides Alexanian's and Eisenberg's methods, we do not know much about Casals's methodology. This is the reason why I decided to make these two works the subject of my research, and examine to what extent they actually correspond to Casals's ideas. To interrogate this issue, I have focused on three aspects of expressive tools: intonation, vibrato, and portamento.

The first chapter of this thesis is a biographical introduction of Alexanian and Eisenberg, which also includes an examination of their relationship with Casals – I consider this introduction essential for a better understanding of the two authors' works and ideas. The second chapter is devoted to Casals's expressive use of intonation. Intonation was Casals's trademark – how his approach inspired the two methods, as well as Casals's students is also part of the discussion. The vibrato, which closely relates to

intonation, is the topic that I explore in my research in chapter three. Casals brought the use of continuous vibrato to cello playing: a revolutionary move which reflected in the work of Alexanian and Eisenberg. Because the tools discussed in the previous chapters are mainly concerned with the use of the left hand, the fourth and final chapter describes Casals's bowing technique and defines the manner in which Casals employed yet another expressive tool – portamento. Subsequent discussion examines how Casals brought refinement to this device and how that influenced the two methods under consideration in this thesis.

Although Casals never held a permanent teaching position, a few select students had the good fortune of studying with him privately or at his master classes. I have used interviews and articles by some of these students as auxiliary resources, as well as David Blum's book *Casals and the Art of Interpretation*, a valuable collection of Casals's principles. This thesis will attempt to define these principles and evaluate the scope of Casals's impact on the methods of Alexanian and Eisenberg.

# 1. Biographies of Diran Alexanian and Maurice Eisenberg

## Introduction

"... We artists are like butterflies: when you die, it's finished."<sup>1</sup> With these words, Gaspar Cassadó, once a student of the celebrated cellist Pablo Casals, expressed a fairly common assumption among musicians: that a performer's career has relevance only in his/her lifetime. This certainly could apply in the case of two important cello players and pedagogues of the twentieth century, Diran Alexanian and Maurice Eisenberg. The only biographies currently available are limited to brief and, at times, inaccurate dictionary entries, inaccuracies which have been perpetuated in academic literature.

Pratt's contribution on Alexanian from the 2001 *New Grove Dictionary of Music and Musicians* states that the *Traité théoretique et pratique du violoncelle* was his and Casals's joint treatise.<sup>2</sup> It is true that Casals's name figures in bibliographical records, because he endorsed the method by writing its preface, but the author of the method was in fact Alexanian alone. The *Cambridge Companion to the Cello* and Campbell's *The Great Cellists*, instead, state that Alexanian studied with Grützmacher in Leipzig. Yet, this piece of information is inexact: if we are to believe that Alexanian's studies with Grützmacher in Germany took place between 1896-1901, it must have been in Dresden and not in Leipzig, where Grützmacher only taught until 1860, before moving to

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<sup>1</sup> Gabrielle Kaufman, *Gaspar Cassadó: Cellist, Composer and Transcriber* (New York: Routledge, 2016), xv.

<sup>2</sup> Dorothy C. Pratt, "Alexanian, Diran," *Grove Music Online*, accessed April 14, 2019, <http://www.oxfordmusiconline.com/grovemusic>.

Dresden.<sup>3</sup> Besides, the *Armenian Soviet Encyclopedia*,<sup>4</sup> as well as *La France et l'Arménie à travers l'art et l'histoire*,<sup>5</sup> both mention Dresden as the location of Alexanian's study, before he came to Paris.

Eisenberg's birthdate is yet another disputed fact. The *New Grove* entry on Eisenberg by Forbes (2001) states that he was born in 1902. This information, which cites *Who's Who* as its source, has been repeated in the *Cambridge Companion to the Cello* and *The Great Cellists* as well. Eisenberg's correct birthdate is however 1900, as reported in his obituary in *The New York Times*, and in accordance with the data of the UNC Greensboro Library, home to the collection of Eisenberg's personal music scores and other archival material.<sup>6</sup>

As this brief overview clarifies, Alexanian's and Eisenberg's biographies need to be carefully reconsidered. This document, therefore, opens with a chapter dedicated to their lives in order to provide a hitherto unavailable comprehensive account of their careers as performing artists and teachers. In the following pages, my intention is not only to expand and correct existing biographical information about Alexanian and Eisenberg, but also to highlight and define Alexanian's and Eisenberg's relationship with Casals. In the context of this thesis, this is crucial to understanding how their cello methods provide a window on Casals's own pedagogical ideas – ideas which the great

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<sup>3</sup> Lynda MacGregor, "Grützmacher, Friedrich," *Grove Music Online*, accessed April 14, 2019, <http://www.oxfordmusiconline.com/grovemusic>.

<sup>4</sup> Victor Hambardzumyan ed., *Armenian Soviet Encyclopedia [Haykakan Sovetakan Hanragitaran]* (Yerevan: Akademija Nauk Armjanskoj SSR, 1974), Vol. 1, 160.

<sup>5</sup> Frédéric Macler, *La France et l'Arménie à travers l'art et l'histoire* (Paris: H. Turabian, 1917), 30, BnF Gallica Digital Library.

<sup>6</sup> "Maurice Eisenberg Musical Score Collection 1900-1972," UNC Greensboro Digital Collections, accessed April 8, 2019, <http://libcdm1.uncg.edu/cdm/msseisenberg>.

cellist never outlined coherently. I decided not to include biographical notes on Casals. They would have been superfluous, given the large number of Casals's biographies published to this date.

## **Diran Alexanian**

Diran Alexanian [Alexanyan Tiran Hovannesi] was born on 12<sup>th</sup> April 1881 in Constantinople (present-day Istanbul) to Armenian parents. At the age of fifteen, Alexanian decided to devote his life to music and moved to Dresden to pursue his studies with Friedrich Grützmacher at the Dresden Conservatory, where he was a student from 1896 to 1901.<sup>7</sup> While in Germany, he had the opportunity to study and play chamber music with Johannes Brahms and Joseph Joachim.<sup>8</sup> Aged seventeen, Alexanian performed as a soloist in *Don Quixote* by Richard Strauss, under the composer's direction (this work was premiered earlier that year in Cologne, by Grützmacher's nephew and namesake, Friedrich).<sup>9</sup> The positive reception of his performance brought Alexanian further solo engagements under conductors Arthur Nikisch and Gustav Mahler.<sup>10</sup>

Upon the completion of his studies in 1901, Alexanian moved to Paris. He made his debut there in May 1903, performing at a philanthropic matinée for the aid of schools in the Orient, organized by the newspaper *Le Figaro*.<sup>11</sup> Thanks to this and other

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<sup>7</sup> Hambardzumyan ed., *Armenian Soviet Encyclopedia*, Vol. 1, 160.

<sup>8</sup> David Blum, *The Art of Quartet Playing: The Guarneri Quartet in Conversation with David Blum* (New York: Alfred A. Knopf, 1986), 100.

<sup>9</sup> Lynda MacGregor, "Grützmacher, Friedrich,"; Dorothy C. Pratt, "Alexanian, Diran," *Grove Music Online*.

<sup>10</sup> Pratt, "Alexanian, Diran," *Grove Online*.

<sup>11</sup> "Pour Les Écoles d'Orient: Le Matinée du Figaro," *Le Figaro*, May 25, 1903, 2, BnF Gallica Digital Library.

subsequent appearances, Alexanian soon secured his position in Parisian artistic circles: he met Debussy, Ravel, Saint-Saëns, as well as Cocteau and Diaghilev.<sup>12</sup>

Noteworthy was Alexanian's partnership with the composer, organist and pianist Jean Huré (1877-1930). They formed a duo and in the late 1909 embarked on a concert tour east to Austria, Romania and Turkey. In Vienna they performed at the Musikverein, played for the Queen of Romania in Bucharest, and appeared at the concert hall of l'Union Française in Alexanian's birthplace Constantinople. The presented repertoire included Bach's Solo Suite No. 3 in C Major and Gamba Sonata in G Major, a sonata by Emánuel Moór, a concerto by Saint-Saëns and a cello sonata by Huré, which was possibly the Cello Sonata in F# Major written in 1909 and dedicated to Alexanian.<sup>13</sup>

Although Alexanian was an active recitalist and chamber musician in France, it took more than a decade before he could attain the stature as a soloist in his adoptive homeland. In December 1913, Alexanian appeared with orchestra on two subsequent occasions. He performed the Schumann Cello Concerto with the Orchestre Lamoureux at the Salle Gaveau in Paris, under the baton of Camille Chevillard,<sup>14</sup> and within the same month he interpreted the Schumann Concerto as part of a demanding concert program that included Brahms's Double Concerto (with violinist, George Enescu, under the direction of Pierre Monteux) and Enescu's own *Symphonie Concertante* op. 8 for cello

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<sup>12</sup> Blum, *The Art of Quartet Playing*, 100.

<sup>13</sup> "Personnalités," *Angers-Artiste*, January 6, 1910, 103, BnF Gallica Digital Library.

<sup>14</sup> "Revue des Grands Concerts," *Le Ménestrel: Journal de Musique*, December 13, 1913, 396, BnF Gallica Digital Library.

and orchestra conducted by the composer.<sup>15</sup> Enescu was very fond of the *Symphonie Concertante* (premiered in 1909 by the French cellist Joseph Salmon) and tried to launch it several times without much public success.<sup>16</sup> As one of the earliest performers of this work, Alexanian was entrusted with its performance again in 1935, appearing at the Salle Pleyel with the Orchestre Symphonique de Paris, under Enescu's baton.<sup>17</sup> Completing the association with Enescu in his multiple capacities, Alexanian premiered Enescu's Sonata No. 2 in C Major (dedicated to Casals) in 1936, at the École Normale de Musique with the composer at the piano.<sup>18</sup>

It was in Paris that Alexanian first met Casals, who realized that they shared similar ideas about technique and interpretation. A discussion of many years followed and resulted in Alexanian's method *Traité théoretique et pratique du violoncelle*, written between 1910 to 1914 and first published in 1922, to which Casals wrote a preface.<sup>19</sup> Casals's endorsement secured some popularity for the method, although his prediction that Alexanian's work would replace the superannuated works of the 19<sup>th</sup> century proved to be mistaken. As Margery Enix reports:

... the Alexanian method was soon found to be seriously flawed: overly complicated theoretical formulations and dangerously overextended fingerings which could strain the average hand are but two of its most obvious defects. Nevertheless, it stimulated others to continue studying

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<sup>15</sup> "Le Violon," *Revue Musicale, Société Internationale de Musique*, January 1, 1914, 55-6, BnF Gallica Digital Library.

<sup>16</sup> Pascal Bentoïu, *Masterworks of George Enescu: A Detailed Analysis* (Lanham, MD: Scarecrow Press, 2010), 41.

<sup>17</sup> "Courrier des Spectacles: Musique," *Le Matin: derniers télégrammes de la nuit*, November 5, 1935, 6, BnF Gallica Digital Library.

<sup>18</sup> Bentoïu, *Masterworks of George Enescu*, 370.

<sup>19</sup> Diran Alexanian, *Traité théoretique et pratique du violoncelle* (Paris: A. Zunz Mathot, 1922).

cello methodology and to search for ways to redefine the fundamental principles of playing the instrument.<sup>20</sup>

After the First World War in 1919, Casals, along with Alfred Cortot, Jacques Thibaud and Auguste Mangeot (owner of the journal *Le Monde musical*), established the École Normale de Musique at 64 Rue Jouffroy in Paris. The idea behind the École Normale was to maintain the cultural prestige of France, and create an institution with a more holistic approach to education, producing fully rounded musicians. Apart from cultivation of virtuosos (as was the case at the Paris Conservatoire), the École also focused on education of future teachers. In addition to the principal instrument study, students intensely followed classes in music theory, composition, history of music, and pedagogy, taught by the most prominent artists of the era like Boulanger, Landowska, Dukas, and Honegger.<sup>21</sup> Casals himself invested \$ 20,000 USD in the École and became one of its artistic directors. He appointed Alexanian as the head of the cello department in 1921.

Alexanian's duties comprised teaching cello and chamber music, as well as conducting the school orchestra.<sup>22</sup> Among his students at the École were Maurice Eisenberg (1900-1972) and Antonio Janigro (1918-1989). Other future famous cellists, like Gregor Piatigorsky, Pierre Fournier and Emanuel Feuermann, sat as auditors in Alexanian's

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<sup>20</sup> Margery Enix, *Rudolf Matz: Cellist, Teacher, Composer* (Ottawa: Dominis Publishing, 1996), 153.

<sup>21</sup> Robert Baldock, *Pablo Casals* (London: Victor Gollancz Ltd., 1992), 137; "Missions: History," École Normale de Musique de Paris Alfred Cortot, accessed April 8, 2019, <http://www.ecolenormalecortot.com/en/school-studies/history>.

<sup>22</sup> "Diran Alexanian, Cellist, Dies at 73," *New York Times*, July 4, 1954, 30, ProQuest Historical Newspapers: New York Times with Index.

classes.<sup>23</sup> Although Casals never served as a resident faculty member, he returned each year to give classes on interpretation. His biographer H. L. Kirk gives a detailed account of one such visit:

Casals'[s] masterclasses for 1921 (six sessions between June 20 and July 1) included the Bach solo cello suites, concertos by Haydn, Boccherini, and Schumann, and Beethoven sonatas. The 1921 classes carried a fee of 100 francs for participants, 60 for auditors of the entire series, 15 for a single session.<sup>24</sup>

Another result of Casals's influence on Alexanian was the publication of his edition of the Bach Cello Suites (Paris, Éditions Salabert, 1929). Although the idiosyncratic notation system employed by Alexanian makes this edition unsuitable for performance from the score, its appearance was revolutionary in its time for multiple reasons. Alexanian's aim was to represent implied harmonies, cadences, and contrapuntal relations of voices, which he marked in the score through his specific method of notation, implicating all the relevant articulation. This edition was also significant from the point of view of historical performance practice: it was among the first to contain a manuscript facsimile of the Suites by Anna Magdalena Bach (Boettcher dates the first appearance of a manuscript copy in print back to 1927).<sup>25</sup> Although historically informed performance practice didn't blossom until the 1960s, it is apparent that at the time of the publication of Alexanian's edition of the Bach Suites, Paris was one of the leading centres of the pioneering phase of the early-music revival. Among its foremost advocates was the Paris-

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<sup>23</sup> Margaret Campbell, *The Great Cellists* (London: Faber and Faber Ltd., 2011), 181.

<sup>24</sup> Herbert L. Kirk, *Pablo Casals: A Biography by H. L. Kirk* (New York: Holt, Rinehart and Winston, 1974), 357.

<sup>25</sup> Winfried Pape and Wolfgang Boettcher, *Das Violoncello* (Mainz: Schott Musik International, 1996), 173.

based harpsichordist Wanda Landowska (1879-1959), Alexanian's colleague at the École Normale.<sup>26</sup> In 1927, she settled north of Paris at Saint-Leu-la-Forêt, where she established the École de Musique Ancienne, an institute promoting music courses and concerts. There, Landowska gave the first complete performance of Bach's Goldberg Variations in 1933.<sup>27</sup>

Alexanian moved to the United States in 1937 to further pursue his teaching career at the Peabody Institute in Baltimore and later at the Manhattan School of Music in New York.<sup>28</sup> On Casals's recommendation, his successor as the principal cello teacher at the École Normale became Alexanian's own student, the American cellist Maurice Eisenberg. Eisenberg had already been on faculty at the École since 1929, and remained in this position until the outbreak of the Second World War, when he and his family had to flee back to the United States.<sup>29</sup>

One of the first students of Alexanian in the New World was David Soyer (1923-2010), later to become the cellist of the legendary Guarneri Quartet. Soyer, who studied with Alexanian for four years, described him as a severe and dogmatic teacher, who could play almost any opera score from memory on the piano. Alexanian taught his students how to practice in an effective, economical way, without ingraining mistakes by senseless repetition. His approach to problem solving, according to Soyer, was the

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<sup>26</sup> Bruce Haynes, *The End of Early Music: A Period Performer's History of Music for the Twenty-First Century* (Oxford: Oxford University Press, 2007), 38-40.

<sup>27</sup> Lionel Salter, "Landowska, Wanda," *Grove Music Online*, accessed April 14, 2019, <http://www.oxfordmusiconline.com/grovemusic>.

<sup>28</sup> Lev S. Ginzburg, *Istorija Violonchel'nogo Iskusstva*, Vol. 4 (Moscow: Muzyka, 1978), 204.

<sup>29</sup> Fred Raimi and Milly Stanfield eds., *Maurice Eisenberg by His Students* (s.n.: 1977), 26-7.

following: "That's not good. What's not good about it? What should it be? How do you do it?"<sup>30</sup>

Other selected testimonies of students from Alexanian's American period still describe him as an intellectual and analytical pedagogue, but express certain doubts about Alexanian's qualities as a cellist. The influential soloist Raya Garbousova (1906-1997), known today mainly as a dedicatee of the Barber Cello Concerto, summarizes the impact of Alexanian's teaching as follows: "He influenced a great many eminent musicians and we were all desperate when he died. He was such a knowledgeable man. His playing itself was not attractive but this is quite unimportant compared with what he did for music as a whole."<sup>31</sup> Another notable pupil of Alexanian in America was Bernard Greenhouse (1916-2011), founding member of the Beaux Arts Trio. Greenhouse remembers that Alexanian's bow arm was stiff and his skills as a player doubtful: "He never touched the cello during lessons, except to show an occasional fingering or something. When he did play, it usually sounded terrible, but one excused him because he was not a cellist and he didn't claim to be."<sup>32</sup> Elsewhere, Greenhouse describes Alexanian as a superb teacher, with an analytical, yet musical approach. His technique was old-fashioned, and he had very large hands, which became problematic especially when Alexanian required students to play with his own fingerings.<sup>33</sup> In accordance to this fact, David Geber gives advice in the introduction to the 2003 re-edition of Alexanian's

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<sup>30</sup> Blum, *The Art of Quartet Playing*, 101.

<sup>31</sup> Campbell, *The Great Cellists*, 183.

<sup>32</sup> Tim Janof, "Conversation with Bernard Greenhouse," November 28, 1998, Internet Cello Society, <http://www.cello.org/newsletter/articles/greenhouse.htm>.

<sup>33</sup>Tim Janof, "Conversation with Bernard Greenhouse."

method: "One word of caution, however: the author's [Alexanian's] hands were unusually large, by all reports. His left-hand system, particularly with fingered double stops, was designed with his own anatomy in mind. A hand of average (or below average) size needs careful guidance through the later chapters to avoid injury."<sup>34</sup> Alexanian never asked Greenhouse to pay for his lessons, so the latter invited Alexanian on a gourmet tour through France in the summer of 1949,<sup>35</sup> "from one great restaurant to another," concluding their journey in Prades, where Greenhouse witnessed an emotional first post-war reunion of Alexanian and Casals: the two had not seen each other for twelve years.<sup>36</sup>

Given Alexanian's illustrious career as a performer prior to his arrival in the United States, and the trust he enjoyed from such music masters as Richard Strauss, Casals, and Enescu, the report of Alexanian's negative qualities as a performer given by Garbousova and Greenhouse might appear controversial. This controversy can be easily explained: Alexanian was in his late fifties at the time when he relocated to America. The imminent war didn't present ideal conditions for an elder foreign performer to re-launch his career in a new country and considering Alexanian's busy teaching schedule, he might have given up public performing (and practicing) around that time, in order to shift the focus on his calling as a teacher. Except for one concert appearance at the National Festival of the American Society of Ancient Instruments in Philadelphia (1939), at which

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<sup>34</sup> Diran Alexanian, *Complete Cello Technique: The Classic Treatise on Cello Theory and Practice*, (Mineola, NY: Dover Publications Inc., 2003).

<sup>35</sup> Baldock, *Pablo Casals*, 184.

<sup>36</sup> Campbell, *The Great Cellists*, 193.

Alexanian performed alongside a period instrument ensemble,<sup>37</sup> references to Alexanian in the contemporary press are sparse, and predominantly related to his pedagogical activity. It would be therefore unjust to judge Alexanian's playing capability based only on his later career in the United States. By all accounts, Alexanian was a much sought-after music clinician and widely recognized scholar, earning respect even from the cello virtuoso Emmanuel Feuermann, who trusted Alexanian's judgement and often played for him (which he compared to "going to the laundry") when he was about to give an important performance.<sup>38</sup>

Apart from being a cellist, teacher, and a conductor, Alexanian was also a composer of note. His compositions were mostly based on Armenian folk tunes: *Petite Suite Armenienne* for a string quartet, *Petites Pièces arméniennes* for piano and violin or violoncello (both published in 1919) or *Chant d'émigré* for piano and violin or voice, which appeared in print in 1920. Alexanian set a number of poems to music, e.g. two poems by Camille Mauclair (*J'ai pleuré des Larmes amères, Mes Douleurs sont sous la Terre*) or a poem by Albert Samain, *Soir (Les Roses dans la Coupe)*, all set for voice and piano. While on a visit to Europe for his conducting engagements, Alexanian died on 27<sup>th</sup> June 1954 in Chamonix, France, where he is buried.<sup>39</sup>

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<sup>37</sup> "Notes Here and Afield," *New York Times*, February 19, 1939, 8X, ProQuest Historical Newspapers: New York Times with Index.

<sup>38</sup> Campbell, *The Great Cellists*, 181; Tim Janof, "Conversation with Bernard Greenhouse."

<sup>39</sup> "Diran Alexanian, Cellist, Dies at 73," 30.

## Maurice Eisenberg

Maurice Eisenberg was born in Königsberg (present-day Kaliningrad) to Russian-Polish parents Samuel and Fannie Eisenberg on 24<sup>th</sup> February 1900.<sup>40</sup> When he was one year old, the family relocated to the United States. His father was a synagogue cantor and Eisenberg was thus exposed to music from an early age. At the age of ten, he began his education in music on the violin, before shifting to the cello one year later, when he started his studies with Bart Wirtz at the Peabody Institute in Baltimore on a scholarship. His other teachers in America included Leo Schulz and Willem Willeke.<sup>41</sup> At the age of sixteen, Eisenberg joined the section of the Philadelphia Orchestra under Leopold Stokowski and later became principal cellist under Walter Damrosch at the New York Symphony Orchestra (which merged into the Philharmonic in 1928).<sup>42</sup>

After he auditioned for Casals in New York, Eisenberg decided to renounce his orchestral career and follow Casals's advice to further his studies in Europe, first with Julius Klengel in Leipzig and later with Hugo Becker in Berlin. He then went to work with Diran Alexanian at the École Normale de Musique, where Eisenberg also had a chance to study harmony and counterpoint with Nadia Boulanger.<sup>43</sup> When Casals heard Eisenberg play again, this time in Paris, he was pleased with his progress, offered to give

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<sup>40</sup> "Un Grand Nom du Violoncelle: Maurice Eisenberg," *Paris Soir*, February 28, 1930, 5, BnF Gallica Digital Library; Elizabeth Forbes, "Eisenberg, Maurice," *Grove Music Online*, accessed April 14, 2019, <http://www.oxfordmusiconline.com/grovemusic>.

<sup>41</sup> Ishaq Arazi, "Always Back to Bach: A Glimpse into the Career of Maurice Eisenberg, Cellist," *American String Teacher* 18, no. 2 (May 1968): 7-12.

<sup>42</sup> Barbara Haws, "New York Philharmonic", *Grove Music Online*, accessed April 14, 2019, <http://www.oxfordmusiconline.com/grovemusic>.

<sup>43</sup> Forbes, "Eisenberg, Maurice."

him lessons at the Casals family estate in San Salvador, Spain, and later invited him to appear as a soloist with the Orquesta Pau Casals on numerous occasions. Eisenberg's 1935 October performance at the Palacio Catalano della Musica in Barcelona – featuring the Concerto in B ♭ Major by Luigi Boccherini and *Don Quixote* by Richard Strauss under Casals's own direction – received high praise from *The New York Times*:

"... Eisenberg confirmed himself an artist of admirable sensibility, musicianship and technique – a worthy exponent of his great master [Casals]." <sup>44</sup> Casals himself recollects:

"One of my most talented pupils was Maurice Eisenberg, with whom I was to form a friendship that would prove so precious to me in future years." <sup>45</sup>

While living in Paris, Eisenberg was active in chamber music circles. He performed in a string quartet with Yehudi Menuhin, Jacques Thibaud and George Enescu, and in November 1933 substituted Casals in his celebrated piano trio with Thibaud and Cortot. In March 1936, Eisenberg was invited to record two piano trios with the siblings Yehudi and Hephzibah Menuhin: the trio in D, op. 70 no. 1 'Ghost' by Beethoven and the Tchaikovsky Trio op. 50. This was Yehudi Menuhin's first recording of chamber music and it remains one of Eisenberg's few commercial recordings available. <sup>46</sup>

Eisenberg collaborated with notable composers of his time, both in France and abroad. He had premiered the Concerto-Ballata op. 108, one of the last works of Alexander Glazunov. This work was originally dedicated to Casals, who never performed

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<sup>44</sup> "First Weeks of Barcelona Season," *New York Times*, December 22, 1935, X8, ProQuest Historical Newspapers: New York Times with Index.

<sup>45</sup> Albert E. Kahn, *Joys and Sorrows: Reflections by Pablo Casals* (New York: Simon and Schuster, 1970), 134.

<sup>46</sup> Humphrey Burton, *Yehudi Menuhin: A Life* (Boston: Northeastern University Press, 2000), 169.

it and passed it on to Eisenberg. Glazunov, of frail health and sensing his nearing demise, convinced Eisenberg to take up the piece for the first performance. The latter had to learn it in four weeks. The premiere took place in October 1933 with the Padeloup Orchestra, under the direction of Glazunov himself.<sup>47</sup> By the time of Eisenberg's following performance of the piece (with the BBC Orchestra in London), Glazunov had already passed away.<sup>48</sup> Other examples of Eisenberg's interpretations of works by contemporary composers included the premiere of Julien Krein's cello concerto (December 1933), accompanied by Orchestre Symphonique de Paris conducted by Cortot, or the 1934 performance of Ernest Bloch's *Schelomo* with the London Philharmonic Orchestra and the composer conducting.<sup>49</sup>

As was the case for most artists of the time, Eisenberg's performing career in Europe was brought to a halt in the late summer of 1939, at the outbreak of the Second World War. Eisenberg was then staying at La Croix-Valmer in the south of France. On the day Germany invaded Poland, Eisenberg and his family left to Prades, where Casals was staying at the Grand Hotel. They journeyed on to Bordeaux, where they boarded one of the ships headed to the USA supplied for the rescue of American citizens from the imminent outbreak of the oncoming war. After their arrival in America, the Eisenbergs found a new home in Millburn, New Jersey.<sup>50</sup>

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<sup>47</sup> "Concerts-Padeloup," *Le Ménestrel: Journal de Musique*, October 20, 1933, 409, BnF Gallica Digital Library.

<sup>48</sup> Samuel and Sada Applebaum, *The Way They Play: Book I*. (New Jersey: Paganiniana Publications Inc., 1972), 288-304.

<sup>49</sup> "Ernest Bloch," *The Times*, February 13, 1934, 10, The Times Digital Archive.

<sup>50</sup> Raimi and Stanfield, *Maurice Eisenberg*, 26-7.

After the war, Eisenberg was one of the first foreign concert artists to return to Europe. In March 1946, he performed Boccherini's Concerto in B  $\flat$  Major with the London Symphony Orchestra directed by Malcolm Sargent at the Royal Albert Hall. Campbell reports an unprecedented occurrence on Eisenberg's journey home to the USA: "On the return flight across the Atlantic he was asked by the vice-president of the airline to play for the passengers, the performance to be broadcast to America, live. This must surely have been the first time that a cello recital took place 8.000 feet up in the air."<sup>51</sup> Eisenberg returned to London again the following year and performed Dvořák's Cello Concerto at the Royal Albert Hall with the BBC Symphony Orchestra under Sir Adrian Boult.<sup>52</sup>

Apart from his post-war concert engagements abroad, Eisenberg's solo appearances in his American home base were few: he had to share the concert market with reputed domestic artists of well-established careers, like Leonard Rose or Zara Nelsova (both were also Eisenberg's fellow colleagues on faculty at the Juilliard School). In spite of that, Eisenberg gave a number of notable solo performances with orchestras in the United States in his later career: he performed the Elgar Cello Concerto in E Minor with the Boston Symphony Orchestra under the baton of Charles Munch in 1955 and was a frequent soloist with the New Jersey Symphony Orchestra, which presented Eisenberg with its NJSO Arts Award in 1966.<sup>53</sup>

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<sup>51</sup> Campbell, *The Great Cellists*, 153.

<sup>52</sup> "Concerts &C.," *The Times*, February 1, 1947, 6, The Times Digital Archive.

<sup>53</sup> "Maurice Eisenberg, Cellist to be Given Arts Award," *New York Times*, April 23, 1966, 17, ProQuest Historical Newspapers: New York Times with Index.

Eisenberg was an active pedagogue throughout his life. He joined the faculty of the École Normale in 1929.<sup>54</sup> When Alexanian left France in 1937 to continue his teaching career in the USA, Eisenberg took up the post of principal cello teacher at the École Normale, on the recommendation of Casals. One of Eisenberg's students there was Dmitri Markevitch – later himself a professor of cello at the École. Markevitch recalls his lessons with Eisenberg: "I am sure that I learned more of Casals'[s] technique through Eisenberg than if I had studied with the celebrated Spanish cellist himself." Markevitch also describes how Eisenberg first introduced him to Casals: "Here is a young boy who someday would like to play like you," to which Casals replied: "I hope he will play like himself."<sup>55</sup> After Eisenberg's later relocation to the United States, he served on faculty at the former New York College of Music from 1945<sup>56</sup> and was appointed a visiting professor at the Longy School of Music in Boston in 1952 (where he taught 6-8 times a year). In 1964, Eisenberg joined the faculty of the Juilliard School, where he remained until his death.

Eisenberg significantly contributed to the restoration of cello pedagogy in post-war England, which he continued visiting in the 1950s, giving classes at summer schools across the country: in Exmouth, Battle Abbey, Winchester College and at the Dartington Hall Summer School. When the London Cello School (founded in 1919 by Becker's pupil

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<sup>54</sup> Raimi and Stanfield, *Maurice Eisenberg*, 31.

<sup>55</sup> Raimi and Stanfield, *Maurice Eisenberg*, 11.

<sup>56</sup> "In the World of Music," *New York Times*, October 21, 1945, X4, ProQuest Historical Newspapers: New York Times with Index.

Herbert Walenn) ceased to exist after Walenn's death in 1953,<sup>57</sup> Eisenberg established the International Cello Centre in London in its stead, at Casals's behest. The Centre became an unofficial continuation of the London Cello School, as well as the pre-war Casals Class at the École Normale. Classes, concerts, conferences and lectures took place at the Centre, which also sponsored Eisenberg's 1964 master class at the Teatro San Materno in Ascona, Switzerland. Eisenberg became the Centre's artistic director and spent several weeks there bi-annually until 1966.<sup>58</sup> His student Milly Stanfield was appointed the Centre's administrative secretary.<sup>59</sup> In collaboration with Stanfield, Eisenberg wrote the method *Cello Playing of Today*, which was first published in 1957. Like Alexanian's method, Eisenberg's work featured a preface by Casals. As Eisenberg stated, the work "was never meant to be a 'method,' simply a treatise on the art and technique of cello playing, written in a way that might encourage cellists of all ranks to improve their playing."<sup>60</sup>

For eleven consecutive years starting from August 1962, Eisenberg taught at the Musical Courses of the Costa do Sol in Cascais, Portugal. These master classes – instigated by Eisenberg's student Isaura Lisboa – attracted international students and took place at the Museum of Count Castro Guimaraes. Later, in 1971, the Maurice Eisenberg Cello Competition was organized in the neighbouring Estoril in Eisenberg's honour. The

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<sup>57</sup> Robin Stowell ed., *The Cambridge Companion to the Cello* (Cambridge: Cambridge University Press, 1999), 200.

<sup>58</sup> Raimi and Stanfield, *Maurice Eisenberg*, 13-15.

<sup>59</sup> Baldock, *Pablo Casals*, 145.

<sup>60</sup> Applebaum, *The Way They Play*, 295.

first prize winner was Michael Masters, Eisenberg's own student.<sup>61</sup> Eisenberg himself sat on many other prestigious competition committees, like the Pablo Casals Competitions (1957 in Paris, 1970 in Mexico City).<sup>62</sup>

Walking in the footsteps of Casals, Eisenberg was a notable Bach interpreter. He gave bi-centennial Bach cycles both in the USA and England, such as the performance of all six Cello Suites and the three Viola da Gamba Sonatas in a series of three recitals at the Wigmore Hall. His edition of the Bach Cello Suites was published posthumously by T. F. H. Publications (New Jersey) with a foreword by Casals. Michael Masters recounts how Eisenberg's colleagues often took him for a 'Bach player' and quotes Eisenberg saying: "I like to think that I can play other things too."<sup>63</sup>

It was actually Eisenberg who convinced the reluctant Casals to undertake his now legendary recording of the Bach Suites. At the time Casals was residing in Paris, the English company HMV Victor approached him with the intention of recording the whole set. As nothing could persuade Casals to travel to England, Eisenberg finally convinced the company's record executive to move all the equipment to Paris instead and record there.<sup>64</sup> One of the reasons was that Casals hated the microphone, which he called the 'steel monster,' as it was uncompromising in picking up every possible noise. Eisenberg

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<sup>61</sup> Raimi and Stanfield, *Maurice Eisenberg*, 6-7, 21-3.

<sup>62</sup> Arazi, "Always Back to Bach," 8.

<sup>63</sup> Raimi and Stanfield, *Maurice Eisenberg*, 1; 37.

<sup>64</sup> Arazi, "Always Back to Bach," 10.

refers that Casals would often stop in the middle of the recording session and refuse to go on, as he was not convinced he could give justice to the masterpieces.<sup>65</sup>

Casals was not only an idol of Eisenberg, but also his life-long teacher and a close friend. When a son was born to Maurice and his wife Paula (née Harper), he was given the name Pablo, after Casals, who became the boy's godfather. Casals even built a cottage next to his own house for little Pablo at his estate in San Salvador, where the Eisenbergs had been frequent visitors since 1928.<sup>66</sup> Just before the end of the Spanish Civil War in 1939, when general Franco made his final assault on Madrid, Casals became stranded abroad in London, where he was performing concertos by Elgar, Dvořák and Haydn, all in one evening, with the London Symphony Orchestra. Aware that he wouldn't be able to return to San Salvador, he instead travelled to Paris and stayed with the Eisenbergs. He remained in their apartment overlooking Place de la Porte de Champerret, for fifteen days, recovering from deep depression, before he was able to return to Prades into what was then an exile with no foreseeable end.<sup>67</sup> Casals's political activism (his refusal to perform in protest of the dictatorship of General Franco) also left a mark of influence on Eisenberg who expressed his opposition against the Soviet Invasion of Czechoslovakia in 1968. Eisenberg declined his participation as a jurist at the International Music Competition, held in Budapest that year.<sup>68</sup>

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<sup>65</sup> "Casals and the Bach Suites: A 'Cellist on Colleague's Contribution to Programs," *New York Times*, October 10, 1943, X7, ProQuest Historical Newspapers: New York Times with Index.

<sup>66</sup> Lillian Littlehales, *Pablo Casals* (London: J. M. Dent & Sons Ltd., 1929), 172; Kirk, *Pablo Casals*, 377.

<sup>67</sup> Baldock, *Casals*, 162.

<sup>68</sup> "Cellist to Boycott Festival," *New York Times*, August 29, 1968, 26, ProQuest Historical Newspapers: New York Times with Index.

Eisenberg was forced to retire from the concert platform around 1964 for medical reasons,<sup>69</sup> but kept a busy teaching schedule until his final days. He died in New York on 13<sup>th</sup> December 1972, while giving a class at the Juilliard School.<sup>70</sup>

## **Conclusion**

Both Alexanian and Eisenberg enjoyed multifaceted and successful careers in music. They performed with orchestras as soloists, played chamber music with legendary musicians, premiered contemporary works by prominent composers, and dedicated a large part of their musical lives to teaching. Alexanian's pedagogy was largely music-oriented. He was quite dogmatic and his inflexible pedagogical attitude was not easily adaptable to all of his students. His student, Eisenberg, was by comparison a more active performer. He empathized with each student's individual needs and his teaching was more cello-focused as opposed to Alexanian, who gave up performing in his later life and was mostly teaching without the instrument. Eisenberg always taught with his cello and bow at the ready in order to demonstrate for the students. Alexanian's published cello method was not a success, although it remains a revolutionary milestone of the cello pedagogy. The user-friendly, well-organized and practical method of Eisenberg unequivocally surpasses the work of his teacher Alexanian, although one must not forget that the two methods were published thirty-five years apart. The following must be admitted in Alexanian's defense: he had a large number of successful students, who themselves

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<sup>69</sup> Raimi and Stanfield, *Maurice Eisenberg*, 14.

<sup>70</sup> "Maurice Eisenberg, Cellist, Dies While Teaching Juilliard Class," *New York Times*, December 14, 1972, 50, ProQuest Historical Newspapers: New York Times with Index.

became master players and teachers of international renown. The same cannot be said about Eisenberg's students, even though the quality of a teacher is not directly proportional to the number of well-known students. In the words of professor Tobias Kühne: "A teacher's success is measured by the number of his students in the middle ranks."<sup>71</sup>

Meeting Casals significantly changed the lives of both Alexanian and Eisenberg, from the professional and personal perspective. The relationship between Casals and his contemporary Alexanian, was one of mutual respect and collegiality. In his pedagogical approach, Alexanian was able to maintain his own (often controversial) ideas, perhaps because he never studied with Casals himself and was already a mature artist when the two met in Paris. On the other hand, the relationship between Casals and Eisenberg was one of the teacher-student sort, almost like a relationship between a father and son. On a personal level, Eisenberg was much closer to Casals than Alexanian was. This also had an affect on Eisenberg's pedagogy: he was the true carrier of Casals's ideas. Exposed to the master throughout his career, he played for Casals and sought his advice well into his late middle years as an artist. This does not mean that Eisenberg was only a second-rate duplicate of Casals: Eisenberg was a cellist and a teacher in his own right who made significant contributions both as a performer and pedagogue. As I will discuss in the following chapters, the methods by both Alexanian and Eisenberg provide important points of entry into Casals's expressive realm, and offer a valuable evidence of the great cellist's contribution to the development of cello technique.

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<sup>71</sup> Eduardo Xavier Fargas, "The Violoncello School of André Navarra" (PhD diss., Cardiff University, 2008), 72.

## 2. Expression Through Intonation

Upon hearing Casals for the first time, a participant of his classes at the University of California Berkeley once reportedly exclaimed: "It is *soooooo* beautiful – but why does he play out of tune?"<sup>1</sup> Numerous advanced cello students already in high command of the instrument had to reconsider fundamentally their intonation after playing for Casals. Intonation was his trademark. But what exactly were Casals's intonation principles, and where did they originate? Are his views still relevant to the playing of today? To answer these questions and shed more light on this often-confused topic, I will first attempt to define the concept of Casals's intonation and examine how it is reflected in Alexanian's and Eisenberg's treatises. For the sake of comparison, accounts of other students of Casals and examples from contemporary cello pedagogy will complement my study.

### Intonation According to Casals

Casals believed in a particular concept of intonation practice, termed "expressive intonation," which he himself employed in playing and promoted through his teaching. In his opinion, the equal temperament of keyboard instruments restricts the tuning perception of string players.<sup>2</sup> According to Casals, musicians should not perceive notes as mathematically fixed units (equal temperament), but rather as flexible entities (expressive

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<sup>1</sup> David Blum, *Casals and the Art of Interpretation* (New York: Holmes & Meier, 1977), 108.

<sup>2</sup> David Cherniavsky, "Casals's Teaching of the Cello," *The Musical Times*, Vol. 93, no. 1315 (September 1952): 398-400.

intonation). Apart from being important in itself, every note creates a bridge between what precedes, and what follows it. No note exists in isolation for Casals.<sup>3</sup>

The central principle of this "expressive" approach to intonation is the relation of a note to its neighbours, and a proper placement of diatonic semitones, according to their gravitational tendency (moving closer to another pitch) in a given musical phrase. How and when the expressive intonation is employed depends on the key, underlying harmonic progressions, and the direction of the melodic line. Casals summarizes these principles in a lucid manner: "In general, we are obliged to have the tendency to keep the half-tones together."<sup>4</sup>

Bonnie Hampton, a former student of Casals, gives a comprehensive overview of her teacher's revolutionary view on intonation:

Intonation was of prime and constant importance, and was central to all our work. He [Casals] used expressive intonation, which related to the tonality of the music and to the harmonic structure of a phrase. A melodic line can have slightly higher sharps and lower flats, whereas playing chords requires a more tempered intonation. This heightens the emotional tension.<sup>5</sup>

To illustrate these principles, let us examine the application of expressive intonation on an ascending major scale, using roman numerals for scale degrees. The pitches of the tonic [1], subdominant [4] and dominant [5], remain the same as in equal temperament, forming a fixed frame toward which the other scale degrees are attracted.<sup>6</sup> This attraction

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<sup>3</sup> Blum, *Casals*, 102.

<sup>4</sup> Blum, *Casals*, 106.

<sup>5</sup> Bonnie Hampton, "Lessons with Pablo Casals," *The Strad*, (October 2013): 81.

<sup>6</sup> Blum, *Casals*, 103.

works within the two scale tetrachords: [1,2,3,4] and [5,6,7,1]. The two diatonic semitones of the scale are placed between the third and fourth degree [3-4] and between the seventh degree and the octave [7-1]. According to Casals, these two semitones have a natural tendency to be drawn upwards, especially the seventh degree inevitably resolving upwards to the tonic. Raising the two semitones will also affect the intermediate degrees, which will need to be sharpened in consequence. Degrees [3] and [4] will be drawn toward the dominant, and degrees [6] and [7] toward the octave [tonic]. In other words, major and augmented melodic intervals will become widened, while minor and diminished will become narrowed. Application of these principles makes the scale more dynamic and lends it a new sense of direction.<sup>7</sup>

However, the placement of semitones in the scale differs, if the motion is descending, as Paul Katz (cello professor at the New England Conservatory) explains: "I remember Casals demonstrating the C Major Prelude [by Bach]. He talked about the B natural in the first measure being lower, because the scale was going down. Later, the same B natural would be higher, when the scale went up, because it was acting as a leading tone. It was interesting the way he heard intonation."<sup>8</sup>

Enharmonic pitches as we define them in equal temperament don't sound the same in expressive intonation. As Hampton explains: "The same note can have a slightly different intention from one key to another."<sup>9</sup> If in E Major the note D# (leading tone) is

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<sup>7</sup> Blum, *Casals*, 104.

<sup>8</sup> Tim Janof, "Conversation with Paul Katz," October 10, 2005, Internet Cello Society, <http://www.cello.org/newsletter/articles/katz/katz.htm>.

<sup>9</sup> Hampton, "Lessons with Pablo Casals," 81.

followed by an E (resolution into the tonic), the D# will be played higher. On the other hand, in G Minor, E ♭ (the enharmonic equivalent of D#) will be played lower, when placed after a D (in this case, a dominant). Under such circumstances, the distance between the two enharmonic notes (in this case D# and E ♭ ), can become as large as the distance between a semitone such as D ♮ and E ♭ , says Casals.<sup>10</sup>

Having used the scale to illustrate the application of the core principles of the expressive intonation, the following must be added to avoid confusion: the order of notes drawn together doesn't have to take place in a sequential manner, from one note to the next, as in the scale. A non-harmonic note (e.g. an appoggiatura), might be situated between the two notes in question. The expressive tension can therefore often be delayed over a sequence of several notes, until it reaches its resolution.<sup>11</sup>

In case one of the open strings of the cello has a function of a leading note and thus needs to be sharpened, Casals would either stop the open string with the first finger or choose a different fingering on the string below. The latter option is obviously not possible in case the leading tone is the lowest, open C string [B#].<sup>12</sup> According to Casals, distances between semitones have to be further exaggerated when playing in faster tempi, for a better clarity.<sup>13</sup>

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<sup>10</sup> Blum, *Casals*, 104-5.

<sup>11</sup> Blum, *Casals*, 106; 108.

<sup>12</sup> Blum, *Casals*, 106.

<sup>13</sup> Blum, *Casals*, 107.

Every inquisitive music student reading about the expressive intonation for the first time will possibly question the applicability of Casals's intonation system in a situation when the stringed instrument is supposed to play together with a modern keyboard instrument, tuned in equal temperament. In Casals's own words, such a situation was of no issue: "The discrepancy between expressive and equal-tempered intonation is easily tolerable." As will be explored later in this chapter, not everyone would agree with this claim. In one case, however, Casals would adapt his intonation to equal temperament – when playing a passage in unison with the keyboard instrument.<sup>14</sup> It must be noted at this point that, although Casals was an active advocate and practitioner of expressive intonation, he didn't invent it. His concept of intonation had its roots in the Pythagorean tuning, but also in the performance practice of the Romantic period, as will be clarified in the subsequent paragraphs.

### **Roots of Casals's Thought**

Telemann categorized the violin and the cello as "unrestricted instruments," which "can play purely in tune," since the tuning of stringed instruments is relative and adjustable to the musical context. The historical discussion of intonation thus mainly concerned keyboard instruments with fixed intonation, as it was impossible to incorporate intervals of both pure fifths and pure major thirds into one tuning system. The Pythagorean tuning, used in the Middle Ages, preferred fifths over thirds, which resulted in thirds being larger (even larger than in the later equal temperament). On the other hand, the Mean-tone

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<sup>14</sup> Blum, *Casals*, 109.

temperament (in existence from the mid-15<sup>th</sup> century) favoured thirds, making the fifths narrower.<sup>15</sup> This temperament, practiced by some violinists apparently as late as 1730, distinguished between major and minor semitones: testimonies of Tosi and Quantz speak of the so-called major semitone (e.g. C-D ♭ ) being reportedly a comma higher than a minor semitone (e.g. C-C#). Tosi remarks, that although finer violinists of his time were making a distinction between the two semitones, the same was impossible on an organ or a harpsichord. According to Tosi, it was not a problem if a singer sang along with the organ, as the former could adjust to the latter, "... but since the time that composers introduced the custom of crowding the opera's [*sic*] with a vast number of songs accompanied with bow instruments, it becomes so necessary [to differentiate between major and minor semitone], that if a soprano was to sing D-sharp, like E-flat, a nice ear will find he is out of tune, because this last rises."<sup>16</sup> To accommodate major and minor semitones, Quantz even enhanced the flute with an additional key. He wrote the following in 1752: "Appreciation of [this difference between flats and sharps] is needed by anyone who wants to develop a refined, exact and accurate ear in music."<sup>17</sup> Accounts of Tosi and Quantz indicate that the idea of intonation in the 17<sup>th</sup> and 18<sup>th</sup> century performance practice was different than previously thought: the players of the time perceived flats higher than sharps and as a result heard the leading tones low. This is a concept diametrically opposed to the idea of the earlier Pythagorean intonation, and

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<sup>15</sup> Bruce Haynes, "Beyond Temperament: Non-Keyboard Intonation in the 17th and 18th Centuries," *Early Music*, Vol. 19, no. 3 (August 1991): 357.

<sup>16</sup> Haynes, "Beyond Temperament," 357.

<sup>17</sup> Haynes, "Beyond Temperament," 357.

therefore also to Casals's idea. "A system that differentiates between half-steps, according to their harmonic function, suggests refinements unknown to our ears, which have grown accustomed to a mere 12 notes to the octave," points out Haynes, who also rightly reflects that sources indicating flats higher than sharps reveal nothing about naturals and therefore don't define a specific "temperament."<sup>18</sup> Major and minor semitones were discussed as late as 1813, by which time the equal temperament was already well-established.

The equal temperament presented a practical solution, an intonation system offering an acceptable compromise. And a compromise it was: Haynes calls it an "artifice that gives the illusion that a keyboard instrument is as well in tune as other instruments when played by musicians with the 'refined, exact and accurate ear' of Quantz's time."<sup>19</sup> He further notes that a "temperament" is not even possible for a non-keyboard instrument, as its tuning is not fixed and its intonation is subjected to various external factors. Moreover, on a stringed unfretted instrument, it is not humanly possible to maintain the same level of consistency implied by a temperament. " 'Temperaments' are closed systems designed to help make the intonation of instruments with immovable pitch (like the organ and harpsichord) convincing. But singers and players of stringed and wind instruments have no such limitations – 'temperament' is too rigid a concept to apply to them."<sup>20</sup> Equal temperament encountered some early criticism, as can be noted in Saveur's report from 1707, in which he stated: "[it] is used [only] among the least able

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<sup>18</sup> Haynes, "Beyond Temperament," 357.

<sup>19</sup> Haynes, "Beyond Temperament," 357-63

<sup>20</sup> Haynes, "Beyond Temperament," 357.

instrumentalists, because it is simple and easy."<sup>21</sup> In spite of the simultaneous co-existence of different tuning systems, the equal temperament was nevertheless the most common tuning of the 18<sup>th</sup> century, when it became a standard. Around that time, musicians became more preoccupied with the melodic content of music and began to rise leading tones – this corresponds with Casals's practice. We must not forget that Casals was after all a product of nineteenth century and his principles of intonation might have stemmed from a habit, rather than from a persuasion of the historical Pythagorean tuning. Besides, many other musicians used the expressive intonation naturally: George Enescu once pointed to Casals that such was the case with the Hungarian gypsy violinists, who would use this technique by intuition.<sup>22</sup>

Casals emphasized how important it is for the player to be aware of the harmonic background of music, especially in the Solo Bach Suites, where the harmony is mostly only implied. The player himself is responsible for adjusting the semitones accordingly, even in absence of the supporting harmony.<sup>23</sup> The three aspects of establishing a proper intonation according to Casals are intellectual awareness (identification of the key, study of both the harmonic context and the melodic direction), intuitive perception (determining the proper placement of diatonic semitones) and critical listening (adjusting the pitch).<sup>24</sup> Casals insisted that expressive intonation should be taught to string players

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<sup>21</sup> Haynes, "Beyond Temperament," 359.

<sup>22</sup> Cherniavsky, "Casals's Teaching of the Cello," 398-400.

<sup>23</sup> Blum, *Casals*, 107.

<sup>24</sup> Blum, *Casals*, 107.

from the very outset of their instrumental training.<sup>25</sup> This idea is also reflected in Alexanian's method *Traité théorique et pratique du violoncelle*.

## **Practicability of Expressive Intonation**

The instructional material concerning the basics of left-hand technique (i.e. correct arrangement of the fingers on the string, introduction to the first position) in Alexanian's method is preceded by a presentation of the proper placement of diatonic semitones in a scale, according to the concept of expressive intonation. On a well-tempered keyboard instrument, the two notes D ♭ and C# sound the same and share the same [piano] key. On a stringed unfretted instrument however, D ♭ and C# represent two separate notes sounding differently, as is outlined in the following Alexanian's example: "The D ♭ will be nearer [to] C than the C# would be. For our ear the D ♭ will appear correct ... only if it has a tendency to descend to C, and the C# is satisfactory only if it allows itself [*sic*] to be attracted by D." Alexanian concludes the topic with an outline of the properly placed diatonic semitones applied to scale degrees in "chronological" order: C ♮ , D ♭ , C# , D ♮ , E ♭ , D# , F ♭ , E ♮ , etc.<sup>26</sup>

Hans Jørgen-Jensen defines Casals's intonation as Pythagorean.<sup>27</sup> Elsewhere, Jørgen-Jensen describes Pythagorean tuning as a key to expressive intonation:

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<sup>25</sup> Blum, *Casals*, 108.

<sup>26</sup> Alexanian, *Complete Cello Technique*, 23.

<sup>27</sup> Tim Janof, "Conversation with Hans Jørgen-Jensen," May 1, 2018, Internet Cello Society, <http://www.cello.org/Newsletter/Articles/cellomind/cellomind.htm>.

"... It is used to tune horizontally and melodically, making it very effective in achieving expressive intonation. Musicians often use Pythagorean tuning intuitively; it is the preference for lower minor thirds/sixths, higher major thirds/sixths, and [higher] leading tones in melodic playing."<sup>28</sup> In the Pythagorean tuning, the difference between all enharmonic keys equals 23.5 cents, the so-called Pythagorean comma.<sup>29</sup> The following testimony of Alexanian partly upsets Jørgen-Jensen's surmise that Casals's intonation is Pythagorean: "In the matter of intonation, for example, he [Casals] cares nothing for the 'comma' arbitrarily dictated by mathematical dictation as the set measure of separation of a given degree of a tonal scale from its enharmonic equivalent."<sup>30</sup> Jørgen-Jensen is not entirely wrong in drawing an analogy between Casals's principles of expressive intonation and the concept of Pythagorean tuning, as it may be considered the most suitable theoretical classification available. However, Casals's intonation is not exactly Pythagorean for the following reasons: it is intuitive and flexible and therefore cannot quite be conveyed in exact numbers.

Professional cellists do not embrace unanimously Casals's theory of expressive intonation. When asked if she believes in the concept of expressive intonation, the late Eleonore Schoenfeld (former cello professor at the USC Thornton School of Music) answered: "Tempered pitch is usually the norm, particularly in ensemble playing. If slightly shrinking or widening an interval provides a musical tension, I would consider

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<sup>28</sup> Hans Jørgen-Jensen and Minna Rose Chung, *CelloMind: Intonation and Technique* (Chicago: Ovation Press, 2017), 262.

<sup>29</sup> Jørgen-Jensen and Chung, *CelloMind*, 261.

<sup>30</sup> Lillian Littlehales, *Pablo Casals* (London: J. M. Dent & Sons Ltd., 1929), 132.

using it."<sup>31</sup> One of Schoenfeld's most successful students, Nathaniel Rosen, the first American cellist ever to win the first prize at the International Tchaikovsky Competition in Russia, counts as one of the concept's opponents:

I don't believe in it [expressive intonation]. I think it's a false concept. I think the whole idea that there are different ideas of intonation is a minefield. Casals dominated every chamber music situation that he was in. What would he have done if somebody had said, "I don't agree with you. I don't hear it that high?" And then what if another musician says, "I hear it lower." Who's going to decide who's right? The fact is that, if people practice their scales in an orderly manner, they will all come to the same idea of where the note is supposed to go. That decision is predicated not only on practicing the scales, but on practicing arpeggios, thirds, etc. You can't do all those things and have a different ideal of intonation. All the tones, if they're based on a harmonic framework, will gradually come to their centre, to their proper place, and everyone will play together. I never have trouble playing in tune with my colleagues who deal with the fundamentals such as scale practice, arpeggio practice, and double stops, particularly thirds. I only have difficulty playing in tune with people that make an ideology out of expressive intonation. Piatigorsky didn't talk about that stuff. He wanted things to be in tune. Period.<sup>32</sup>

Rosen's note on the difference in opinion between Casals and Piatigorsky matches the recollection of Paul Katz:

I had just studied the E-flat Suite [Bach] with Piatigorsky and he had me raise certain notes while Casals had me lower them. Casals wanted all the flats very, very low; some I couldn't play low enough for him. I realized at that point that intonation is an art, not a science, since two great artists can hear the same piece very differently.

Another issue touched upon by Rosen is the unilateral authority of Casals. One simply could not contradict him. Casals's enormous contribution to the world of music is

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<sup>31</sup> Tim Janof, "Conversation with Eleonore Schoenfeld," August 22, 1999, <http://www.cello.org/newsletter/articles/schoenfeld.htm>.

<sup>32</sup> Tim Janof, "Conversation with Nathaniel Rosen," March 2, 1996, Internet Cello Society, <http://www.cello.org/newsletter/articles/rosen.html>.

of course not to be questioned, but this does not mean that some of the rules he advocated were not his own mere subjective opinion, or that it was impossible for him to be wrong.

Gerhard Mantel (author of *Cello Technique: Principles and Forms of Movement*)<sup>33</sup> gives an account of Casals's authoritative teaching:

One could not please Casals. The lessons took place in an emotionally tense environment, as if we were in the presence of God himself ... Casals could easily say to a group of high-level students, "You all play out of tune and out of rhythm." In intonation matters he was extremely demanding. He was aware, and made the students aware, that there are quite different intonational situations, depending on melody, harmony, tempo, and expression (Casals'[s] term: "Expressive intonation"), and he became angry when someone left this up to chance ... In one lesson I remember he had me play the first two bars of the sixth Bach Suite at least ten times, answering by playing it himself. It took many repetitions until I found out that he intended to play the second bar ever so slightly faster than the first.<sup>34</sup>

Rosen proposes an experiment to prove his standpoint against expressive intonation. In his opinion, the first F# above the D string has only one form, and doesn't alter with the change of key, i.e. the F# as a leading tone in a G Major scale is the same, as the F# functioning as a tonic in F# Major.

To explain this theory on a practical example, Rosen suggests playing the G Major dominant-to-tonic chord progression on the cello in the following manner:

[IV. D (1), III. A (1), II. F# (3), I. A (0)],<sup>35</sup> resolved in the octave unison [III. G (0), II. G (4)]. In this progression, the F# functions as a leading tone and has to be equally

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<sup>33</sup> Gerhard Mantel, *Cello Technique: Principles and Forms of Movement* (Bloomington: Indiana University Press, 1995).

<sup>34</sup> Tim Janof, "Conversation with Gerhard Mantel," February 12, 2000, Internet Cello Society, <http://www.cello.org/newsletter/articles/mantel.htm>.

<sup>35</sup> Roman numerals represent open strings, capital letters pitches, numbers in brackets fingering.

tempered to the open A string, which cannot be moved. As the next step, Rosen proposes to play the F# in the key of F# Minor for comparison: [IV. F# (4), III. C# (4), II. F# (2), I. A (0)]. In this case, the key has changed, but one cannot state the same about the F#, which still has to be tuned to the A string in the same way, as in the previous example.<sup>36</sup> (Rosen's example is however set in double-stops and as we know from the testimony of Hampton, Casals would also use more tempered intonation in this case).<sup>37</sup>

The interviewer challenges Rosen's view with two counter-arguments. Firstly, defenders of expressive intonation might bring up the following hypothesis concerning Rosen's practical example: perhaps it is not the F# which needs to be adjusted to the open A string because in some other keys – this case inclusive – the A string can theoretically be considered "out of tune." Thus, Rosen is only making allowance for the open string, which can't be changed in pitch. Secondly, it is known that a few string quartet cellists tune the C string slightly higher in order to be in tune with the open E string of the violin (a technique termed as "tight fifths"). In response to the latter argument, Rosen admits there might perhaps be a grain of truth to it – as he himself is tuning the C string sharper when playing with the violin. He doesn't however disprove his former viewpoint.<sup>38</sup>

As a matter of fact, Casals too used to tune the two lower strings of his cello slightly higher, to achieve an equilibrium between the lower and higher registers of the cello, otherwise the two lower strings would sound too low in comparison with the upper

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<sup>36</sup> Janof, "Conversation with Nathaniel Rosen."

<sup>37</sup> Hampton, "Lessons with Pablo Casals," 81.

<sup>38</sup> Janof, "Conversation with Nathaniel Rosen."

two. Another objective of this technique was matching equivalent pitches of the equally tempered piano.<sup>39</sup> This practice was also applied by the late cellist David Soyer, of the legendary Guarneri Quartet, who was a student of Alexanian.<sup>40</sup> Jørgen-Jensen reports that Casals generally tuned his instrument higher when playing with a piano or with an orchestra, which allowed him to project above it.<sup>41</sup>

Casals's expressive intonation is often taken for an outdated practice, particular only to Casals and the immediate circle of his followers. To avoid this possible misunderstanding, let us draw a different example from contemporary pedagogy for a comparison to Rosen's critical viewpoint, and examine the advice of another notable cello pedagogue, Antonio Lysy, professor at the UCLA Herb Alpert School of Music, who published an article on the subject of intonation, both well-tempered and expressive, in *The Strad* magazine. Lysy writes:

To understand the concept of well-tempered tuning, or equal temperament, play an E in first position on the D string, double-stopped with an open G. Now play the same E with an open A. The pitch of the E has to change drastically to ring perfectly with each string. Find a midpoint that is acceptable to both, to 'equalise' the pitch.<sup>42</sup>

Lysy considers the application of expressive intonation to be "more musical" and explains its appropriate use: "It can be used on passing notes, and notes that express major and minor. A flattened third helps to give a sadder character; a sharpened leading note gives

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<sup>39</sup> Blum, *Casals*, 109.

<sup>40</sup> David Blum, *The Art of Quartet Playing: The Guarneri Quartet in Conversation with David Blum* (New York: Alfred A. Knopf, 1986), 27.

<sup>41</sup> Janof, "Conversation with Hans Jørgen-Jensen."

<sup>42</sup> Antonio Lysy, "Mastering Intonation," *The Strad*, (March 2017): 78.

the feeling of pushing towards the tonic, where it will resolve, adding to the tension of the music."<sup>43</sup>

Xavier Gagnepain, who counts among the most sought-after cello professors in France, is yet another critic of expressive intonation. In Gagnepain's view, some intervals (whether sung or played) are more difficult than others, either because they are encountered less often in the repertoire, or else their notation is unusual. Mainly the augmented and diminished intervals fall into this category, as they best express harmonic tensions, which we aim to underline through expressive intonation.<sup>44</sup>

There is no doubt about the existence of what Gagnepain calls "poles of attraction" possessed by certain notes. A musician playing a leading tone too low would only reveal his lack of awareness of this phenomenon. In fact, there are notes that need a resolution – such like the leading tone into the tonic, or the seventh of the dominant seventh chord into the mediant [third scale degree] – a factor one cannot neglect from the perspective of intonation. If, however, we were to base our inner perception of intonation on the exaggeration of harmonic and melodic tensions (narrowing the diatonic semitones), we might easily cross the border of what is considered acceptable. As a matter of fact, Gagnepain insists that an overuse of expressive intonation should be avoided "like the plague."<sup>45</sup>

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<sup>43</sup> Lysy, "Mastering Intonation," 78.

<sup>44</sup> Xavier Gagnepain, *Du musicien en général...Au violoncelliste en particulier* (Paris: Philharmonie de Paris, 2017), 71.

<sup>45</sup> Gagnepain, *Du musicien en général*, 71.

While some intervals sound well melodically after being adjusted expressively, they might easily become insupportable if perceived harmonically. One of the most extreme principles of expressive intonation, which Gagnepain considers not completely unfounded and yet terms it "absurd," is that of playing all the sharps higher and all the flats lower. Gagnepain poses a rhetorical question with a slight note of sarcasm: "... to play all sharps high and all flats low (... and to play all the naturals in tune?!)."46

In certain cases, the use of expressive intonation is suitable, giving more clarity to the key. But if we were to apply its rules to every diatonic semitone, how could we possibly account for an enharmony between the keys of F# Major and G ♭ Major, considering that a G ♭ is a tonic of G ♭ Major no less than a F# is a tonic of F# Major or a C of C Major?47 Although chromatic semitones in tonal music are encountered less often than diatonic semitones, the ear of a musician influenced by expressive intonation gets disoriented in chromaticism, absent of any points of tonal reference. Therefore, the only possible course of action is playing chromatic passages in equal temperament. Gagnepain reflects: Would an experienced musician be able to produce a chromatic scale divided into e.g. fifteen semitones in the span of an octave?48 Among the variety of expert opinion on expressive intonation, Maurice Eisenberg's view seems less dogmatic: he offers a modern approach, encompassing the whole spectrum of the aforementioned views, while remaining faithful to Casals's ideas at the same time.

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<sup>46</sup> Gagnepain, *Du musicien en général*, 72.

<sup>47</sup> Gagnepain, *Du musicien en général*, 72.

<sup>48</sup> Gagnepain, *Du musicien en général*, 72.

In *Cello Playing of Today*, Eisenberg described intonation as: "... the result of the finger seeking and finding the heart of a note because of an intense desire to produce it." Eisenberg makes a distinction between the "absolute" intonation of the piano or organ, immovable and mathematically measured, and the "relative" intonation of singers and players of stringed instruments, related to the key and harmony. Except for open strings, which are tuned in advance, string players have the possibility to alter the pitch and thus produce a wide scope of "sensitive" notes and intervals.<sup>49</sup>

Eisenberg's fundamental concept of intonation is identical to Casals's: it is important to learn to hear notes as part of an interval, rather than as isolated sounds. Same as Casals, Eisenberg advocated lower-pitched minor thirds and minor sevenths,<sup>50</sup> and higher-pitched major thirds and leading tones. On the other hand, contrary to the resolute statement of both Casals and Alexanian, that principles of expressive intonation should be introduced to string players early in their development, Eisenberg has certain doubts. Wouldn't such a concept be confusing to a beginner?<sup>51</sup>

Eisenberg concludes on the topic of expressive intonation: "If exaggerated, the whole reason for its inception is lost, especially when playing with a tempered instrument. It might moreover come to be regarded as a formula instead of being the fulfillment of a deeply felt instinct. Yet if it is neglected, the ear becomes dulled and learns to be satisfied with the imperfections of a 'tempered' tonality."<sup>52</sup>

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<sup>49</sup> Maurice Eisenberg and M. B. Stanfield, *Cello Playing of Today* (London: Lavender Publications, 1966), 74.

<sup>50</sup> Eisenberg and Stanfield write incorrectly "diminished sevenths."

<sup>51</sup> Eisenberg, *Cello Playing of Today*, 74.

<sup>52</sup> Eisenberg, *Cello Playing of Today*, 74.

## Conclusion

A common confusion regarding Casals's expressive intonation is its erroneous categorization as a temperament or a tuning system. Instead, it should be redefined as an adjustment of the standard equal temperament, altered according to the content of the music and/or the player's musical instinct. Casals's dogmatism did not leave much space for constructive criticism from the side of his contemporaries, whether they were students or colleagues. His word was always final and only a handful of people dared to question his statements.

In fact, intonation can be as personal as a player's sound: note only the diametrically opposed opinion of Casals and Piatigorsky, who were both legendary cellists of merit and yet heard differently. The diversity of expert views on expressive intonation (including the treatises by Alexanian and Eisenberg) provides us several common-ground conclusions. It is apparent that its concept cannot be considered a general rule, applicable to every situation of music making and suited for everyone – it can be defined as an intonation practice rather than a temperament, and thus it is up to the player's taste to use it or not. The concept of expressive intonation allows neither for enharmony, nor for chromaticism, and it can only be applied to the horizontal (melodic) dimension of music. Expressive intonation is individual and intuitive, but if analyzed from the theoretical point of view, it is closest to the Pythagorean tuning in its principles. It can be considered an expressive tool or an optional adjustment of equal temperament, which still remains the primary reference point in intonation for the present-day musician.

If Casals's teaching had a negative side to it, it was certainly his inflexibility of opinion. As a result, it might be said that his views more closely resembled that of an ideology rather than a teaching philosophy. Along the same lines, Alexanian's method presents the expressive concept of intonation as a matter of fact, without leaving much space for explanation and in-depth clarification of its principles. The placement of the topic within the structure, at the very outset of his method, is not very appropriate either and as Eisenberg stated, the concept of expressive intonation might only appear confusing to the beginner. Alexanian's rather opinionated presentation of information on the topic of intonation could have been a purposeful aim to strongly oppose the current practice, by taking a more extreme position. However outdated his views may appear, Alexanian's contribution to cello pedagogy is indisputable. The method he wrote forms a bridge between the old-fashioned approach of nineteenth-century treatises and the modern practice, of which Eisenberg is a worthy representative. Eisenberg most fittingly articulates Casals's concept of intonation and presents it to the reader in a comprehensive form. This concept, upgraded by Eisenberg's personal input, remains relevant to modern cello playing of our day, even though several decades have passed since the first publication of *Cello Playing of Today*.

### **3. Vibrato: from an Embellishment to a Crucial Component of Sound**

#### **Production**

Cello methodology always closely followed the more advanced methodology of the violin. When the innovative players of the Franco-Belgian school in the second half of the nineteenth century first introduced a practice described as "continuous vibrato" in modern terms, the cello world still adhered to the old aesthetic of sporadic vibrato and had to wait for Casals to finally bring this innovation to cello playing.

Because of Casals's endorsement, Alexanian's method has been taken for granted as an unquestionable window to Casals's own ideas – many writers, including Robert Philip (1992) present Alexanian's principles as if they were Casals's own.<sup>1</sup> Nevertheless, Casals and Alexanian were not always in exact agreement. In order to find out whether their views matched or differed on the subject of vibrato, I will look at Casals's ideas outside of Alexanian's method, as well as search for similarities in the method of Eisenberg. For a better understanding of the state of scholarship before Casals's apparition, a historical introduction to vibrato will preface this chapter.

#### **Vibrato before Casals, an Introduction**

The oscillation of pitch wasn't always exclusively termed 'vibrato.' Some of the historical expressions designating vibrato included *Tremulant / Tremoleto* (Leopold Mozart, 1756), *Tremolo* (Spohr, 1832), *ondulation* (Baillot, 1834) or *sons vibrés* (Bériot, 1858).

Moreover, any of these terms could convey multiple meanings as well: an accent (L.

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<sup>1</sup> Robert Philip, *Early Recordings and Musical Style: Changing Tastes in Instrumental Performance, 1900-1950* (Cambridge: Cambridge University Press, 1992), 102.

Mozart compared the vibrato to the effect of striking a slack string or bell), rapid staccato notes (G. J. Vogler) or even right-hand undulation (Rode, Kreutzer, and Baillot in their *Méthode* of the Conservatoire, 1803).<sup>2</sup> These techniques are certainly different from what we now call "vibrato." Occasionally, vibrato was indicated in the score, although such markings were rare. These in existence included dots over notes (the number of dots conveying the number of pulsations), or different kinds of wave-like signs, employed by Baillot (1834), but also, much later, by Joachim and Moser (1905).<sup>3</sup> This latter sign was identical with the modern marking used to define the duration of a trill.

In the eighteenth century, vibrato was mostly considered an ornament. It was used more frequently than previously thought, and certainly more than the writers of the time conceded. Anner Bylsma points out that Francesco Geminiani, in his treatise *The Art of Playing on the Violin* (London, 1751), suggested using vibrato as often as possible.<sup>4</sup> It wouldn't be correct, however, to take his testimony for a historical account of continuous vibrato as we know it today. As Brown notes, Geminiani's comment is "the only endorsement by a significant musician of the mid-eighteenth century of frequent vibrato specifically as a means of enhancing tone" and "Geminiani's ... opinion has no parallel in other instrumental or vocal methods during the succeeding century and a half." Therefore, Geminiani's use of vibrato may have been regarded as an abuse by his contemporaries and successors. Indeed, reports of vibrato overuse abound. In 1756, the progressive

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<sup>2</sup> Clive Brown, *Classical & Romantic Performing Practice: 1750-1900* (Oxford: Oxford University Press, 1999), 517-19; 529.

<sup>3</sup> Brown, *Classical & Romantic Performing Practice*, 538-9; 547-52.

<sup>4</sup> Bernard D. Sherman, *Inside Early Music: Conversations with Performers* (New York: Oxford University Press, 1997), 210.

Leopold Mozart spoke of players who "tremble consistently on each note as if they had the palsy." Along the same lines, the cellist Romberg (1767-1841) commented on the former abuse of vibrato (in the latter part of the eighteenth century) and called for its restriction. Even the legendary violinist Viotti was critiqued for his "somewhat strong *tremulando*" in the late 1790s.<sup>5</sup> Such abuse of vibrato was confirmed, but also condemned, in the cello method of F. A. Kummer (Leipzig, 1839): "Formerly, people vibrated much too much [*sic*]; the modern style of playing demands, that we also be able to draw with clear lines [without vibrato]."<sup>6</sup>

As these aforementioned testimonies suggest, frequent vibrato as an embellishment grew out of fashion at the beginning of the nineteenth century and faced resolute opposition for a long time to come. French violin methods published between 1800 and 1850 considered the vibrato a negligible topic: for example, the *Méthode* of the Conservatoire from 1803 didn't even contain a single reference to left-hand vibrato. Other accounts from the same period considered vibrato a historical curiosity, calling it "obsolete" (Jousse, 1811) or an "old ornament [*Manier*]" (Dotzauer, 1832). In some instances, passages discussing vibrato were completely left out in re-editions of historical methods, as was the case with Woldemar's 1801 edition of Leopold Mozart's treatise. This is surprising, as Mozart's view on vibrato was very moderate and would be in line with the widely accepted opinion of the eighteenth century: "... [vibrato] must be employed only in such places where Nature herself would produce it."<sup>7</sup> Significant was the opinion

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<sup>5</sup> Brown, *Classical & Romantic Performing Practice*, 525-28.

<sup>6</sup> Sherman, *Inside Early Music*, 210.

<sup>7</sup> Brown, *Classical & Romantic Performing Practice*, 529.

of Spohr (1832), who advised against continuous vibrato. His influence on the German violin school lasted for several decades: Joachim and Moser still quoted Spohr as late as 1905. Vibrato as an essential aspect of tone production first emerged from the influence of the Franco-Belgian violin school at the turn of the twentieth century, with violinists Wieniawsky, Ysaÿe, and Kreisler among its major proponents. Carl Flesch noted:

Ysaÿe was the first to make use of a broader vibrato and already attempted to give life to passing notes, while Kreisler drew the extreme consequences from the revelation of vibrato activity; he not only resorted to a still broader vibrato, but even tried to ennoble faster passages by means of a vibrato which, admittedly, was more latent than manifest.<sup>8</sup>

Authors of violin methods and treatises from the eighteenth and nineteenth centuries addressed the question of vibrato in greater detail; by comparison, very little on this matter is found in methods for the cello. Mentions of cello vibrato were seldom in treatises pre-dating authors of the so-called Dresden cello school (Dotzauer, Romberg, Kummer). Friedrich Dotzauer in his 1832 bilingual German-French *Violonzell-Schule* referred to the vibrato in similar terms as L. Mozart: either as *tremolo* or *tremblement* (trembling) and described it as a casual embellishment employed "especially by Italian professors" (this latter reference was omitted altogether in the German text of Dotzauer's method). Although Dotzauer didn't fully reject the use of vibrato, he considered it an outdated element. He also referred to a different kind of vibrato, executed with the bow arm, a wave-like motion of the right wrist, termed *ondulé*.<sup>9</sup> This was probably a common technical tool employed by solo players of the time, suggests Brown. Because Dotzauer

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<sup>8</sup> Brown, *Classical & Romantic Performing Practice*, 535.

<sup>9</sup> George Kennaway, *Playing the Cello: 1780-1930* (Farnham: Ashgate, 2014), 123-42.

regarded the bow vibrato as interchangeable with the left-hand vibrato, we may assume that Dotzauer regarded its variation in pitch almost negligible.<sup>10</sup> Bernhard Romberg (1840), who made a distinction between a "close-shake" [vibrato] and a "passing-shake" [mordent], described the vibrato favourably only "when used with moderation ... at the beginning of the note." But the first cellist who discussed the vibrato at a greater length was the previously-quoted Kummer. Both Dotzauer and Romberg sometimes indicated the vibrato distinctly in the score, using a wave-like marking, while Kummer followed the same practice with a written-out indication "vibrato." Nevertheless, such indications failed to become established, as the cellist Carl Schroeder noted in 1893: "A special sign for the close shake [vibrato] is not in general use ... sometimes the indication 'vibrato' is met with." Schroeder also mentions that the employment of vibrato was "being left to the player's taste."<sup>11</sup>

Such was the state of scholarship at the time of Casals's musical upbringing. With Casals's apparition, the aesthetics of the nineteenth century met with new possibilities. As Robert Philip writes: "Of all the string-players who lived through the change from the traditional to the modern approach, the one who most succeeded in combining the virtues of the old and the new styles was the cellist Casals."<sup>12</sup>

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<sup>10</sup> Brown, *Classical & Romantic Performing Practice*, 538.

<sup>11</sup> Kennaway, *Playing the Cello*, 123-42.

<sup>12</sup> Philip, *Early Recordings and Musical Style*, 105.

## Casals's Principles and Personal Input

By the time Casals's international reputation reached its peak around 1914, the traditional approach of nineteenth-century cello performance practice (vibrato inclusive) was still prevalent. The cello virtuoso Alfredo Piatti, who passed away in 1901, can serve as one of the last examples of this past tradition. He was playing with minimum vibrato and still without the endpin.<sup>13</sup> Casals, who represented the new direction, vibrated continuously and was capable of large variety of vibrato.

His recommendation to students was to match the vibrato at all times to the character of the music, rather than using it as a tool *per se*. Many young cellists vibrate consistently, without first considering where it is appropriate and whether their action reflects the intention of the composer: as was advised by an anonymous author of *Hints to Violin Players* from the second half of the nineteenth century: "... master the close shake [vibrato], but do not let the close shake master you."<sup>14</sup> Casals's ideas on vibrato are best summarized by David Blum:

So often vibrato will be taught as a skill in itself with attention given to its technical basis rather than to its interpretative relevance. An aesthetic principle is thus acquired without its being related to the aesthetic material – which is not tone as an abstract phenomenon, but tone as it mirrors the dynamic process of change in a work of art. "Vibrato in itself cannot be expressive," Casals has said, "because that depends on how it is applied. The vibrato is a means of expressing sensitivity, but it is not a proof of it."<sup>15</sup>

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<sup>13</sup> Lynda MacGregor, "Piatti, Alfredo," *Grove Music Online*, accessed April 14, 2019, <http://www.oxfordmusiconline.com/grovemusic>.

<sup>14</sup> Brown, *Classical & Romantic Performing Practice*, 534

<sup>15</sup> David Blum, *Casals and the Art of Interpretation* (New York: Holmes & Meier, 1977), 134.

Unlike the violinist Kreisler, Casals believed a constant vibrato might end up sounding monotonous. Casals was not afraid of using open strings between vibrated notes – even in expressive melodies – and would avoid it altogether in relevant situations, especially in softer dynamics or in moments when the cello plays a subordinate or accompanying role to the piano. He reminded his pupils that the piano is after all an instrument without vibrato. On one occasion, Casals advised a student to practice a movement of Bach without vibrato for a whole week, in order to realize and appreciate the "expressive capacity of the bow."<sup>16</sup> This means that the vibrato must always work in complete harmony with the bow arm. Regarding this interdependence of hands, Blum reports: "Casals'[s] vibrato was always receptive – but never superordinate – to the formulating activity of the bow."<sup>17</sup> On the subject of the width of vibrato, Casals found oscillation around both the flat and sharp side of the pitch disagreeable and preferred to vibrate solely towards the sharp side of the pitch. At the beginning of the twentieth century, Casals's uncommon approach was regarded as revolutionary. His ideas were soon to become influential. One of the earliest followers of Casals's ideas was Diran Alexanian, who moved to Paris around 1901. There, influenced by some of the most prominent musicians of the day, he began to question his musical upbringing in the German tradition, including its reserved approach to vibrato. Meeting Casals further influenced Alexanian's ideas: a collaboration between the two cellists followed, only to

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<sup>16</sup> Blum, *Casals*, 136.

<sup>17</sup> Blum, *Casals*, 137.

crystallize in the *Traité théoretique et pratique du violoncelle*, in which Alexanian recorded many of Casals's progressive principles.

### **Alexanian, Facing the Old Aesthetics**

In his *Traité*, Alexanian begins the introduction to the chapter on vibrato with an opinionated criticism of the old school, which he claims forbade a regular use of vibrato in fear of an inaccurate intonation.<sup>18</sup> It is not clear which "old school" Alexanian had in mind, although we may suppose he was generally referring to the Romantic period, when the vibrato was only used "with discretion and selectively," especially in the German realm.<sup>19</sup> Alexanian continues: "I knew a very aged violinist, who maintained that the vibrato was an unhealthy habit."<sup>20</sup> Alexanian was known to have played chamber music with Joseph Joachim, who could have possibly been the violinist in question. Fifty years Alexanian's senior, Joachim was an avid opponent of continuous vibrato. One of Joachim's prominent pupils and the last heir to his ideas on the vibrato was Leopold Auer, who himself produced a number of world-class violinists as a teacher, including Heifetz and Milstein. On the subject of vibrato, Auer wrote that instead of being applied in form of an embellishment, the vibrato got abused by musicians only to become "... a plague of the most inartistic nature."<sup>21</sup> Neither Heifetz nor Milstein followed his teacher in this

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<sup>18</sup> Diran Alexanian, *Complete Cello Technique: The Classic Treatise on Cello Theory and Practice* (Mineola, NY: Dover Publications Inc., 2003), 96.

<sup>19</sup> Bruce Haynes, *The End of Early Music: A Period Performer's History of Music for the Twenty-First Century* (New York: Oxford University Press, 2007), 55.

<sup>20</sup> Alexanian, *Complete Cello Technique*, 96.

<sup>21</sup> Clive Brown, "Vibrato and Portamento in Nineteenth-Century Violin Playing," *Journal of the Royal Musical Association*, Vol. 113, no. 1 (1988): 111.

particular respect and, as we know from their recordings, both violinists vibrated more continuously than not. On the other hand, Auer didn't represent the modern approach and, according to Brown, was considered "one of the last important advocates of the old aesthetic."<sup>22</sup>

In Alexanian's words, the vibrato is an "expressive undulation" and an essential contributing factor to the fullness of tone colour. Alexanian considered the contrary – a non-vibrato sound – a "dull sonority."<sup>23</sup> For a proper application of vibrato, the player has to decide what kind of undulation is appropriate in a given situation, as well as the undulation's frequency and amplitude. The finger pad is the contact point between the vibrating finger and the string, approaching it at a slightly acute angle. The result is both a precise and rounded sound.

Alexanian considered vibrato in fast passagework superfluous. In situations where the player takes on the role of a secondary voice to other instrument(s), the vibrato should be avoided as well – if not employed with care, it might disturb the principal melodic voice. The relation between the vibrato and dynamics is equally important. The vibrato should become slower and more elastic in softer dynamics. If the score indicates louder dynamics, faster and agile vibrato is more suitable. Caution is advised when shifting between different registers: the shorter the string gets, the more reduced the finger oscillation should be.

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<sup>22</sup> Brown, *Classical & Romantic Performing Practice*, 535

<sup>23</sup> Alexanian, *Complete Cello Technique*, 96-7.

Alexanian warns against vibrating with the first finger formed into an extended position. He instead recommends re-forming the hand last-minute at the end of the note prior to an extension. The thumb must be free at all times, without pressing on the neck of the instrument. Alexanian was against placing the remaining non-vibrating fingers on the string during the vibrating process, and rather advocated for placing one finger down at a time, thus giving more freedom to the oscillating movement. On the other hand, he suggested that all fingers be brought together to form a "concentrated mass," in case a greater intensity of vibrato was desired. Although this technical suggestion is not harmful, it bears similarity with one controversial aspect of Alexanian's technique – his theory of the bow hold with closely knit fingers.<sup>24</sup>

Alexanian illustrated the oscillations of vibrato in a figure, outlined using a standard notation. A vibrato on the note F on D string in the first position is depicted as two slurred, rapidly alternating pitches: a F and an E# respectively. Alexanian explains the meaning of the figure: "The blurring of the note by vibrato should not fill up the interval between two enharmonic notes. Nevertheless, I will use the enharmonic notation, in order to establish approximately the frequency of the oscillations."<sup>25</sup> Because an F and an E# would form a unison in equal temperament, Alexanian clearly thinks in terms of the Pythagorean temperament here. According to the Helmholtz Intonation Chart, the E# is 23.5 cents (Pythagorean comma) higher than the F: this is what Alexanian meant by

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<sup>24</sup> Alexanian, *Complete Cello Technique*, 11-3.

<sup>25</sup> Alexanian, *Complete Cello Technique*, 97.

"[an] interval between two enharmonic notes."<sup>26</sup> Alexanian's illustration, however, presents a conflict between its visual perception and practical execution: while the illustration shows a falling movement (from F to E#), the raising oscillation of the finger moves in the opposite direction.

Alexanian sets forth: "Every note attracted by another note, should be played vibrato in the interval that separates it from the note by which it is attracted."

To illustrate this point, Alexanian presents two practical examples: "[a] vibrato between D ♭ and C ♮ " notated as a D ♭ , and "[a] vibrato between C# and D ♮ " notated as a C#.<sup>27</sup>

This suggested concept is clearly an influence of Casals's expressive intonation.

Moreover, the latter example (vibrato on a C#) matches Casals's preference to vibrate towards the sharp side of the pitch, as was already mentioned above. This practice is nevertheless one of the few Casals's innovations which did not become an established norm: most string players today prefer to vibrate below the pitch (with its center at the top of the oscillation) or else around it – but never exclusively above. Even Bernard Greenhouse (Beaux Arts Trio), himself a student of both Alexanian and Casals, taught vibrating below the note, which he expressed as vibrating "up to the pitch."<sup>28</sup>

Agreement with Casals's vibrato principles in Alexanian's chapter on vibrato is evident. Like Casals, Alexanian sees the vibrato primarily as a device of tone production, advocating premeditation in matching the vibrato to the musical material and its

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<sup>26</sup> Hans Jørgen-Jensen and Minna Rose Chung, *CelloMind: Intonation and Technique* (Chicago: Ovation Press, 2017), 250.

<sup>27</sup> Alexanian, *Complete Cello Technique*, 97.

<sup>28</sup> Paul Katz, "Vibrato: How to Combine Hand Position and Hearing to Create your Ideal Sound," *The Strad*, (July 2017): 79.

adjustment according to the prescribed dynamics. In line with Casals, Alexanian considers vibrato redundant in fast passages and would cease to vibrate when the voice of the cello takes an inferior role to other instrument(s). Perhaps the most significant vibrato technique presented by Alexanian is vibrating with one finger at a time: this was Casals's revolutionary contribution and it became a standard in cello playing ever since.

Alexanian believed that the vibrato "doesn't call for special exercises" and that "experience will add 'naturalness' of execution." He describes the vibrato process as such: "This oscillation is to be produced by a slight, supple and regular movement of the left hand and forearm, executed in a practically vertical direction (in relation to the length of the string)."<sup>29</sup> Providing other guidelines to vibrato execution, e.g. regarding the contact point of the finger with the string or the avoidance of extensions while vibrating, Alexanian's method is among the first ones to provide clear instructions on how to use vibrato, although he does not give any specific instructions for developing this skill. Building on the ideas of his teachers Alexanian and Casals, Maurice Eisenberg took the vibrato to an even more elaborated plateau in its expressive use in *Cello Playing of Today*.

### **Eisenberg, a Definitive Outlook**

In agreement with Casals, Eisenberg frequently speaks of colours in connection with vibrato. If Alexanian's portrayal of vibrato stems from ideas of Casals in his younger years, Eisenberg's account on the other hand captures a more crystalized form of Casals's

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<sup>29</sup> Alexanian, *Complete Cello Technique*, 96-7.

thought on vibrato, endorsed by the experience of his long career. What is more, unlike Alexanian, Eisenberg had the good fortune of being Casals's "lifelong apprentice," with a constant access to his knowledge. From a pedagogical perspective, Eisenberg took up where Alexanian left off: vibrato instructions in *Cello Playing of Today* offered a comprehensive manual to a gradual acquisition of the skill.

Eisenberg defines vibrato as a tool, which intensifies the tone, "vocalizes legato notes," and gives continuity to the phrasing. Depending on the tonality, modulation, rhythm or dynamics of a particular piece of music, a fitting vibrato timbre should be chosen accordingly from an imaginary "palette of colours."<sup>30</sup>

Before students make any attempts to vibrate, Eisenberg advises that a general awareness of positions on the fingerboard is essential. At a certain stage of development, he suggests that the student will himself demonstrate an initiative to make his sound more refined by adding the effect of vibrato. Eisenberg firstly recommends practicing preparatory vibrato exercises without the bow. The oscillation should originate in the elbow and end in the fingertip, moving from side to side in a motion parallel to the string. At the beginning, the vibrato is to be practiced in the first position, starting with the second finger (centre of the hand), getting the other fingers involved immediately after. Once oscillations are within control, the student should repeat the same procedure over again, this time adding the bow. Eisenberg warns against the habit of "roll[ing] the hand from the wrist" and states, that although the thumb must maintain its position against the

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<sup>30</sup> Maurice Eisenberg and M. B. Stanfield, *Cello Playing of Today* (London: Lavender Publications, 1966), 108.

second finger for a better form and stability, it needn't be fixed, and should remain free at all times.<sup>31</sup>

The speed and span of the oscillation are in direct proportion: the vibrato narrows with increasing speed and vice versa. Analogous to Alexanian's theory of "concentrated mass,"<sup>32</sup> Eisenberg advises closing up the fingers in order to increase the speed of vibrato: "The tighter the vibrato, the more concentrated should the hand become."<sup>33</sup> In order to develop readiness in shifting between different vibrato intensities, Eisenberg introduces an exercise comprised of long-drawn notes, gradually alternating between both extremes of the dynamic scope. Like Alexanian, Eisenberg puts forward the ratio between the length of the string and the quality of vibrato. As the left hand gets nearer the bridge, the vibrato has to become narrower and tenser. The contact point of the bow and the amount of bow used also depend on the current location of the left hand on the string.

Eisenberg also sees the vibrato as an expressive medium between the musician and the music itself, calling it "[an] expression of a colour scheme."<sup>34</sup> His ultimate objective was to match the vibrato to the notes according to their register, and master this skill to such an extent, as to free oneself completely from its technical aspect. If all these criteria are met, the player will be eventually able to create and vary a whole spectrum of tone colours, expressive moods, and emotions through his performance. As Eisenberg states: "No matter how simple a composition may be, there is always a need for variety of

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<sup>31</sup> Eisenberg and Stanfield, *Cello Playing of Today*, 109.

<sup>32</sup> Alexanian, *Complete Cello Technique*, 96.

<sup>33</sup> Eisenberg and Stanfield, *Cello Playing of Today*, 109.

<sup>34</sup> Eisenberg and Stanfield, *Cello Playing of Today*, 110.

tone colour."<sup>35</sup> To achieve this musical ideal, the background of the work must be studied in great detail, so that the player is able to hear the optimal quality of tone in the imagination first, before setting to recreate it. Regardless of size, each musical unit – be it a single note, note grouping or a larger phrase – requires a unique kind of vibrato. Essential is to make a distinction between different tone colour nuances, "which means using the same colour, but varying its shadings ... [or else a] complete change from one colour to another."<sup>36</sup>

A technical tool unique to Eisenberg is using the vibrato over open strings. If an open string is encountered before, after, or in a stream of stopped notes, the oscillating movement of the hand continues throughout, resulting in an unbroken musical line. This idea represents an innovation in comparison with Alexanian's avoidance of open strings altogether while vibrating.<sup>37</sup> Another technique advocated by Eisenberg is plucking the string with the left hand immediately before the bow gets involved in the process of sound production. This technical tool, which is not limited to open strings and can be equally applied to a stopped note, enhances articulation and "... sets the string in motion by both hands simultaneously."<sup>38</sup>

Eisenberg was of the opinion that the national temperament of each individual can be reflected in the sound. He claimed that "nearly all greatest performers come from races [cultures] of traditional singers." Such players have the skill of "[an] instinctive

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<sup>35</sup> Eisenberg and Stanfield, *Cello Playing of Today*, 113.

<sup>36</sup> Eisenberg and Stanfield, *Cello Playing of Today*, 113.

<sup>37</sup> Alexanian, *Complete Cello Technique*, 97.

<sup>38</sup> Eisenberg and Stanfield, *Cello Playing of Today*, 114.

vocalization founded on a rich folklore." Furthermore, according to Eisenberg, the tone of French performers is tighter and more brittle in comparison to their neighbours, and originates from a tense, quick vibrato.<sup>39</sup> Whether this statement was true during Eisenberg's lifetime, or else it was only a subjective opinion on his part, it leaves us a testimony of Eisenberg's epoch, when the distinction between national schools might still have been apparent.

Eisenberg's method offers the reader a well-arranged modern companion to vibrato, which ideally helps students to master vibrato to a point when they no longer need to think about it as a technical aspect and start using it as naturally as a singer. Eisenberg's vibrato over open strings is not a demonstration of mannerism; it rather presents a helping tool for maintaining the continuity of vibrato, in spite of the presence of open strings. Moreover, it was not the first time such technique was introduced, if we are to believe Löhlein's anecdotal testimony from 1774: "Many have the praise-worthy habit of trembling on the open strings. This is worse than bad and belongs in the beer cellar."<sup>40</sup> The plucking of the string with the left hand is a device coming directly from Casals – it can be observed in his filmed recordings, for example the open-air performance in San Juan, featuring the Song of the Birds in De Rochemont's 1958 film *Windjammer*.<sup>41</sup> Eisenberg's linking of different vibrato types to national schools is particular, but there might be a grain of truth in his theory: similar report, although

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<sup>39</sup> Eisenberg and Stanfield, *Cello Playing of Today*, 108.

<sup>40</sup> Brown, *Classical & Romantic Performing Practice*, 525.

<sup>41</sup> *Windjammer: the Voyage of Christian Radich*, directed by Louis de Rochemont (1958; Los Angeles, CA: Flicker Alley, 2012), DVD.

reporting more on a choice than a characteristic, is found in Foster's writing on singing from 1934, in which he notes that "... vibrato was liked by Latin races but not by Anglo-Saxon ones."<sup>42</sup>

## **Conclusion**

The following principles of vibrato advocated by Casals clearly come to light and are amplified through the pedagogical work of his disciples Alexanian and Eisenberg: developing the ability to produce different degrees of vibrato, relating the vibrato to the musical material in question, and making the vibrato receptive to the activity of the bow. A good example of how all three principles became first adopted and later passed on, was the playing and teaching of Bernard Greenhouse (1916-2011) – founding member of the Beaux Arts Trio – a student of both Alexanian and Casals.

In an interview with his former student, the New England Conservatory cello professor Paul Katz, Greenhouse described using three different kinds of vibrato, depending on whence the motion generates: from the shoulder, from the elbow, or from the wrist. A technical mastery of vibrato enhances options of expression, as Greenhouse explains: "The ability to change the vibrato gives so much more colour to the phrase and to what you want to express."<sup>43</sup> When asked, whether he changes his vibrato intuitively, Greenhouse replied: "Mostly it's ... intuitive. I think eventually it becomes something that you do just because you have a certain way you want to express the phrase and you use

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<sup>42</sup> Brown, *Classical & Romantic Performing Practice*, 523.

<sup>43</sup> Bernard Greenhouse, "On maintaining vibrato," interview by Paul Katz, CelloBello, 2008, <http://www.youtu.be/igGiSDJ6bBw>, accessed January 24, 2019.

the change in vibrato to help you to do that." Regarding the partnership of the vibrato and the bow, Greenhouse noted:

One of the major things that I tried to teach is how important it is to make the two hands work together. You can't have a beautiful crescendo in the bow, without having something happen in the left hand to augment the crescendo. They have to work together. Otherwise it's like a great painter, who has only two primary colours to work with.<sup>44</sup>

Greenhouse often encountered players who had the ability to produce a very beautiful sound, and yet their vibrato remained the same all the time, in spite of the dynamic changes reflected by the bow. Such an approach resulted in a deficiency of "an enormous gift of colour of sound."<sup>45</sup>

Casals's inescapable influence – whether through live performances, recordings, teaching or through the methods and pedagogical activity of Alexanian and Eisenberg – has definitely inspired a new direction in the use of the cello vibrato, a direction which has become a standard ever since. The discussion of vibrato in Alexanian's method almost entirely corresponds to Casals's views on the subject. The younger Eisenberg only had to enhance the concept of his teachers with a few ideas of his own and shape them into a more comprehensive unit, to make them available to the modern reader. As such, Eisenberg's method can be considered a definitive introduction to vibrato in this evolutionary line.

Casals's idea of vibrato as a crucial component of sound production and its application as one of the essential tools required in order to enable a faithful

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<sup>44</sup> Greenhouse, "On maintaining vibrato."

<sup>45</sup> Greenhouse, "On maintaining vibrato."

interpretation of the composer's ideas and/or expressing emotions of the player, has become an idiomatic part of today's technical and musical vocabulary of cellists. The views of Greenhouse as outlined above, serve as one of the many contemporary testimonies of this integrated practice and of the successful journey of Casals's legacy.

#### 4. Bow, the Cellist's Voice: Use of Portamento in Particular

Casals believed in a close relation between music and the spoken word.<sup>1</sup> Inspired by this belief, he strived to imitate variations of intensity, articulation and timbre of the human voice, making these qualities part of his expressive musical vocabulary. Communication was the core element of his interpretative art. Many music lovers would agree that Casals's sound had a particular "speaking quality" to it. His former student Bonnie Hampton recalls: "Always he would stress the character of the music one was playing – find its own essence and 'say it' – never just notes – but always saying something."<sup>2</sup> The great cello virtuoso Emanuel Feuermann (1902-1942) said of Casals:

Nobody who ever heard him play can doubt that with him a new period for the 'cello began. He has shown that the 'cello can sing without becoming overly sentimental, that phrasing on the 'cello can be of highest quality. He adopted a technique according to the musical requirements. The enormous reaches seem to have disappeared; so have the ugly noises theretofore considered an integral part of 'cello playing. He has set an example for the younger 'cellists and demonstrated what can be done on it [cello].<sup>3</sup>

Intonation and vibrato, the two other expressive tools examined in the previous chapters, primarily concern the left-hand technique. In this chapter, I will first review characteristics of Casals's right-hand technique and then I will turn to portamento, an expressive tool concerning the technique of both hands to the same extent. To understand the significance of Casals's contribution to portamento, my study will contain an

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<sup>1</sup> David Blum, *Casals and the Art of Interpretation* (New York: Holmes & Meier, 1977), 51.

<sup>2</sup> Bonnie Hampton, "Pablo Casals: Core Principles," April 2013, CelloBello, [cellobello.org/legacy-cellists/pablo-casals-core-principles](http://cellobello.org/legacy-cellists/pablo-casals-core-principles), Accessed February 11, 2019.

<sup>3</sup> Robert Philip, *Early Recordings and Musical Style: Changing Tastes in Instrumental Performance, 1900-1950* (Cambridge: Cambridge University Press, 1992), 150-1.

overview of how this expressive tool has been employed since the time of Jean-Louis Duport until the publication of the influential method of Alexanian. I will examine which ideas of Casals influenced Alexanian and how these ideas reflect in the later method of Eisenberg. I will finally compare my findings with available analyses of selected recordings of Casals and define to which extent has his use of portamento inspired the succeeding generations of cellists.

### **Casals, the Monarch of the Bow**

Casals's masterful command of the bow allowed him to convey the subtlest nuances and inflections of tone colour, making his interpretations unique. "Those who have never heard Pablo Casals, have no idea how a string instrument can sound," stated the conductor Wilhelm Furtwängler.<sup>4</sup> In the early stages of his musical upbringing in Barcelona, Casals learned to play with a stiff arm and a book held under the armpit.<sup>5</sup> In permanent search for the most natural solutions, Casals's suspicion of this practice led him to a complete revision of the bow arm technique.

Casals regarded the bow as a "servant of the music, never its master."<sup>6</sup> He was one of the first cellists to use the bow in varied lengths, depending on requirements of the music. This was contrary to the past practice of consistent employment of the full-length of the bow. From a technical perspective, Casals made the upper arm more relaxed and flexible, and characterized the movement of the bow as coming from the centre of the

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<sup>4</sup> J. Ma. Corredor, *Conversations with Casals* (New York: E. P. Dutton & Company, Inc., 1956), 10.

<sup>5</sup> Corredor, *Conversations*, 25.

<sup>6</sup> Blum, *Casals*, 109; 121.

body, instead from its extreme ends. This basically meant taking more advantage of the back muscles and the natural weight of the arm.<sup>7</sup> The violinist Fritz Kreisler rightfully called Casals "the monarch of the bow."<sup>8</sup>

Bernard Greenhouse – another former student of Casals – seemed to have incorporated the rhetorical aspect of Casals's sound into his own playing particularly well. The shaping of Greenhouse's phrases was sometimes "sung" and "spoken" at the same time, as recalls Steven Doane, who also notes how effortless and economical Greenhouse's motions at the cello appeared to be, due to his engagement of back muscles.<sup>9</sup> In case some of the innovations mentioned above seem too self-evident to the modern reader, it is only evidence of how profoundly integrated the ideas of Casals became in the modern playing of today. Elsewhere, Hampton describes the nature of her teacher's bow arm:

His bow arm was in perfect balance – free but strong. It was sensitive, but had enormous energy to be able to create a wide range of colours. Another reason for his great articulation was his constant shifting of finger pressure on the bow. He used the Franco-Belgian bow hold, with the first two fingers on the stick, which allowed for flexibility of the bow's different nuances. He used different amounts and speeds of bow, and a focused contact with the string.<sup>10</sup>

Surprisingly, Alexanian's ideas of the right-hand technique don't correspond with the ideas of his master, as described by Hampton in the passage above. Alexanian's

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<sup>7</sup> Gabrielle Kaufman, *Gaspar Cassadó: Cellist, Composer and Transcriber* (New York: Routledge, 2016), 3.

<sup>8</sup> Corredor, *Conversations*, 10.

<sup>9</sup> Steven Doane, "Speaking and Singing: Bernie's Use of Musical Rhetoric, and his Link with Casals," 1 January 2016, CelloBello, [cellobello.org/cello-blog/bernard-greenhouse/speaking-and-singing-bernies-use-of-musical-rhetoric-and-his-link-with-casals](http://cellobello.org/cello-blog/bernard-greenhouse/speaking-and-singing-bernies-use-of-musical-rhetoric-and-his-link-with-casals).

<sup>10</sup> Bonnie Hampton, "Lessons with Pablo Casals," *The Strad*, (October 2013): 81.

proposed bow hold is completely different from Casals's, and the motion of the right arm during the execution of a bow stroke certainly doesn't reflect the way Casals himself played. To prepare the right hand to hold the bow, Alexanian states that the fingers must be "fully extended" and "pressed together" (with the exception of the thumb). Throughout his bow-hold instructions, Alexanian stresses the importance of keeping the fingers together at all times and gives special significance to levelling the fingertips, which is achieved by slight bending of the longer fingers. Such alignment might be necessary in the left hand to align fingers on a single string; when applied to the right hand, however, this practice only means a departure from the natural form of the hand – which André Navarra used to fittingly call *main morte* [dead hand].<sup>11</sup> As for the thumb, Alexanian seems to keep it stiff and extended on most illustrations in his method.<sup>12</sup> Alexanian's proposed down-bow movement is led with the wrist, followed by the arm. Furthermore, the wrist remains higher than the arm and the whole bow-grip stays inflexible throughout. Consequently, bow-strokes executed this way completely lack pronation in the arm towards the tip, making it close to impossible to transfer any weight of the arm into the bow, and consequently into the string.<sup>13</sup> It is obvious that this practice would cause uneven intensity of sound throughout the bow-stroke. The late George Neikrug, who studied with Alexanian for a year and then decided to leave his class, reports on this topic: "Oddly, he claimed that he based his ideas on what Casals did, and yet Casals had a

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<sup>11</sup> Eduardo X. Fargas, *The Violoncello School of André Navarra* (PhD diss., Cardiff University, 2008), 116.

<sup>12</sup> Diran Alexanian, *Complete Cello Technique: The Classic Treatise on Cello Theory and Practice* (Mineola, NY: Dover Publications Inc., 2003), 11-20.

<sup>13</sup> Alexanian, *Complete Cello Technique*, 20.

very free bow arm, while Alexanian's was very stiff."<sup>14</sup> On the subject of the right-hand technique, Alexanian's and Casals's views are unlike and at times even contradictory. This finding is altogether odd, given that Casals himself endorsed Alexanian's treatise.

Perhaps a closer rendition to the right arm "à la Casals" is presented in Eisenberg's *Cello Playing of Today*. Eisenberg doesn't provide a detailed guide to the bow-hold for beginners, but states that the physical formation of the hand determines the balance of the bow in the fingers: the second and third fingers remain closer together, as they are served by the same tendon, whereas the first and fourth fingers are independent. Eisenberg notes that due to the weakness of the shortest fourth finger, this latter may be placed nearer the third. Eisenberg's bow-grip is accommodating to the physiognomy of the hand and uses the hand's relaxed form as a departure point: quite the contrary of Alexanian's forced grouping of fingers and the alignment of fingertips, resulting in unnecessary tension.<sup>15</sup> The bow-stroke demonstrated by Eisenberg shows the right elbow leading the motion and the arm gradually pronating, as the bow draws closer to the tip, where the weight is required most. The fingers adjust to the pronation of the arm and Eisenberg's hand, unlike Alexanian's, gives the impression of flexibility and suppleness: its form naturally changes throughout the execution of the bow-stroke, whereas Alexanian's remains the same whether situated at the frog or at the tip of the bow.<sup>16</sup>

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<sup>14</sup> Tim Janof, "Conversation with George Neikrug," January 4, 2002, Internet Cello Society, <http://www.cello.org/newsletter/articles/neikrug/neikrug.htm>.

<sup>15</sup> Maurice Eisenberg and M. B. Stanfield, *Cello Playing of Today* (London: Lavender Publications, 1966), 7.

<sup>16</sup> Eisenberg and Stanfield, *Cello Playing of Today*, 8-9.

The most frequently discussed expressive technique in string playing involving the use of the bowing arm is the portamento. What defined this technique, how Casals figured in its development and how that reflected in the methodological outreach of Alexanian and Eisenberg is the topic of the following pages.

## **Portamento**

The portamento can be defined as "a continuous slide between two pitches which does not distinguish the intermediate semitones" (Stowell),<sup>17</sup> "the emotional connection of two notes" (Flesch),<sup>18</sup> or simply as an "expressive shift" in the modern terminology of bowed instruments. Depending on the language, it was referred to historically as *portamento di voce*, *port de voix* or *Tragen der Töne* respectively. All these terms suggest a "carrying" of the voice or sound, a more or less audible slide between two pitches.<sup>19</sup>

Portamento probably first emerged in vocal music and already played a significant role in the latter part of the eighteenth century. It was associated with the Italian style of playing (like the vibrato) and cultivated especially by singers and violinists. Antonio Salieri considered the violinist Antonio Lolli (c.1725-1802) an alleged pioneer of portamento.<sup>20</sup> According to Salieri, Lolli in his later career, no longer a master of his instrument and deprived of the impressive virtuosity of his prime, resorted to an

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<sup>17</sup> Robin Stowell, ed., *The Cambridge Companion to the Cello* (Cambridge: Cambridge University Press, 1999), 233.

<sup>18</sup> Robin Stowell, "Portamento (ii)," *Grove Music Online*, Accessed April 14, 2019, <http://www.oxfordmusiconline.com/grovemusic>.

<sup>19</sup> Clive Brown, *Classical & Romantic Performing Practice: 1750-1900* (Oxford: Oxford University Press, 1999), 558.

<sup>20</sup> Brown, *Classical & Romantic Performing Practice*, 560.

exaggerated use of portamenti in the form of a joke to at least entertain his audiences, if nothing else. However doubtful Salieri's report may be, it testifies that portamento of his time was employed with an increased frequency, assumes Brown.<sup>21</sup> Other period sources suggest the use of portamento as a special effect, implied by fingerings, like in e.g. L. Mozart's method (1756) or J. Haydn's op. 33 string quartets (1781-1782). Further examples can be found in the music of violinists of the Viotti school (for example Baillot, Kreutzer and Rode), provided by authors' own fingerings. During the nineteenth century, singers and string players intensified the use of the portamento technique as an expressive feature of performance.

In his 1858 method, Charles de Bériot uses three signs to indicate different speed of portamento: *port-de voix vif*, *doux* and *trainé*. These indications, drawn from singing, reveal the vocal character of portamento. As Joachim and Moser wrote: "As a means borrowed from the human voice ... the use and manner of executing the portamento must come naturally under the same rules as those which hold good in vocal art."<sup>22</sup> Along the same lines, Joachim's student Leopold Auer advises: "In order to develop your judgement as to the proper and improper use of the *portamento*, observe the manner in which it is used by good singers and by poor ones." Nevertheless, as was the case with vibrato, Auer seems to have an issue with a portamento used continually.<sup>23</sup>

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<sup>21</sup> Brown, *Classical & Romantic Performing Practice*, 560.

<sup>22</sup> Brown, *Classical & Romantic Performing Practice*, 579-80.

<sup>23</sup> Philip, *Early Recordings and Musical Style*, 143.

For bowed instruments, the portamento is a natural consequence of position changes.<sup>24</sup> The violinist Carl Flesch speaks of three basic methods of employing the portamento: "An uninterrupted slide on one finger ... A slide in which one finger slides from the starting note to an intermediate note, and a second finger stops the destination note" and "A slide in which one finger plays the starting note, and a second finger stops an intermediate note and slides to the destination note."<sup>25</sup>

Brown points out that the portamento was liable to abuse by the less talented musicians, as Nicola Vaccai reports in the 1830s: "By portamento must not be understood – as is often the case – the gliding (or dragging) of the voice through all the intermediate grades between one tone and another. On the contrary, it is the perfect connecting of two notes, each being confined strictly within its sound-limits."<sup>26</sup> Throughout the nineteenth century, there was apparently a difference between a portamento employed as a habit (used perhaps as an aid for more accurate shifting) and a portamento as a tool of expressive variety. Moser writes the following on the proper use of portamento: "In a very special case its use might be permissible when serving the purpose of a nuance in expression; but if it grows into a mannerism, it is to be condemned out and out."<sup>27</sup>

Quite the contrary to violin methods, most cello treatises dating from around the turn of the nineteenth century ignore portamento altogether. This might have been caused by the absence of melodic content within the methods' materials, consisting then mostly

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<sup>24</sup> Brown, *Classical & Romantic Performing Practice*, 558.

<sup>25</sup> Philip, *Early Recordings and Musical Style*, 144.

<sup>26</sup> Brown, *Classical & Romantic Performing Practice*, 559.

<sup>27</sup> Brown, *Classical & Romantic Performing Practice*, 578.

of passages in detached bowings and written in fast tempi, neither of which made the portamento relevant.<sup>28</sup>

In the preface to Alexanian's *Traité théoretique et pratique du violoncelle*, Casals claims that if Jean-Louis Duport were to come to life again, he would be surprised to find the cello playing halted at the same point of technical development.<sup>29</sup> While Casals's assertion might have been true of other aspects of cello playing, it is questionable whether it also related to portamento. How much new material adds Alexanian's treatise to the methodology already in existence at the time?

The method of Duport (1806) is in fact one of the first prominent cello treatises offering an important discussion on shifting and portamento. Duport makes a distinction between two kinds of audible shifts. The first is a shift consisting of two notes a semitone or a whole tone apart, played with the same finger. Duport himself avoided this practice, except in passages of fast detached notes, or in slurred passagework. He even denoted it as "something very unpleasant." The other kind of audible shift presented by Duport is a slide of the interval of a third or larger (a "portamento") resulting in what Duport calls a "very good effect." He further notes that such slide is usually executed quickly, although it depends on "the expression required by the melody." Duport clearly describes portamento as a premeditated device, rather than an improvisatory element left to chance.<sup>30</sup> A year before the publication of his method, Duport was a desk partner with Bernhard Romberg at the royal court orchestra in Berlin.

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<sup>28</sup> Kennaway, *Playing the Cello*, 100.

<sup>29</sup> Alexanian, *Complete Cello Technique*, 3.

<sup>30</sup> Kennaway, *Playing the Cello*, 101-2.

Romberg's method was published in 1839 towards the end of his life. In comparison to his view against the use of vibrato, Romberg's opinion of portamento is more favourable. He regards its application to both vocal and instrumental music as agreeable, and generally interprets portamento as a connecting tool. As far as Romberg's notation of portamento is concerned, he either implies portamento through a particular choice of fingerings, or else marks it with an "anticipation grace note" – identical to Flesch's "intermediate note" in his description of different types of portamento (see above). As George Kennaway assumes, Romberg's enthusiasm for portamento might have simply been a matter of his own taste, or else a result of personal necessity, as his violinist-like left hand might have made it very difficult to shift in an inaudible manner.<sup>31</sup> Romberg had a profound influence on the younger Friedrich Dotzauer, whose method appeared in print around 1832.

Dotzauer's account on portamento prepared the path for many later cello treatises. Apart from the self-explanatory slide with a single finger, Dotzauer presents another portamento technique – starting the note with a different finger than the final note of the slide. His aim was to make these two techniques sound the same, to create an impression one heard the "whole space from the lowest to the highest note."<sup>32</sup> Dotzauer sees the portamento as a technical aid for more accurate shifting, as its use makes the whole trajectory toward the final note audible, and thus enables the player to halt the finger in time at the correct spot. Dotzauer also describes portamento as a tool "... which allows

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<sup>31</sup> Kennaway, *Playing the Cello*, 103-4.

<sup>32</sup> Brown, *Classical & Romantic Performing Practice*, 574.

the artist to give way to his feeling." Although Dotzauer doesn't condemn its use, he still states that the portamento "rarely makes a good effect."<sup>33</sup> One of Dotzauer's most prominent disciples was F. A. Kummer.

In his 1839 method, Kummer calls the portamento a "bad habit" and its effect a "continual moaning and wailing." This might have been a reference to some of Kummer's contemporaries, who were not using portamento as an occasional ornament, but as a consistent trademark of their playing. By some, such practice was regarded as tasteless:

... there were those who were described as playing in an overly sentimental 'salon style.' Cellists such as Alexander Batta and J. F. Mendes, who were especially popular with female Parisian audiences, were frequently castigated by 'refined' male listeners for their emulation of the popular tenor Giovanni Battista Rubini (1794-1854). Characteristics of this style included rubato tempo fluctuations, portamento 'sobs', and exaggerated use of piano and forte.<sup>34</sup>

Although Kummer clearly opposes the idea of frequent portamento, he doesn't propose any solution on how to reduce it. One of the first cello pedagogues who ever explored techniques of how to reduce audible shifting was the fine Russian cellist Karl Davidov, who published a method in 1888, a year before his death.<sup>35</sup>

Davidov's method contains a detailed shifting manual. Its objective is not, however, to give the student an overview of portamento possibilities, but obviously to help him attain a skill that would allow to shift without audible slides. By acquisition of good shifting technique, the player can decide to use the portamento effect deliberately,

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<sup>33</sup> Kennaway, *Playing the Cello*, 103.

<sup>34</sup> Robin Stowell, ed., *The Cambridge Companion to the Cello* (Cambridge: Cambridge University Press, 1999), 192.

<sup>35</sup> Kennaway, *Playing the Cello*, 104.

or refrain from its use, depending on the occasion.<sup>36</sup> Davidov's approach of portamento represents the peak of the nineteenth-century methodology, comprehensively summarized by Kennaway as follows:

In pedagogical works for the cello, portamento is therefore generally treated with caution if not actual suspicion throughout the nineteenth century. However, there are several explanations of the physical movements required to execute portamento ... Portamento, therefore, is offered as a valid expressive device, and differences of emphasis mainly reflect differing views as to how much should be used, and where.<sup>37</sup>

Nevertheless, based on an examination of period compositions, what was described in theory might have been applied differently in practice.

A. F. Servais (1807-1866), for instance, was known for his serial same-finger shifts, sometimes encompassing even as many as seven consecutive notes.<sup>38</sup> Many similar examples can be found in editions revised by Friedrich Grützmacher (1832-1903), who was the teacher of Alexanian. The scale of notated portamento in Grützmacher's editions is unparalleled anywhere else. He applied portamento not only to legato notes, but also to notes "preceded by a rest, or by a staccato note on another string (sometimes an open string)," albeit he avoided the serial same-finger shifting, suggested by Servais.<sup>39</sup> Therefore, it seems that opposed to its methodological presentation, the portamento has enjoyed an increased popularity in practice.

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<sup>36</sup> Kennaway, *Playing the Cello*, 104-6.

<sup>37</sup> Kennaway, *Playing the Cello*, 111.

<sup>38</sup> Kennaway, *Playing the Cello*, 112-13.

<sup>39</sup> Kennaway, *Playing the Cello*, 113-15.

This state of scholarship and performance practice concerning the portamento was to become a departure point for Casals, who was (although largely self-taught) essentially a product of the nineteenth century cello pedagogy. We must bear in mind that Casals's entire formal education in music took place before the turn of the century.<sup>40</sup> Not unlike many other aspects of Casals's artistry, the portamento (referred to as "glissando" by Casals) was also subjected to variation, e.g. "in timing, speed, distance, direction, intensity, [and] colouration," writes Blum. When making a decision on where to make the portamento and where not, Casals used his common sense and his almost religious obligation to good taste. He would never make a consecutive glissando and "cautioned against making two [glissandi] in opposite direction within a space of three notes." Where a phrase was repeated, Casals considered using the portamento to distinguish expressively the repetition of a phrase from its previous statement.<sup>41</sup>

These principles are also reflected in Robert Philip's comparative analyses of early nineteenth-century recordings, also featuring Casals: the slow movement of Elgar's Cello Concerto and of the cello and piano arrangements of Chopin's Nocturne in E flat, op. 9 no. 2. In the Elgar, Casals uses portamento significantly less frequently compared to recordings of W. H. Squire (1871-1963) and B. Harrison (1892-1965). Although both Squire and Harrison were Casals's near-contemporaries, their playing still belonged to the old school and the difference between them and Casals was notable: in comparison, Casals's portamento was faster and more varied and as Philip states: "Casals uses the

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<sup>40</sup> Robert Anderson, "Casals, Pablo [Pau]," *Grove Music Online*, Accessed April 14, 2019, <http://www.oxfordmusiconline.com/grovemusic>.

<sup>41</sup> Blum, *Casals*, 126-127.

portamento to underline the progress of the melody in a way which seems entirely natural, though no other cellist has ever used the device in quite the same way."<sup>42</sup> In the Chopin, recordings of W. Hill, Feuermann and Casals are compared: here, the difference of portamenti in number between the three players is not as striking as in the Elgar; however, Casals's portamento outstandingly differs in style – even next to Feuermann, Casals varies the speed and the shape of sliding most: "This very varied use of portamento is characteristic of Casals's playing, and he uses it in a masterly way, together with carefully controlled dynamics and vibrato, to shape the progress of the melodic line" writes Philip.<sup>43</sup> Having defined some of the most salient characteristics of Casals's portamento, we can now move to Alexanian's and Eisenberg's methods to evaluate the extent of Casals's influence also on this aspect of cello playing.

### **Portamento according to Alexanian and Eisenberg**

Alexanian was the first to explore the control of slides. Methods predating Alexanian only advised fast shifting as means of hiding the slide's audibility.<sup>44</sup>

In accordance with Casals's principles, Alexanian places musical expression at the forefront. The importance of other aspects involved is secondary. If the musical expression requires a choice of an uncomfortable fingering in a shift, it is the duty of the performer to overcome the resulting discomfort. According to Alexanian, to elude the

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<sup>42</sup> Philip, *Early Recordings and Musical Style*, 165.

<sup>43</sup> Philip, *Early Recordings and Musical Style*, 164-8.

<sup>44</sup> Kennaway, *Playing the Cello*, 109.

situation through the choice of an easier, musically unsuitable fingering, or else avoid the shift altogether, are not acceptable solutions to the problem.<sup>45</sup>

Alexanian preferred a stretch to shifting wherever possible, perhaps because his own hands were rather large. Regardless of his preference, he distinguished between two kinds of shifting: the portamento/"port de voix" (defining any audible slide), and the less audible "jump" (basically a combination of a stretch and a slide).<sup>46</sup> To facilitate the shifting process, Alexanian advises to form the hand into an extension prior to sliding (for ascending shifts) and contracting the hand for descending shifts.<sup>47</sup> The former example in particular, although surely a well-intended way of how to anticipate the final note of the shift by decreasing the distance, represents an unacceptable supposition from today's point of view. Such practice would make the hand tense for the whole duration of the shift, disrupt its brilliance, and could result in an injury if exercised persistently.

One aspect of shifting proposed by Alexanian, however, did become an integrated part of today's technique to some extent: his left-hand articulation. During the execution of an ascending shift from a lower-number finger to a higher-number finger, Alexanian would "strike" the final note with a percussive motion of the finger. In case the shift was either ascending or descending from a higher-number finger to a lower-number finger, Alexanian would slightly "pluck" the string with the finger, which begun the shift.<sup>48</sup>

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<sup>45</sup> Alexanian, *Complete Cello Technique*, 50.

<sup>46</sup> Alexanian, *Complete Cello Technique*, 55.

<sup>47</sup> Alexanian, *Complete Cello Technique*, 53; 57-8.

<sup>48</sup> Alexanian, *Complete Cello Technique*, 52.

Although Alexanian's principles of portamento share a common ground with Eisenberg, the latter's approach is in certain ways more refined and premeditated.

Eisenberg warns against uncontrolled "shifting slides," driven exclusively by emotion. Although there isn't any set rule, dictating where to use the slide and where to avoid it, these decisions should in Eisenberg's view be first contemplated from an intellectual perspective. Every phrase has to be analyzed and looked upon as a unit, attention given to its shaping and articulation. Once the phrase is analyzed, the performer might make a conscious choice of slide, or avoid it altogether. The primary influential factors of appropriate shifting are the musical intuition of the player and his awareness of different styles, enabling an interpretation within the boundaries of good taste. During the rendition of a portamento, it is necessary to maintain a fluent and equal quality of sound, regardless of any technical difficulty imposed by the effect. While shifting, Eisenberg regards the arm as forming a single unit from the elbow to fingertips and anticipates the angle of the hand according to its arrival position, in order to achieve good intonation.<sup>49</sup>

Contrary to Alexanian, Eisenberg keeps his fingers together (i.e. free and without any extension) until the very last moment before the hand slides. According to Eisenberg, an equal attention should be given to the bow speed, which has to synchronize with the motion of the left hand (an aspect which Alexanian omits altogether).<sup>50</sup> While shifting from a lower-number finger to a higher-number finger, Eisenberg leaves the latter to "take over" imperceptibly. This technique is yet another antithesis of one of Alexanian's

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<sup>49</sup> Eisenberg and Stanfield, *Cello Playing of Today*, 35-9.

<sup>50</sup> Eisenberg and Stanfield, *Cello Playing of Today*, 38.

ideas: the finger percussion on the arrival note of the shift. For clarity, it must be added that Eisenberg refrained from the use of finger percussion only in shifting, but advocated this practice within a position, for the purpose of clear articulation.<sup>51</sup> Another further proposition of Eisenberg is to vibrate the immediate note before the shift until the very last moment. The result is a smoother connection between the two notes.<sup>52</sup>

The shift termed by Alexanian as a "jump," which he presented, albeit left largely unexplained, is amplified in the method of Eisenberg, who suggests a change of bow during the "jump" shift, in order to conceal any undesired deficiency caused by the left hand. In situations where an audible slide could disturb the phrasing, Eisenberg lightened the bow pressure between the notes<sup>53</sup> (see Hampton's report of Casals's "shifting of finger pressure on the bow,"<sup>54</sup> quoted earlier in this chapter).

## **Conclusion**

In 1977, David Blum wrote the following on the subject of portamento: "Half a century ago, glissandi [portamenti] may have been over-used ... In our 'objective age,' however, we have come full circle, reverting to the drier outlook ... [of] the late nineteenth century – when such excess was of the devil."<sup>55</sup> It won't be too long before another "half a

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<sup>51</sup> Eisenberg and Stanfield, *Cello Playing of Today*, 5-6.

<sup>52</sup> Eisenberg and Stanfield, *Cello Playing of Today*, 36.

<sup>53</sup> Eisenberg and Stanfield, *Cello Playing of Today*, 37.

<sup>54</sup> Hampton, "Lessons with Pablo Casals," 81.

<sup>55</sup> Blum, *Casals*, 126.

century" will pass since the publication of Blum's book and we may ask: has our "dry outlook" changed since?

In the twentieth century, many composers became more specific in the notation of their music, striving for exactitude of execution, leaving little space to the player's personal consideration. This leads to a meticulous, almost religious respect of the score, in fear that a slight digression from what is written could be considered a wrongdoing. Many twentieth-century works feature a slide [portamento] as a written-in musical effect. This has influenced our perception of the score and consequently its interpretation: as much as we would not play "ordinario," where "sul ponticello" is written, or add a trill where there is none marked, the same became true of slides.

Casals raised the awareness of different styles in classical music. His contribution to the portamento as an expressive tool was its refinement and moderation. As we were able to uncover in this chapter, Alexanian's theoretical rendition of portamento accords with principles of Casals – his influence is apparent. Eisenberg's more recent interpretation amplifies some of the concepts introduced by Alexanian, while still very much pointing back to Casals.

## Conclusions

The previous pages have discussed how Alexanian's and Eisenberg's treatises show remarkable differences and some similarities. These discrepancies are due to the two authors' belonging to two different generations, which also explains their distinct relationships to Casals. Yet, because of these very differences and by looking at both these treatises we gain a broader understanding of Casals's own pedagogical legacy.

The teaching style of Alexanian was marked by his strong personality. He was a musician with an in-depth knowledge of the score and presented his ideas to students in a dogmatic manner. Interestingly, Alexanian taught mostly without the instrument.

Although he was performing considerably in Europe during his earlier years, his focus exclusively shifted to pedagogy in his career once he moved to the USA. Many of his students enjoyed successful careers themselves. Alexanian's method *Traité théorique et pratique du violoncelle* was not received well, in spite of Casals's endorsement.

Alexanian had his own opinions, and although his ideas closely resembled those of Casals, the two often differed significantly in views on technique, which is contrary to the general belief that Alexanian's method represented Casals's principles. However, Alexanian's method presents a significant testimony in the development of modern cello technique: a bridge between the old-fashioned and the modern approach.

Alexanian's student Eisenberg was an active performer during most of his professional life. His teaching career started in his early thirties at the École Normale de Musique and continued in the USA after the war. He also taught many masterclasses, particularly in England and later in Portugal. As opposed to Alexanian, who was never

Casals's student (they were contemporaries and colleagues), Eisenberg did study with Casals. They became close friends and Eisenberg was thus frequently exposed to the master's ideas. This is perhaps the reason, why Eisenberg's *Cello Playing of Today* reflects Casals's principles on interpretation and technique so well: the discussion of specific aspects as taught and interpreted by Casals (intonation, vibrato, portamento etc.) only confirms that. We even owe it to Eisenberg's insistence that Casals recorded his now legendary version of Bach solo suites.

Casals's concept of "expressive intonation" was often misinterpreted for a tuning system. Nevertheless, expressive intonation is clearly an intonation practice, rather than a temperament. Moreover, it is a tool of personal choice, not a requirement: except for Casals, who presented his concept in a very assertive manner and expected everyone to follow the way he heard intonation. Alexanian's way of presenting intonation principles was as inflexible as Casals's and it was the more diplomatic Eisenberg who comprehensively redefined Casals's intonation concept, while remaining faithful to its core principles.

Casals's role in the history of cello vibrato is unquestionable. Inspired by the more progressive violin practice of the time, he brought continuous vibrato to cello playing and made it a crucial component of sound production. In order to express emotions and different sound colours, Casals used a large variety of vibrato. The chapter on vibrato in Alexanian's treatise must have been revolutionary at the time of its publication, as it advocated continuous vibrato, in line with Casals's principles. Unfortunately, Alexanian's account on vibrato is rather brief and the device is presented as a matter of course,

leaving many important issues unanswered. The later method of Eisenberg improved on Alexanian's work and presented a more thorough guide to vibrato.

The portamento is the last expressive tool discussed in this document. Before Casals's time, portamento was used with excess, regardless of style. Casals's contribution to the portamento was its perfection, variation, and moderation of its use, as is also obvious from his recordings. As far as portamento is concerned, accounts in both methods of Alexanian and Eisenberg are in accordance with Casals's views.

Alexanian's method was an amalgamation of his own and Casals's ideas. The way Alexanian presented the method material was quite idiosyncratic and chaotic. It was, however, published in 1922, at the beginning of his teaching career. It remains an open question as to how Alexanian's method would have looked if it had appeared instead towards the end of his life, especially considering all of the pedagogic experience he had gained since the 1922 publication. Nevertheless, however inexperienced a pedagogue Alexanian might have been in the early 1920s, the method offers some important aspects on the performance practice of the time, aspects that clearly diverge significantly from Eisenberg's later treatise. Casals's preface to the method should be seen as a gesture of support to a like-minded colleague, rather than a consent of agreement with everything stated in the work.

Eisenberg, on the other hand, published his treatise in 1957, at the peak of his artistic and pedagogic maturity. Since the time he studied with Casals, he was in near-constant contact with him and belonged to the circle of his closest acquaintances. Eisenberg had thus access to Casals's wisdom throughout several decades (except for

during the Second World War). Eisenberg's own personal input in *Cello Playing of Today* is not to be underestimated, but in sum, his treatise is the nearest and most complete available record of Casals's teaching principles.

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