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## **The Horn in Tchaikovsky's Symphony No. 5, Op. 64: An Introduction to the Horn in Late Nineteenth Century Russia**

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THE HORN IN TCHAIKOVSKY'S SYMPHONY NO. 5, OP 64:  
AN INTRODUCTION TO THE HORN IN LATE NINETEENTH CENTURY RUSSIA

David Seth Hall  
Honors Thesis  
University of Tennessee, Knoxville  
May 2, 2019

## **Introduction**

Tchaikovsky's Symphony No. 5, Op. 64 lives on today as one of his more popular works. For horn players, any mention of the symphony immediately conjurs up thoughts of the famous horn solo in second movement. The symphony is filled with colorful writing for the horns that reflects both trends in Tchaikovsky's approach to writing for horn and horn playing in general in the late 19<sup>th</sup> century. While this paper is not an exhaustive analysis of Tchaikovsky's horn writing, it does serve as an exploratory look into Tchaikovsky's use of the horn in the Symphony No. 5. In part one of this paper, I will consider Tchaikovsky's education, musical experiences, and professional partnerships in relation to his compositions. Additionally, I will examine the development of the valve horn in Europe leading up to the late 19<sup>th</sup> century, giving special focus to its development in Russia. In part two of this paper, I will analyze the horn parts to Tchaikovsky's Symphony No. 5, considering how the factors discussed in part one affected Tchaikovsky's use of horns in the Symphony.

## PART 1: HISTORICAL CONTEXT

### Overview of Tchaikovsky's Education and Compositional Style

Peter Ilyich Tchaikovsky was born on April 28, 1840 to Illia Tchaikovsky and Alexandra Andreivna Tchaikovsky. At the time of his birth, Tchaikovsky's father was the inspector of mines at Kamsko-Vitinsk, Russia. Although his mother played some piano and sang for her children, Tchaikovsky's first real musical instruction came from Marie Markovna Palchikov. Tchaikovsky was originally intended by his parents to be trained as a mine engineer but was eventually sent to the School of Jurisprudence in St. Petersburg in 1850. Although there is no definitive evidence, Tchaikovsky might have studied piano with one of the professors while at the School of Jurisprudence. During breaks in his studies, which was rare, Tchaikovsky studied piano scores of German composers and frequently listened to Italian operas. He also had a strong love for Glinka's *A Life for the Tsar*.<sup>1</sup> These early musical experiences formed the initial groundwork for Tchaikovsky's compositional style that was further developed at the St. Petersburg Conservatory.

In 1862, Tchaikovsky enrolled in the newly formed St. Petersburg Conservatory. In his letter to the Russian Musical Society, Tchaikovsky wrote: "Having the wish to study music, and for the most part music theory, in the College, newly established by the Music Society. I have the honor of kindly requesting of the Directorate of the indicated society to admit me amongst the pupils of this institution."<sup>2</sup> Tchaikovsky studied in a special program that combined the technical aspects of music theory with their practical application to composition. His primary teachers

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1. Tchaikovsky, *The Life and Letters of Peter Ilich Tchaikovsky* (New York: Vienna House, 1973), 2-33

2. Polotskaya, "Concerning the History of Education of Music Theorists and Composers in the First Russian Conservatories," *Problemy Muzykal'noi Nauki*, no. 4 (2017), 101

were Nicholas Ivanovich Zarembo (1821-1879) in theory and counterpoint and Anton Rubenstein (1829-1894), the founder of the conservatory, in orchestration<sup>3</sup>. Tchaikovsky did not agree with some of Zarembo ideas and preferred the teaching of Rubenstein. Modeste Tchaikovsky wrote that Zarembo's knowledge of music stopped at Beethoven ignored the music of Schumann, Berlioz, and even Glinka, much to the frustration of the Conservatory students.<sup>4</sup>

Tchaikovsky developed most of his compositional technique under the guidance of Rubenstein, particularly instrumentation. Rubenstein studied composition in Germany and was familiar with the music of Schumann and Mendelssohn. According to others, he saw the orchestra as that of Beethoven with three added trombones and chromatic horns and trumpets.<sup>5</sup> Tchaikovsky, and many students at the conservatory, wanted to expand past Rubenstein's conception of a traditional orchestra to write for the expanded "modern orchestra."<sup>6</sup> In the spirit of the Romantic tradition, the orchestration class that Tchaikovsky took at the conservatory included several exercises geared towards the writing of large-scale symphonic works.<sup>7</sup> Along with his studies, Tchaikovsky frequently listened to rehearsals and performances given by the Russian Musical Society, often conducted by Rubenstein.<sup>8</sup> At these rehearsals, Tchaikovsky heard and made his own impressions of works by Wagner, Berlioz, Liszt, Meyerbeer, and others.

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3. Polotskaya, "Concerning the History," 101

4. Tchaikovsky, *The Life and Letters*, 46-47

5. Tchaikovsky, *The Life and Letters*, 49

6. Tchaikovsky, *The Life and Letters*, 49

7. Polotskaya, "Concerning the History," 103

8. Polotskaya, "Piotr Ilyich Tchaikovsky and the Russian Musical Society: A Sociocultural Aspect of Interaction," *Problemy Muzykal'noi Nauki*, no. 4 (2018), 81

Tchaikovsky took an interest in the large-scale instrumentation of Wagner and attempted to recreate it in his overture *The Storm* (Op. 76, posthumously). The piece calls for a full orchestra including the addition of tuba and English horn. Reportedly, Rubenstein did not approve of Tchaikovsky's experimentation in the orchestration of Wagner but helped the young composer nevertheless.<sup>9</sup>

Tchaikovsky's studies at the conservatory, from which he graduated in 1865, gave him a knowledge of Western compositional techniques and orchestration that many Russian composers were oblivious to. In his autobiography, Rimsky-Korsakov (1844-1908) noted that in the beginning he and the rest of the composers in Balakirev's circle were oblivious to the use of chromatic brass instruments, choosing instead to write for natural trumpets and horns; "We selected French horns in all possible keys in order to avoid the imaginary stopped notes... and yet all that would have been necessary was a talk and consultation with some practical musician."<sup>10</sup> Rimsky-Korsakov soon realized the practicality of the valve horn but continued to write for natural horns in some of his works; the opera *May Night* is one example.<sup>11</sup> Given Tchaikovsky's link to Schumann through Rubenstein, one would expect Tchaikovsky to have used the valve horn extensively through various crooks in his works. However, Tchaikovsky seems to mostly use the valve horn in F, perhaps due to the reality of what most Russian horn players were using at the time. Some noted exceptions in Tchaikovsky's use of horns in F occur in the Symphony No. 1, Op. 13 (horns in Eb) and for an orchestration of a trio from Cimarosa's

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9. Tchaikovsky, *The Life and Letters*, 50

10. Rimsky-Korsakoff, *My Musical Life* (New York: Tudor Publishing, 1936), 66

11. Rimsky-Korsakoff, *My Musical Life*, 176

*Il Matrimonio Segreto* (horns in G), written specifically for a concert of the Russian Musical Society.<sup>12</sup>

Throughout his professional career, Tchaikovsky interacted with the Russian Musical Society (RMS) in several capacities and this interaction affected both Tchaikovsky's social and creative lives. He was appointed by the RMS as a professor of theory and composition at the Moscow Conservatory and taught there from 1866-1878. The RMS awarded Tchaikovsky with a special recognition for his service to the advancement of music education in Russia. Tchaikovsky also served as the Director for the Moscow section of the RMS from 1885-1890, during which he saw to many activities of the RMS including the appointment of a new director and professors for the Moscow conservatory.<sup>13</sup>

As a composer, Tchaikovsky frequently depended on the Russian Musical Society for payments and performances of many of his works. Tchaikovsky received payments in 1871/72 for his *Romeo and Juliet Overture*, 1875/76 for his Third Symphony, and 1877/78 reportedly for his Fourth Symphony, to name a few examples.<sup>14</sup> During his lifetime, all of Tchaikovsky's symphonies, programmatic works, concertos, and numbered string quartets were performed by the RMS, and nearly fifty of those works were premiered at RMS concerts.<sup>15</sup> The majority of RMS concerts featuring works by Tchaikovsky occurred at the St. Petersburg and Moscow sections of the RMS.<sup>16</sup> It is highly probable that Tchaikovsky took the size and ability of these

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12. Komarov, "Piotr Ilyich Tchaikovsky and the Russian Musical Society: The Creative Aspect of Interaction," *Problemy Muzykal'noi Nauki*, no. 4 (2018), 95

13. Polotskaya, "A Sociocultural Aspect of Interaction," 81

14. Komarov, "The Creative Aspect of Interaction," 94

15. Polotskaya, "A Sociocultural Aspect of Interaction," 83

RMS orchestras into consideration when orchestrating his works, although many of the works were not originally intended for specific performances of the RMS.<sup>17</sup> The re-orchestration of the Overture in F, Op. 71 by Tchaikovsky illustrates some of the possible considerations Tchaikovsky had when writing for the orchestras of the RMS. At the request of Nikolai Rubenstein, Tchaikovsky expanded the original brass orchestration from one horn and one trumpet to four horns, two trumpets, and three trombones.<sup>18</sup> He also reworked several sections of the work and added significant length. The expansion was made in part to fit the larger orchestra of the Moscow section of the RMS; works were regularly expanded for performances by the RMS.<sup>19</sup> Other works that Tchaikovsky wrote specifically for premiere at RMS concerts included the Marche Slave, Op. 31, and the Suite from the Nutcracker, Op. 71a.

Tchaikovsky's musical works were often praised for their beautiful melodies, rich harmonies, and colorful orchestration. His observations from rehearsals and concerts and his studies with Rubenstein meant that Tchaikovsky was likely very familiar with the orchestration techniques of Western Europeans. He apparently had a taste for Wagner's orchestration and, much to Rubenstein's dismay, wrote a piece entitled *The Storm* for a large Wagnerian orchestra.<sup>20</sup> Herman Laroche (1845-1904), a frequent critic of Tchaikovsky, praised Tchaikovsky for his wonderful melodies and superlative harmony, noting the influence of Glinka on Tchaikovsky's part-writing. Despite some criticism on the lack of form, Laroche continued to

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16. Polotskaya, "A Sociocultural Aspect of Interaction," 83

17. Komarov, "The Creative Aspect of Interaction," 96

18. Komarov, "The Creative Aspect of Interaction," 93

19. Komarov, "The Creative Aspect of Interaction," 93

20. Tchaikovsky, *The Life and Letters*, 50

praise Tchaikovsky for his ability to pull together the colors of the orchestra.<sup>21</sup> César Cui (1835-1918) remarked on the importance of symphonies in Russian music, recognizing Tchaikovsky as one of the great symphonic composers and comparing him to Berlioz and Schumann.<sup>22</sup> In a review of the Fifth symphony, Nikolay Kashkin (1839-1920) praised Tchaikovsky's melodies, calling the theme of the second movement one of the most beautiful he had ever heard.<sup>23</sup>

### **Overview of Horns and Players in 19<sup>th</sup> Century Europe**

By the time Tchaikovsky wrote his Fourth symphony in 1877-78, most horn players in Europe used horns with three valves that allowed them to play chromatically throughout their range. Prior to the invention of valves, horn players were limited to those pitches available on the harmonic series and through hand stopping. In 1814, horn player Heinrich Stölzel invented the first valve; his design was patented in 1818.<sup>24</sup> Other patents following the Stölzel valve included the Vienna valve in 1823 by Joseph Reidl and Joseph Kail, the rotary valve in 1835 by Joseph Reidl, and the piston valve in 1839 by François Périnet.<sup>25</sup> The early valve horns were often just natural horns of the region fitted with a removable valve section. This was particularly true with the French. Valves were slow to gain acceptance by players and listeners due to the unreliability of early valve construction and the negative impact valves made on the tone of the horn.<sup>26</sup>

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21. *Russians on Russian Music, 1880-1917: An Anthology*. Edited by Stuart Campbell (Cambridge: Cambridge University Press, 2003), chapter 1

22. *Russians on Russian Music*, chapter 1

23. *Russians on Russian Music*, chapter 1

24. Ericson, "The Valve Horn and its Performing Techniques in the Nineteenth Century," *The Horn Call Annual*, no. 4 (1992), 2

25. Ericson, "The Valve Horn in the Nineteenth Century," 2-5

26. Ericson, "The Valve Horn in the Nineteenth Century," 7-9

The quality of valve horn construction did eventually improve, and many players switched to the valve horn for its versatility. However, composers and musicians pushed back against the valve horn, viewing it as threat to the tradition of the natural horn<sup>27</sup>. In a committee meeting of the Royal Music Society, chairman George MacFarren argued that the use of valves deteriorated the smooth legato sound of the natural horn and eliminated the unique color of the natural horn's stopped notes, which MacFarren pointed out were intentionally chosen by the composers.<sup>28</sup> Brahms, disliked the valve horn and wrote almost exclusively for natural horn. Most of his major works, including all the symphonies, were intended to be played on the natural horn, despite the widespread use of the valve horn across Europe and the reality that many players would have performed his works on the valve horn.<sup>29</sup> Other composers sought to take advantage of the valve horn, but did not understand the technique, which varied between regions and schools. For example, Wagner's *Lohengrin* calls for rapid crook changes using the valves, suggesting that the players perform the part as a natural horn with hand stopping.<sup>30</sup> This method of writing for horns was likely influenced by the technique and teaching of J.R. Lewy, a virtuoso valve horn player who was the principal horn of the Royal Kapelle in Dresden from 1837-1851. However, Wagner later changed his approach to one that used the valves as fingerings, perhaps realizing the impracticability of using valves as fast crook changes. In the preface to *Tristan and*

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27. Ericson, "Trashing the Valve Horn: Comments on Valved and Natural Horns from Turn-of-the-century England," *The Horn Call* 29, no. 1 (1998), 53

28. Ericson, "Trashing the Valve Horn," 53-54

29. Ericson, "Brahms and the Orchestral Horn"  
<http://www.public.asu.edu/~jqerics/brahms-natural-horn.html>

30. Ericson, "Joseph Rudolphe Lewy and Valved Horn Technique in Germany," *The Horn Call Annual*, no. 9 (1997), 29

*Isolde*, Wagner wrote “the composer, who is concerned with the preservation of the true character of the horn, would have to refrain from employing valve horns, had he not learned that excellent performers have been able to eliminate these drawbacks almost completely by careful execution.”<sup>31</sup> Wagner then goes on to discuss the use of the E and F crooks and the use of the + symbol for stopped notes. His note signifies both the acceptance of valve horn by composers and its widespread use throughout Europe by the mid-19<sup>th</sup> century.

In 1833, the Paris Conservatory created its first valve horn class under Piere-Joseph-Emile Meifred (1791-1867).<sup>32</sup> The creation of the class signaled the acceptance of the valve horn into mainstream musical instruction. In France, Germany, and Russia, schools of horn playing developed out of the methods of teachers like Meifred, J.R Lewy, Henri Kling, Oscar Franz, and Franz Schollar. Additionally, differences in equipment and playing style separated these schools and further defined their unique sounds. To some extent, this divide still exists today between French, German, and Russian horn players.

In France, the first notable teacher of the valve horn was Meifred. His book, *Méthode pour le Cor Chromatique, ou à Pistons*, was intended for a two-valve horn and served as an extension to the natural horn method of Louis-François Dauprat (1781-1868).<sup>33</sup> Meifred believed that the valves should only be used to improve intonation and fill in the notes that were unavailable or had a muffled sound on the natural horn. All other qualities of the natural horn should be retained like the use of crooks and the stopping of leading tones in the natural scale.<sup>34</sup>

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31. Ericson, “J. R. Lewy and Valved Horn,” 29-31

32. Ericson, “The Valve Horn in the Nineteenth Century,” 9-10

33. Ericson, “The Valve Horn in the Nineteenth Century,” 10

34. Ericson, “The Valve Horn in the Nineteenth Century,” 9-12

Meifred used a horn with two Stölzel valves, which caused some of the air to actually blow back at the player. It follows that the limited functionality of these valves worked well with Meifred's emphasis on natural horn technique and limited use of the valves.<sup>35</sup>

The Stölzel valve was popular in France during the first part of the 19<sup>th</sup> century.<sup>36</sup> Around the mid-19<sup>th</sup> century, French horn players switched from the two-valve system to an ascending three-valve system invented by a student of Meifred, Jules Halary. This system crooked the horn in G, although the horn would have sounded in F without the ascending valve pressed down. The French, and the English who followed French horn development closely, preferred horns with smaller bell throats when compared to German and Austrian horns. Additionally, the tapers in the French horns' crooks had gradual tapers that created a uniquely light sound. By mid-century, Périnet piston valves were the most popular in France and England.<sup>37</sup>

In Germany, horn playing schools developed around J.R Lewy and Oscar Franz, both of whom were based in Dresden. J.R. Lewy (1802-1881) studied valve horn with his older brother, E.C. Lewy (1796-1846), and was familiar with both natural horn and valve horn techniques.<sup>38</sup> Ericson suggests that Lewy would have been familiar with the methods of Meifred after spending some time in France in 1836-1837.<sup>39</sup> In many of his etudes, Lewy alternated between using the valves as fast crook changes and fingerings. Lewy considered a strong foundation in

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35. Ericson, "The Valve Horn in the Nineteenth Century," 13

36. Ericson, "The Valve Horn in the Nineteenth Century," 8

37. Ericson, "The Valve Horn in the Nineteenth Century," 7-8

38. Ericson, "J. R. Lewy and Valved Horn," 23-24

39. Ericson, "J. R. Lewy and Valved Horn," 24

natural horn essential to playing the valve horn.<sup>40</sup> In the preface to *Douze Etudes pour le Cor chromatique et le Cor simple*, Lewy wrote “these studies are to played on the chromatic F horn, but the valves are only to be employed when the natural horn is inadequate for the bright and distinct emission of sounds.”<sup>41</sup> The horn parts to Wagner’s *Lohengrin* reflect some of the elements of Lewy’s etudes, namely the fast crook changes. However, horn players of the time likely used their valves as fingerings and transposed their parts. Wagner’s later works reflect the preference of horn players to use the valves as fingerings and stay in a single crook for extended times. In *Tristan and Isolde*, he calls for F and E horn, with the part staying in one of the two crooks for extended periods.<sup>42</sup> Richard Strauss followed a similar approach of using horns crooked in F and E for his tone poem *Don Juan*, Op. 20 (1888).<sup>43</sup>

Oscar Franz (1843-1889) taught at the Dresden conservatory and was active as both a teacher and performer.<sup>44</sup> In his *Grosse theoretisch-practische Waldhorn-Schule*, Franz started with exercises utilizing the natural horn, a common trait shared in the methods of Meifred, Lewy, and Henri Kling, the latter of whom also deserves mention here.<sup>45</sup> Kling (1842-1918) was a Geneva-based horn player who wrote numerous methods and etudes for the valve horn. He advocated for the use of the crooks called for by composers, claiming the that the crooks offered

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40. Ericson, “The Valve Horn in the Nineteenth Century,” 14

41. Ericson, “J. R. Lewy and Valved Horn,” 27

42. Ericson, “The Valve Horn in the Nineteenth Century,” 15-17

43. Ericson, “The Valve Horn in the Nineteenth Century,” 24

44. Ericson, “The Valve Horn in the Nineteenth Century,” 23

45. Ericson, “The Valve Horn in the Nineteenth Century,” 23

different tone colors and made performance easier for the player.<sup>46</sup> Like Kling, Franz believed that horn players should use the crooks composers specified when possible, especially when the requested crook is higher than F. However, Franz was not as strict on the use of crooks as Kling and included advice on transposing in his method.<sup>47</sup> This reflected a general trend among horn players toward the later 19<sup>th</sup> century to use the F crook on their valve horns and transpose most music.

For the first part of the 19<sup>th</sup> century, German and Austrian horn players used Vienna valves on their horns. However, the Germans switched to the rotary valve while the Austrians retained the Vienna valve; this distinction remains today.<sup>48</sup> Compared to French horns, German horns had a larger bell throat and less taper in the crooks. The Austrian horns also had a larger bell throat than the French, but not quite as large as the German horns. Additionally, the Austrian horn featured a tapered crook like the French, except the Austrian crook opened to full width faster than the more gradual taper of the French crook.<sup>49</sup> The German and Austrians used a standard three-valve system, exactly like the descending system still in use on most horns today.<sup>50</sup> According to Richard Strauss, the most common horns in the late 19<sup>th</sup> century were crooked in F, E, Bb alto, and A. Strauss also pointed to an emerging trend in the last part of 19<sup>th</sup>

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46. Ericson, "The Valve Horn in the Nineteenth Century," 18-21

47. Ericson, "The Valve Horn in the Nineteenth Century," 23-24

48. Ericson, "The Valve Horn in the Nineteenth Century," 7-8

49. Ericson, "The Valve Horn in the Nineteenth Century," 7

50. Ericson, "The Valve Horn in the Nineteenth Century," 8

century for first and third horn players to use horn crooked in Bb alto and second and fourth horn players to retain use of the F horn.<sup>51</sup>

Like many elements of art and music in Russia, the Russian horn schools did not emerge until the late 19<sup>th</sup> Century. Throughout the 18<sup>th</sup> century, Russian hunting horn bands were popular throughout the country, particularly with the aristocracy. One such ensemble led by Bohemian horn player Jon Anton Maresch (1719-94) featured 36 members who each played one note on different length instruments.<sup>52</sup> These local traditions likely interacted with the trends in the rest of Europe to influence the growth of Russian horn schools. It is difficult to determine the extent to which the French, German, and Austrian schools of horn playing influenced the emergence of the Russians schools following the founding of the St. Petersburg and Moscow Conservatories in 1862 and 1866, respectively. A few researchers have explored this connection between Russia and the rest of Europe. Vitali Bujanovsky points out that the St. Petersburg school was highly influenced by European trends, whereas the Moscow school retained more traditionally Russian ideals.<sup>53</sup> Burkhardt notes the influence of French brass chamber music on the brass chamber music traditions of Russia, particularly through French brass performers that toured throughout Russia in the latter part of the 19<sup>th</sup> century.<sup>54</sup> Finally, military historians note that the early development of military bands in Russia relied on German and Bohemian musicians for both musical instruction and instruments. One group of Bohemian musicians

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51. Ericson, "The Valve Horn in the Nineteenth Century," 24

52. Bujanovksy, "Three Hundred Years of Horn Playing in Russia," *The Horn Call* 49, no. 2 (2019), 26

53. Bujanovksy, "Three Hundred Years of Horn Playing in Russia," 27

54. Burkhardt, "The Paris Factor," *Paris: Un Laboratoire D'idées* (2007), 11-12

arrived in 1802 and included a horn player named Fuchs. Another member of the group, Anton Dörfeldt (1781-1829) started the St. Petersburg Military Music School in 1809.<sup>55</sup> While not directly related to the classical music tradition, these military bands played an important part in influencing the development of music and training of musicians in Russia prior to the explosion of orchestral music in the mid-19<sup>th</sup> century.<sup>56</sup>

Some of earliest horn instruction in Russia occurred in the Court “Kapella” orchestra housed in the Royal Court of St. Petersburg. Founded in 1703 in the same year as the city of St. Petersburg, the orchestra educated many young Russian musicians, although it is unclear how thorough or organized this education was.<sup>57</sup> Bujanovsky states that the systematic education of Russian musicians began in Moscow’s orchestra in 1839, so it is likely that St. Petersburg also had a systematic school of some sorts in its orchestra by the mid-19<sup>th</sup> century.<sup>58</sup> By 1888, Franz Schollar (1859-1933), a graduate of the Prague conservatory, moved to St. Petersburg and began teaching for the Court “Kapella.” He is credited with writing the first Russian horn method.<sup>59</sup> In accordance with the horn methods of Meifred, Lewy, Kling, and Oscar Franz, Schollar’s method begins with foundational exercises for natural horn, or the natural harmonic series of the valve horn.<sup>60</sup> Schollar believed that the central tone of the horn was G<sub>3</sub>, a belief followed by many

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55. “Military Music and Tradition in Imperial Russia,” *Brandenburg Historica* (blog), August 24, 2014.

56. “Military Music and Tradition in Imperial Russia”

57. Wekre, “The Leningrad School of Horn Playing,” *The Horn Call* 10, no. 1 (1979), par. 1-2

58. Bujanovksy, “Three Hundred Years of Horn Playing in Russia,” 27

59. Wekre, “The Leningrad School of Horn Playing,” par. 4-5

Russian horn players to this day.<sup>61</sup> In line with the horn method of Oscar Franz, Schollar's method also features a lengthy chart on transposition and several exercises written specifically for the player to practice transposition with the valves. The method includes some exercises for extended ornamentation: lip trills, turns, appoggiaturas, and mordents. In general, most of the exercises in the method stay below written G<sub>4</sub>, with the occasional appearance of A<sub>4</sub> and Bb<sub>4</sub>, and extends all the way down to written G<sub>1</sub>.<sup>62</sup> Tchaikovsky's horn parts in the Symphony No. 5 reflect this range limitation, which could be due to equipment, players, or a combination of both.

The founding of the St. Petersburg Conservatory by Anton Rubenstein in 1862 marked the beginning of formal academic musical training in Russia.<sup>63</sup> However, the organization of the conservatory was lacking in its early days and most of the brass instruction occurred under the direction of a trumpet player named Metzdorf.<sup>64</sup> After 1870, Friedrich Homilius (1818-1902) took over horn instruction at the conservatory. Homilius received his education some time before 1838 at the Dresden Conservatory under a Professor Moschke and was likely familiar with the playing style of J.R. Lewy, who was actively performing in Dresden while Homilius was at the conservatory. While the teaching at the St. Petersburg Conservatory, Homilius created a horn quartet with his students that helped the horn achieve more public attention and recognition in Russia.<sup>65</sup> After 1899, horn instruction at the St. Petersburg Conservatory passed to Jan

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60. Schollar, *School for Valve Horn*, Moscow: Muzgiz, 1929.

61. Wekre, "The Leningrad School of Horn Playing," par. 5

62. Schollar, *School for Valve Horn*, Moscow: Muzgiz, 1929.

63. Bujanovksy, "Three Hundred Years of Horn Playing in Russia," 27

64. Wekre, "The Leningrad School of Horn Playing," par. 3

65. Wekre, "The Leningrad School of Horn Playing," par. 7-8

Denisovitsch Tamm (1875-1933). While at the conservatory, Tamm expanded the ideals and goals of the horn school to include a newly defined embouchure technique that used the bottom lip as a foundation and avoided excessive pressure to the top lip. Additionally, he viewed the horn as an expressive melodic instrument, a belief that remained a fixture in the later Leningrad school of horn playing.<sup>66</sup> In Moscow, horn instruction was similarly focused on expressive playing and retaining qualities of the human voice. Josef Shanilec (1860-1905), one of the first great Russian horn soloists, taught at the Moscow Conservatory. Shanilec drew the attention of many, including Tchaikovsky, and one critic wrote of Shanilec: “For him the horn isn’t just a brass instrument, but a medium in which he is able to express all tender ideas and emotions.”<sup>67</sup> Compared to the St. Petersburg school, the Moscow school of horn playing was freer and more expressive. From the St. Petersburg and Moscow schools, an overall Russian horn sound emerged by the 20<sup>th</sup> century, described by Bujanovsky as “a resonant relatively ‘dark’ sound, with vibrato, connected by a beautiful legato.”<sup>68</sup>

Given that two of the early horn teachers in Russia were from Germany and its surrounding countries, it follows that Russian players used primarily German style horns with rotary valves and large bell throats.<sup>69</sup> The transposition chart in Schollar’s horn schools suggests that F was the standard key and a three-valve descending system was the standard valve arrangement.<sup>70</sup> Little is known about the actual production of horns in Russia in the late 19<sup>th</sup>

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66. Wekre, “The Leningrad School of Horn Playing,” par. 9-13

67. Bujanovksy, “Three Hundred Years of Horn Playing in Russia,” 27

68. Bujanovksy, “Three Hundred Years of Horn Playing in Russia,” 28

69. Wekre, “The Leningrad School of Horn Playing”

70. Schollar, *School for Valve Horn*, Moscow: Muzgiz, 1929.

century, but one family does deserve mention. The family of Reinhold Glier, whose Horn Concerto, Op. 91 is well-established in the repertoire, were horn-makers in Kiev.<sup>71</sup> Reinhold's father, Ernst Moritz Glier (1834-1896) learned horn-making from his father and worked with his uncle in Warsaw before moving to Kiev. After his wedding in 1868, Ernst received the factory of Vincent Kortschak as a wedding gift and ran the factory before passing it along to Reinhold's brother, Moritz Glier.<sup>72</sup> Although not directly related to horn manufacture or sale, Julius Heinrich Zimmermann (1851-1923) and Vaclav Frantisek Cerveny (1819-1896) were both influential producers and sellers of brass instruments in Russia.<sup>73</sup> Zimmermann was a Russian instrument maker based in St. Petersburg and known primarily for his tuba designs. V.F. Cerveny was a Czech instrument designer who first set up shop in Hradec Kralove outside of Prague in 1842. Cerveny supplied many brass instruments to Russian musicians and controlled a significant portion of the brass instrument market in Russia.<sup>74</sup>

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71. Misner, "Reinhold Glière's Concerto for Horn and Orchestra," Doctoral thesis, University of Texas at Austin, 2001, 6

72. Misner, "Reinhold Glière's Concerto for Horn and Orchestra," 6-8

73. Levachkine, "A Brief History of the Tuba in Russia," Tuba in Russia, 2019.

74. Levachkine, "A Brief History of the Tuba in Russia"

## PART 2: ANALYSIS OF THE HORNS IN TCHAIKOVSKY'S SYMPHONY NO. 5, OP. 64

Instrumentation: Four Horns in F

Overall Range: D<sub>3</sub> – G<sub>4</sub>

1<sup>st</sup> Horn in F: B<sub>2</sub> – G<sub>4</sub>

2<sup>nd</sup> Horn in F: D<sub>2</sub> – G<sub>4</sub>

3<sup>rd</sup> Horn in F: B<sub>2</sub> – G<sub>4</sub>

4<sup>th</sup> Horn in F: D<sub>2</sub> – G<sub>4</sub>

Notable Passages:

Mvt. I – All horns, m. 100-103; All horns, m. 214-238

Mvt. II – 1<sup>st</sup> Horn solo, m. 8-28;

Mvt. III – All horns (stopped), m. 28-31

Mvt. IV – 2<sup>nd</sup> horn, m. 24-41; All horns, m. 450-504

Discussion:

As stated before, this analysis of the horn parts to Tchaikovsky's Symphony No. 5, Op. 64, is by no means an exhaustive list. Instead, this analysis briefly considers the elements present in the Symphony that reflect broader trends in Tchaikovsky's horn writing and horn playing in general during the late 19<sup>th</sup> century. The main elements considered in this analysis include the function of the horn within the orchestration, notable passages including the second movement solo, and performance considerations.

Tchaikovsky utilizes the horn section primarily to provide harmonic and rhythmic support. The horns first enter at m. 23 in the first movement playing short chords beneath the string section's main melody. Here and throughout the symphony, Tchaikovsky voices the horns in the traditional manner with the 1<sup>st</sup> and 3<sup>rd</sup> horns playing higher than the 2<sup>nd</sup> and 4<sup>th</sup> horns. At

m. 154 in the first movement, the horns play harmony with the woodwinds with an offset rhythm. The horns also support the woodwinds in m. 269-278. In the second movement, the horns provide much of the underlying harmony and rhythmic pulse. Examples in the second movement include m. 45-63 and m. 142-158, the latter of which utilizes the horns on consistent sixteenth notes in the upper range at *ff* (see figure 1). In the third movement, the horns provide the off beats (beats two and three) to much of the waltz theme, a niche horns often fill in Tchaikovsky's waltzes.

The image shows a musical score for the first horn of Tchaikovsky's Symphony No. 5, second movement, measures 142-158. The score is written on seven staves. The first staff (m. 138) is marked 'ritenuto' and 'ff'. The second staff (m. 142) is marked 'Andante mosso', 'ff', and 'f'. The third staff (m. 144) is marked 'animando', 'ff', and 'riten.'. The fourth staff (m. 146) is marked 'animando un poco', 'fff', and 'f'. The fifth staff (m. 148) is marked 'ff'. The sixth staff (m. 150) is marked 'cresc.' and has a 'K' in a box above it. The seventh staff (m. 152) is marked 'Molto più andante' and 'fff'. The eighth staff (m. 154) is marked 'animando', 'ff', 'f', 'riten.', 'Piu animato', 'ten. ten.', 'simile', 'mf', 'p', and 'riten.'.

Figure 1. Tchaikovsky, Symphony No. 5, mvt. 2, m. 142-158, 1<sup>st</sup> horn

When not providing underlying harmony, Tchaikovsky uses the horn section to provide echoes, calls, and loud statements of the theme. For example, m. 84-94, the horns respond to the strong chords of the trumpets and trombones with an offset entrance. Then, at m. 100 the horns enter in unison with a *fff* statement of the main theme, the loudest dynamic and first major climax in the first movement (see figure 2).



Figure 2. Tchaikovsky, Symphony No. 5, mvt. 1, m. 100-103, 1<sup>st</sup> horn

In m. 194-195, the horns play a variation of this theme voiced like a pair of natural horns with the high horns playing step-wise intervals and the low horns skipping through an arpeggio (see figure 3).



Figure 3. Tchaikovsky, Symphony No. 5, mvt. 1, m. 194-195, 1<sup>st</sup> and 2<sup>nd</sup> horns

Another historical reference to horn playing traditions occurs in m. 214-238 where the horns mimic a hunting call. In the softer moments, the horns play short fragments of melodic material, like the trade-off between 1<sup>st</sup> horn and violins in m. 140-151. In the second movement, the 3<sup>rd</sup> horn briefly alludes to Tchaikovsky's *Romeo and Juliet Overture*, CW 29, at m. 33-34 (see figure 4). The horns echo the string violins at m. 116-119 with a fragmented version of the horn solo from the beginning of the second movement.



Figure 4. Tchaikovsky, Symphony No. 5, mvt 2, m. 33-34, 3<sup>rd</sup> horn

Although Tchaikovsky mostly uses the horns as a supporting instrument, he does feature the horns in some notable passages throughout the symphony. In the first movement, Tchaikovsky features the horns with a loud statement of the first theme at m. 100-103. The horns also stand out at 309-316. The horns play a dotted-eighth-sixteenth motive in octaves while the rest of orchestra responds. The stopped horn part in m. 28-31 of the third movement adds a unique color that is not heard any other place in the symphony. The fourth movement showcases the chromatic capabilities of the valve horn. One example occurs in the 1<sup>st</sup> and 2<sup>nd</sup> soli with bassoons at m. 24-38. This passage is particularly notable for the 2<sup>nd</sup> horn due to its extended low range and large contrast in dynamics; it requires a strong and flexible 2<sup>nd</sup> horn player to execute (see figure 5). Another example of the chromatic capabilities of the valve horn occurs at m. 490-504 (see figure 6).

Figure 5. Tchaikovsky, Symphony No. 5, mvt. 4, m. 24-41, 2<sup>nd</sup> horn

Figure 6. Tchaikovsky, Symphony No. 5, mvt. 4, m. 490-503, 1<sup>st</sup> horn

The horn solo in the second movement stands out as the most notable horn passage of the Symphony No. 5 (see figure 7). The beautiful expressiveness of the solo reflects not only Tchaikovsky's gift for crafting memorable melodies but also an emerging feature of the Russian horn schools towards the end of the 19<sup>th</sup> century.<sup>75</sup> Jan Tamm, horn professor at the St. Petersburg Conservatory from 1899-1920, believed that the horn should be approached as a melodic instrument, close to the qualities of the singing voice.<sup>76</sup> Tchaikovsky captures this singing quality through the opening three notes of the horn solo. The three-note triplet relates directly to sacred Russian music, following the words "we pray to the Lord."<sup>77</sup> The role of the horn in setting the mood for the second movement and the detailed markings that Tchaikovsky makes on the part reflect two other trends in Russian horn playing. First, players of the Russian horn schools viewed the horn parts in Tchaikovsky's works almost as a dramatic role. Bujanovsky states that a horn player performing Tchaikovsky's symphonies should "be able to portray a perfect human" through attention to "tone color, phrasing, dynamics, and attacks."<sup>78</sup>

75. Bujanovksy, "Three Hundred Years of Horn Playing in Russia," 27

76. Wekre, "The Leningrad School of Horn Playing," par. 12

77. Bujanovksy, "Three Hundred Years of Horn Playing in Russia," 26

More so than the Moscow school of horn playing, the St. Petersburg school emphasizes an exact interpretation of musical elements. Considering the detailed articulations and phrase markings Tchaikovsky wrote into the horn solo and the fact that the symphony premiered in St. Petersburg, it is highly probable that Tchaikovsky had the stylistic playing of St. Petersburg horn players in mind when he composed the horn solo. Tchaikovsky would have expected the markings in the solo to be followed exactly, thus giving the solo its subtle phrasing and nuance.

**Andante cantabile, con alcuna licenza.**

The musical score for the 1st horn solo in Tchaikovsky's Symphony No. 5, movement 2, measures 8-28, is presented in five staves. The tempo is marked 'Andante cantabile, con alcuna licenza.' The key signature has one sharp (F#). The time signature is 12/8. The score begins with a '7' above the first measure, indicating a fingering. The first staff is marked 'SOLO.' and 'dolce con molto espress.'. The second staff includes 'animando', 'riten.', and 'Sostenuto' markings, with dynamics 'mf' and 'p'. The third staff has 'animando' and 'Sostenuto' markings, with dynamics 'mf' and 'p'. The fourth staff is marked 'Con moto', 'dolce', and 'anim.', with a dynamic 'p'. The fifth staff is marked 'Sostenuto' and 'mp', with fingerings '2' and '4' above the notes.

Figure 7. Tchaikovsky, Symphony No. 5, mvt. 2, m. 8-28, 1<sup>st</sup> horn

At its premiere in St. Petersburg in 1888, Tchaikovsky's Symphony No. 5 was likely played on single horns in F. Although the Bb horn was growing in popularity among 1<sup>st</sup> and 3<sup>rd</sup> horn players towards the end of the 19<sup>th</sup> century, the range demands in the symphony do not appear to have been enough to warrant the use of Bb horn. The entire horn section stays below a

written G4. Apart from the horn solo, the largest challenges for the horn players are endurance and intonation. For much of the symphony, the horn section plays supporting harmony, but the first and third horns tend to play in the top part of their range. Measures 142-158 in movement two is one example of the symphony's endurance challenges due to its range, repeated articulation, and loud dynamic. Overall, Tchaikovsky does not write many technically challenging or demanding parts for the horns in the Symphony No. 5, especially when compared to the horn writing of Tchaikovsky's contemporaries Johannes Brahms (1833-1897) and Anton Bruckner (1824-1896). However, Tchaikovsky's use of the horn as harmonic support gives his symphony a unique color and reflects a common approach used by many Russian composers.<sup>79</sup>

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79. Rimsky-Korsakov, "Composition of the Orchestra," *Principles of Orchestration*, Translated by Edward Agate (Berlin: Editions Russes de Musique, 1922).

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