Jean Sibelius's Orchestration Technique and the Seventh Symphony: A Case Study

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Abstract

The current study explores Jean Sibelius's compositional methods through his use of orchestration and the impact it had on his symphonic sound. Specifically, this study focuses on Sibelius's orchestration in his Symphony No. 7 in C-Major, Op. 105 (1924) and compares it to the use of orchestration in his Symphony No. 1 in E-Minor, Op. 39 (1898-1899) and Symphony No. 3 in C-Major, Op. 52 (1907). The study is divided into three sections. First, the study takes into consideration Sibelius's musical training and the influences of the Russian and Austro-German music schools on his development as an orchestrator. Second, to determine how Sibelius utilized his instruments, an analysis of instrumental families (e.g., woodwinds, brass, percussion, and strings) are investigated according to their function, common characteristics, and less common characteristics. And third, a comparative analysis of the orchestration between the three symphonies follows. The study reveals Sibelius's development as a master orchestrator may have been a result from the influences of Richard Wagner, Anton Bruckner, and Pyotr Tchaikovsky while studying in the cities of Helsinki, Berlin, and Vienna. Additionally, the comparison between the orchestration of the First, Third, and Seventh symphonies reveal that Sibelius approached instrumental families in a similar manner. Only an analysis of the remaining symphonies following the methods outlined in this study can deem these observations as truth.

Abstrait

L'étude actuelle explore les méthodes de composition de Jean Sibelius à travers son utilisation de l'orchestration et l'impact qu'elle a eu sur on son symphonique. Plus précisément, cette étude se concentre sur l'orchestration de Sibelius dans sa Symphonie n ° 7 en ut majeur, op. 105 (1924) et le compare à l'utilisation de l'orchestration dans sa Symphonie n° 1 en mi mineur, op. 39 (1898-1899) et Symphonie n ° 3 en ut majeur, op. 52 (1907). L'étude est divisée en trois sections. Premièrement, l'étude prend en considération la formation musicale de Sibelius et les influences des écoles de musique russe et austro-allemande sur son développement en tant qu'orchestrateur. Deuxièmement, pour déterminer comment les instruments sont utilisés, une analyse des familles instrumentales (par exemple, les bois, les cuivres, les percussions et les cordes) est étudiée en fonction de leur fonction, de leurs caractéristiques communes et de leurs caractéristiques moins communes. Et troisièmement, une analyse comparative de l'orchestration entre les trois symphonies suit. L'étude révèle que le développement de Sibelius en tant que maître orchestrateur est peut-être le résultat des influences de Richard Wagner, Anton Bruckner et Pyotr Tchaikovsky alors qu'ils étudiaient dans les villes d'Helsinki, de Berlin et de Vienne. De plus, la comparaison entre l'orchestration des première, troisième et septième symphonies révèle que Sibelius abordait les familles instrumentales de la même manière. Seule une analyse des symphonies restantes suivant les méthodes décrites dans cette étude peut considérer ces observations comme véridiques.

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Introduction

Background

The possibilities of the orchestral palette have grown significantly over the past five centuries and continue to grow today. During the nineteenth-century, new and improved instruments (e.g., valved brass instruments; saxophone; etc.) began to appear in the orchestra, resulting in more dynamic coloring and texturing than ever before. In conjunction with these innovations, leading composers of the nineteenth and early twentieth-centuries—such as Hector Berlioz (1803-1869), Richard Wagner (1813-1883), Franz Liszt (1811-1886), Richard Strauss (1864-1949), Gustav Mahler (1860-1911), and Claude Debussy (1862-1918)—took western classical music to a different level of expressiveness. This was not only achieved through the content of their musical ideas, but also through their handling of orchestration in presenting these ideas.

Among the innovative composers of this era was Finnish composer Jean Sibelius (1865-1857), whose symphonic output included a wide array of symphonic tone-poems, incidental music, and seven symphonies. Unlike his contemporaries, who were expanding the use of instruments in their works to express their musical ideas (e.g., Mahler symphonies and Strauss tone-poems), Sibelius was more conservative in his instrumentation. Despite this he was able to achieve an equally expressive and dynamic orchestral palette as his peers. He did so by becoming acutely aware of the qualities and abilities of the instruments, and how their connection with each other was essential to the overall musical outcome. As we will see, Sibelius's studies and experiences in Helsinki, Berlin, and Vienna provided him the foundation to understand orchestration that led him to develop his own orchestral aesthetic.

Purpose of Study

The purpose of this study is twofold. First, owing to his more conservative instrumentation, performances of Sibelius's symphonies are often artistically ineffective because performers tend to overlook instrumental balancing and disregard the many possible colors presented in his scores. During Sibelius's life, many of his contemporaries became dependent on scoring more instruments for dramatic and coloristic effects. In contrast, Sibelius was able to achieve an equally expressive and colorful sound as his contemporaries using a comparatively small orchestra. Consequently, particular attention needs to be paid to Sibelius's use of instruments in his symphonies to obtain a sound consistent with the composer's wishes. Stated differently, misunderstanding of Sibelius's orchestration confuses his musical goals, leading to important thematic/motivic lines being lost and subtle changes in orchestration going unnoticed.

Second, a survey of the literature shows a dearth of research on Sibelius's use of orchestration within his symphonies. Some scholars and commentators (e.g., Charris Efthimiou; Ralph Wood; and Bengt de Törne) have provided short analyses on the use of instruments in Sibelius's works, but few have viewed his music specifically through the lens of orchestration.¹ Those commentators that do exist, however, speak to the importance of understanding Sibelius's compositional process as it relates to orchestration. For instance, Sibelius's former pupil, Bengt de Törne, recalled the great symphonist talking about the 'proportion' and the importance of understanding each work's homogeneity and 'unity of conception' when performing them.² Here, the composer calls attention to the relationship between proportion and unity of conception as they relate to the performance of a piece—a hint from Sibelius himself on the importance of orchestration, balance, and coloring to the performance practice of his music. In light of these

¹ See Appendix 1 for a representative sample of sources that discuss Sibelius's orchestration.

² Bengt de Törne, *Sibelius: A Close-Up.* (London: Faber, 1937), 16.

observations, research in this field is necessary to assist performers and listeners—particularly those who are unfamiliar with Sibelius's music—to better understand his works through his instrumentation. The purpose of this research, therefore, is to explore Jean Sibelius's compositional methods through his use of orchestration and to explore the impact it had on his symphonic sound.

Specifically, this study will focus on Sibelius's orchestration in his *Symphony No. 7 in C-Major, Op. 105* (1924). Following a thorough discussion of Sibelius's approach to orchestration within this work, I will compare it to the use of orchestration in his *Symphony No. 1 in E-Minor, Op. 39* (1898-1899) and *Symphony No. 3 in C-Major, Op. 52* (1907). These two earlier symphonies fall under different stylistic periods in Sibelius's development, which is why they were selected for this study. A comparative analysis of Sibelius's orchestration between the three symphonies will reveal or clarify his use of instruments, the consistency he used instruments and their instrumental families, as well as provide a better understanding for his conception of an orchestral sound. Discussion of Sibelius's tone-poems and his incidental music will be limited. These works fall under a different category of expression because of their programmatic tendencies which tend to be guided by a predetermined idea that may influence the selection of instruments, versus a symphony, in which musical ideas are more absolute. It is best, therefore, to focus on these works as a separate investigation.

From a conductor's perspective there is much to learn from a study of Sibelius's orchestration practices and their influence on his sound. Each of his symphonies is incredibly rich and complex. They are living pieces of art that gained character and complexity with each iteration, reflecting in their increasing subtleties the artistic growth and inventiveness of their author. So many aspects of them, their color or their character, can be altered if performers do not have the

necessary instruction on how to play certain passages, or even the knowledge of how important certain phrasing, voicing, and articulation of certain passages can affect the overall performance. For instance, the passing or juxtaposition of a motivic idea between multiple parts is a common feature of Sibelius's compositions, and being able to recognize the connection allows one to maintain the flow of his music. Despite the individuality of each symphony, they appear to have a common trait, and that trait is the particular care with which Sibelius used orchestration to produce his signature sound. That is why this research is aimed towards conductors—as a way to provide the necessary tools to begin understanding Sibelius's treatment of the orchestra so that in future performances, his concept of sound will be approached with more care and consideration to the uniqueness of his orchestration.

Methodology

The current research undertaken in this study is guided by two primary categories of questions: (1) Background/Social Context; and (2) Analytical. The former aims to understand Sibelius's musical training and influences that may have impacted his own approach towards orchestration. The latter takes the former into account and breaks down the orchestration of the symphonies from the large ideas for how to use the instruments (e.g., function) to smaller details (e.g., instrument idiosyncrasies or common characteristics). The following questions will be used as a guide for the exploration of this study.

Background/Context Questions:

- Who may have influenced Sibelius's orchestration style? (e.g., composers, teachers)
- How does Sibelius's use of orchestration compare to that of his contemporaries?

Analytical Questions:

• What are the primary and secondary functions of each instrumental family? Do these functions stay relatively the same or change between the First, Third, and Seventh symphonies?

The following are three categories of functions, and their definitions, that will be explored. Each instrumental family can be assigned between one and three functions based on their role within a given work.

- **Motivic/Thematic**: Instrument(s) are utilized in presenting thematic/motivic material in full or fragmented form.
- **Harmonic/Pedal**: Instrument(s) are utilized to support the ensemble's harmonic foundation for thematic/motivic ideas through held or slow-moving static chord progressions.
- **Rhythmic**: Instrument(s) are utilized in presenting material that serves to fill in the ensemble's sound (e.g., ostinato, tremolo, trills, syncopations, etc.).
- Are there frequent practices of particular instrumental pairings or combinations within and/or between families? (e.g., woodwinds with strings)
- Are there any significant harmonic/intervallic qualities or treatments found within or between instrumental families?
- What are the similarities and/or differences in the use of instruments between the First and Third symphonies compared to the Seventh symphony?

Chapter 1: Sibelius's Musical Background

Training as a Composer

To gain a better sense of Sibelius's development as a composer and orchestrator, it is imperative to examine the social context in which he was trained. The years 1885-1891 were of extreme importance in the beginning of Sibelius's growth as a composer, studying in Helsinki, Berlin, and Vienna. By the end of his studies, Sibelius's experience with various teachers and his exposure to new music in these cities aided in his growth as a composer, and ultimately set him on the course in developing his own orchestral aesthetic—in which orchestration plays a key role.

Helsinki (1885-1888)

Martin Wegelius

In 1885, at the age of 22, Sibelius moved from his childhood home, Hämeenlinna, to Helsinki and began studying law at the Imperial Alexander University. It is important to note that prior to his move, Sibelius was self-taught in composition, having used Johann Christian Lobe's *Lehrbuch der musikalischen Komposition* as a guide in composing some of his early chamber pieces.³ During his time in Helsinki, Sibelius also enrolled at the newly established Helsinki Music Institute (today known as the Sibelius Academy), and by 1887 began studying composition with the institute's founder, Martin Wegelius.

Wegelius was a prominent music figure in Helsinki, having studied music in both Vienna and Leipzig. Through his schooling he developed into a great admirer of the German music tradition, showing particular admiration for J.S. Bach, Beethoven, and Wagner.⁴ Through Wegelius, Sibelius was provided the methodological instruction he lacked from his own self-

³ Glenda Dawn Goss, *Sibelius* (Chicago: University of Chicago Press, 2009), 76.

⁴ It is likely that Wegelius would have in some way expressed his enthusiasm for Wagner to Sibelius through his studies. Elements of his style can be heard in Sibelius's earlier orchestral works and will be discussed later.

teaching. Instruction included exercises on the basics of counterpoint, and fugues. These exercises provided a much needed structure to Sibelius's studies. However, they also stymied his compositional output, since his works were not more closely critiqued.⁵ As a result, Sibelius did not compose any known orchestral works during this time. Despite his stern educational approach, an idea mentioned in the literature suggests Wegelius may have been attempting to shape Sibelius into a true *Finnish* composer, one that would begin a national tradition in the same way Wegelius saw that Wagner had established a new era in German music.⁶

Berlin (1889-1890)

Albert Becker (1834-1899)

Following his schooling in Helsinki, in 1889, Sibelius went to study composition in Berlin with the aim of learning more about orchestration.⁷ With Wegelius's recommendation, he was introduced to Albert Becker, a composition professor at the newly formed Scharwenka Conservatory. Coming from a devout Lutheran family, Becker found solace in his faith through music. He composed many of his works in homage to J.S. Bach, which in turn, greatly influenced his teaching style.⁸ Sibelius described this style in his letters back home, where he constantly complained about Becker's endless counterpoint and fugue exercises.⁹ (Later in his life Sibelius remarked on how he felt Becker's style belonged to the past, but eventually saw how it helped him practice composition).¹⁰ Scholar Glenda Dawn Goss speculates, however, that Wegelius wanted

⁵ Wegelius was brought up in a deeply devout Lutheran family which may explain his rigid teaching approach toward Sibelius.

⁶ Goss, Sibelius, 76.

⁷ Erik Tawaststjerna, *Sibelius: Volume I*, trans. Robert Layton (Berkeley: University of California Press, 1976), 75. It is also important to note that Sibelius was originally on a state grant to study violin while in Berlin. His aim was to study with Fritz Struss, but ended up with someone named "Sachse," cited in Goss, *Sibelius*, 106. ⁸ Goss, *Sibelius*, 107

⁹ Ibid., 108

¹⁰ Karl Ekman, Jean Sibelius: His Life and Personality, trans. Edward Birse (New York: Alfred A Knoff, 1938), 75.

Sibelius to study with Becker, because he believed his former student still needed strict discipline in order to refine his composition process.¹¹

During his studies with Becker, Sibelius produced chamber works, but did not compose any works strictly for orchestra.¹² Despite his quandaries with Becker's teaching style, Sibelius had the chance to attend many performances while living in Berlin. He heard his first Wagner operas, *Tannhäuser, Die Meistersinger von Nürenberg, Lohengrin, Die fliegende Holländer*, in addition to Mozart's *Don Giovanni*, Richard Strauss' tone-poem, *Don Juan*, and fellow Finn (and future advocate) Robert Kajanus's tone-poem, *Aino*. If Sibelius did not feel he was receiving the appropriate instruction on orchestration while studying in Berlin—as mentioned above—he was likely learning more about orchestral texturing and colors by attending performances outside his studies.

Vienna (1890-1891)

Karl Goldmark (1830-1915) & Robert Fuchs (1847-1927)

On October 19, 1890, Sibelius set off for Vienna to continue his composition studies with Robert Fuchs (by recommendation of conductor Hans Richter) and Karl Goldmark (recommended by Wegelius).¹³ A well-regarded composer in Vienna of the time, Fuchs was known as a highly trained orchestrator who focused on technical details. However, information regarding Sibelius's lessons with him is minimal.¹⁴ His lessons with Goldmark were even less formal. Since Sibelius

¹¹ Goss, *Sibelius*, 109.

¹² According to Goss, during Sibelius's studies with Becker, he composed a work set for chorus and full orchestra, *Herr, Du bist ein Fels* and *Herr erzeige uns deine Gnade und hilf uns*. These are two contrapuntal exercises he composed in 1889. However, Goss also notes the score had not yet been examined. Sketches are located in the Finnish National Library—Ibid., 109. Performances of these two pieces by the Lahti Symphony are found under the BIS label titled "Sibelius, J: Sibelius Edition, Vol. 3 – Voice and Orchestra." <u>https://mcgill-nml3-naxosmusiclibrary-com.proxy3.library.mcgill.ca/streamw.asp?ver=2.0&s=6956%2FMcGill17%2F4266992</u>.

 ¹³ Ferrucio Busoni wrote a letter of introduction to Johannes Brahms, but the letter did not help his cause. Cited in Andrew Barnett, *Sibelius* (New Haven: Yale University Press, 2010), 61.
¹⁴ Ekman, 95

missed the entrance date for the conservatory, Goldmark asked him to bring him completed pieces to look through at his home. Though Sibelius did not care for the teaching of Fuchs, he seemed to show some approval for Goldmark. In a letter to Wegelius (dated November 19, 1890), Sibelius wrote, "I say, he has a damned good reputation here in Vienna and as his pupil, I enjoy great prestige everywhere. This is the kind of education after my own heart."¹⁵ Goldmark suggested Sibelius study the works of Haydn, Mozart, and Beethoven for models, rather than those of Berlioz and Wagner.¹⁶ Furthermore, he also advised him to thoroughly work over his ideas so they had more inner character, citing Beethoven as a prime example.¹⁷

Like his time spent in Berlin, Sibelius also frequented performances outside of his studies while living in Vienna. He attended performances of Wagner's *Tristan und Isolde* and *Siegfried*, Beethoven's *Symphony No. 9*, and Anton Bruckner's *Symphony No. 3*—the latter which had a strong impression on him. Additionally, he had the chance to hear some of Goldmark's compositions, including *Im Frühling, op. 36; Frühlingshymne, op. 23;* and *Symphonie Ländliche Hochzeit, op. 26.*¹⁸ Peter Revers's study of Sibelius's musical influences and affinities while studying in Vienna point out similarities between Goldmark's use of instruments and Sibelius's—such as chords omitting thirds to create 'empty' coloring, citing Goldmark's *Sankuntala* (1865) and Sibelius's Fourth Symphony as examples.¹⁹ Goldmark was known for assimilating Wagnerian orchestration techniques in his operas, which included employing pedals and elaborate sound sheets in addition to being focused towards coloristic affect.²⁰ The extent to which Sibelius

¹⁵ Tawaststjerna, Sibelius Vol. I, 73.

¹⁶ Peter Revers, "Chapter 1: Jean Sibelius and Vienna." In *The Sibelius Companion*, edited by Glenda Dawn Goss (Westport: Greenwood Press, 1996), 16. Tawaststjerna, *Sibelius Vol. I*, 88.

¹⁷ Tawaststjerna, Sibelius Vol. I, 99.

¹⁸ Revers, "Jean Sibelius and Vienna," 17.

¹⁹ Ibid., 23. See source for example.

²⁰ Ibid., 28. For an entire discussion on orchestration similarities found between Sibelius's early orchestral works and Goldmark's see Revers, 23-29.

incorporated Goldmark's orchestration teachings into his own work is still a relatively young subject.

At this point in his training, Sibelius knew he still did not have a full understanding of the capabilities for all instruments.²¹ Within two weeks of his arrival in Vienna he purchased a copy of Francois-Auguste Gevaert's (1828-1908) Neue Instrumenten-Lehre. In her research of Sibelius's time in Vienna during his youth, Glenda Dawn Goss suggests Sibelius purchased a copy of this book as a way to learn more about instruments with which he did not have much experience (e.g., woodwinds, percussion)—this is a source that may have helped guide him in filling voids of his understanding of instruments.²² By 1891, Sibelius began composing for orchestra, resulting in the Overture in E-major, JS 145 and the Scène de ballet, JS 163.²³ After showing his work to Goldmark, he described the quality of Sibelius's pieces as 'artificial' and suggested he focus more on structural elaboration and the quality of melodic invention—which may be why he suggested Sibelius thoroughly study the works of Haydn, Mozart, and Beethoven.²⁴ From this point forward, Sibelius would continue building his orchestral output, starting with Kullervo, Op. 7 (1892) and En Saga, Op. 9 (1893)-both pieces drew the attention of his fellow Finns. Eventually, this awakening allowed him to begin developing the orchestration techniques that would become emblematic of his compositional style.²⁵

²¹ Goss, *Sibelius*, 26.

²²Ibid., 25-26. Having examined the source, Goss notes that Sibelius did not make any annotations in his copy of Geavaert's book, however, she did observe various signs of physical use (e.g., smudges, smears) in the sections regarding winds and percussion—these are instruments with which Sibelius had the least experience.

²³ Barnett, *Sibelius*, 63-66. The performances of Wagner's *Tristan* and *Siegfried* was said to have sparked his enthusiasm for composing for orchestral forces.

²⁴ Revers, "Jean Sibelius and Vienna," 16.

²⁵ Robert Layton described Sibelius as having an "unfailing ear for idiomatic and individual orchestral sonorities for his early orchestral compositions. With each passing composition his mastery of orchestral resources and sense of color grew," cited in Layton, *Sibelius* (London: J.M. Dent & Son Ltd, 1965), 28.

Musical Influences as discussed in Scholarship

Now that we have a clearer idea of Sibelius's training as a composer, we can discuss in more detail the composers that may have impacted his development as shown through the literature. When discussing the influence of other composers on Sibelius's orchestration style and development, it is important to note that studying, imitating, and borrowing from other composers has occurred throughout music history.²⁶ In addition to hearing live performances, these methods were important for composers in developing their own orchestration technique and procedures.

In his study comparing the musical similarities between Sibelius and Tchaikovsky, Joseph Kraus asks us to take caution when making these comparisons. He notes that it is extremely difficult to directly measure a composers' influence on another, and that the 'echoes' of a composers' style we may hear in someone else's music is based on individualized perceptions.²⁷ Though Kraus's observations are noted, we also must remember composers needed a foundation and a model(s) in which to learn these skills. Research of the historical context at this time in Sibelius's life aligns with our argument for Sibelius came from a country that possessed neither a long nor a rich classical music history. Therefore, we can suppose he would have looked elsewhere to learn and find inspiration from composers outside of Finland and his studies. The ideal choices for Sibelius would have been found in the Russian and Austro-Germanic traditions.

Russian Influence

During the nineteenth-century, St. Petersburg became a major cultural center with flourishing music schools (e.g., a conservatory founded by Anton Rubinstein and the Free Music

²⁶ Veijo Murtomäki, "Russian Influence on Sibelius," in *Sibelius Forum: Proceedings from The Second International Jean Sibelius Conference*, ed. by Veijo Murtomäki, Kari Kilpeläinen, and Risto Väisänen. (Helsinki: Sibelius Academy Department of Composition and Music Theory, 1998), 153.

²⁷ Joseph Kraus, "The 'Russian Influence in the First Symphony of Jean Sibelius: Chance Intersection or Profound Integration?," in *Sibelius Form: Proceedings from the Second International Jean Sibelius Conference*, edited by Veijo Murtomäki, Kari Kilpeläinen, and Risto Väisänen, 142-152. (Sibelius Academy: Department of Composition and Music Theory, 1995), 143.

School founded by Milì Blakirev in 1862) and arts organizations (e.g., Imperial Mariinsky Theatre in 1863). By 1870, a railway connection between Helsinki and St. Petersburg was completed, allowing easier travel between the two cities. Future friend and advocate of Sibelius's music, Robert Kajanus, founded the Helsinki Orchestral Society in 1882. He was known for frequently programming Russian composers—such as Borodin, Tchaikovsky, Rimsky-Korsakov, and Kalinnikov—and bringing in Russian artists to perform in his concerts—including Alexander Glazunov, Alexander Ziloti, and Sergey Rachmaninov (see Figure 1).²⁸

December 10, 1885	Rubinstein, Dimitri Donskoi Overture; Tchaikovsky, Suite op. 43
April 1, 1886	Glinka, La jota Aragonesa
April 29, 1886	Tchaikovsky, Capriccio Italien
January 20, 1887	Tchaikovsky, Suite II
October 27, 1887	Tchaikovsky, Overture "1812"
November 24, 1887	Tchaikovsky, Overture "1812"
February 23, 1888	Tchaikovsky, Overture "1812"
November 1, 1888	Tchaikovsky, Mozartiana
November 22, 1888	Rubinstein, Symphony G minor
February 28, 1889	Tchaikovsky, Overture "1812"
November 14, 1889	Rubinstein, Dimitri Donskoi Overture, Symphony No. 2 ("Ocean")
March 5, 1891	Borodin, In the Steppes of Central Asia
January 12, 1893	Tchaikovsky, Romeo and Juliet Overture
November 16, 1893	Tchaikovsky, Symphony No. 2, Romeo and Juliet
January 18, 1894	Tchaikovsky, Hamlet Overture
February 17, 1894	Rubinstein, Symphony No. 1
October 26, 1894	Tchaikovsky, Symphony No. 6 ("Pathétique")
December 2, 1894	Rubinstein, Dimitri Donskoi Overture

Fig. 1: Russian works performed with Kajanus's Helsinki Orchestral Society between 1885-189429

As mentioned earlier, Sibelius attended the Helsinki Music Institute from 1885-1888, and later moved to Helsinki in 1891 before relocating to his new home, *Ainola*, after the turn of the century. During his time in Helsinki, it is probable he attended Kajanus's concerts to hear new works, even

²⁸ Murtomäki, "Russian Influence," 154.

²⁹ Figure 1 is based on Nils-Eric Ringbom's *Helsingfors orkesterföretag 1882-1932* (1932), pg. 91-126 as cited in Murtomäki "Russian Influences," 160. See Ringbom source for complete list of Russian works performed through 1917. Please note concertos are not included as part of this collection.

if his first composition teacher, Wegelius, was not an advocate of the Russian music style (e.g., Tchaikovsky).³⁰

Given the proximity of St. Petersburg to Helsinki and that Finland was under the rule of the Russian Empire (1809-1917) during Sibelius's formative years, it is reasonable to believe the Finnish people would have felt a connection to Russian music culture.³¹ In reference to the Russian school, music historian Igor Bel'za recalled memories of Sibelius stating, "in his own work he had always been guided by the very same principles of national individuality that distinguishes the music of the great Russian masters...He viewed them [Glinka and Borodin, Mussorgsky and Rimsky-Korsakov, Tchaikovsky and Glazunov] as his comrades-in-arms in the struggle for national identity."³² Whether Sibelius's statements were directed specifically at Finland's search for a national identity, or an identity in music, it appears he had a connection to these composers. Therefore, the proximity of a major music center, such as St. Petersburg, makes the influence of the Russian music tradition and compositional style—including orchestration—over a young Sibelius inevitable.³³

Pyotr Ilyich Tchaikovsky (1840-1893)

The Helsinki performance of Tchaikovsky's *Symphony No. 6 "Pathétique"* in 1894 was suggested to have had a strong impact on Sibelius. In a letter to his wife, Aino, Sibelius spoke fondly of Tchaikovsky, writing "there is much in that man that I recognize in myself."³⁴ A review of literature on Russian music influences cites many similarities between the music of Sibelius and

³⁰ Tawaststjerna, *Sibelius Vol. I*, 39. Sibelius studied violin with Mitroyan Wasilieff, a Russian from St. Petersburg, while attending the Helsinki Music Institute.

³¹ Ibid., 209.

³² Bel'za Igor, "Memories of Sibelius." Sovetskaya muzyka 21, no. 11 (November 1957) quoted by Malcolm Hamrick Brown in "Perspectives on the Early Symphonies: The Russian Connection Redux," in Proceedings from the First International Jean Sibelius Conference Helsinki, August 1990, cited in Murtomäki, "Russian Influence," 155. ³³ Ibid., 154.

³⁴ Tawaststjerna, Sibelius Vol. I, 209.

Tchaikovsky. Unfortunately, inquiries into this topic are still ongoing, and the sources discuss more about the melodic and harmonic similarities between the two composers, and less about orchestration.³⁵

Despite the lack of research on the orchestration similarities between the two composers, the literature provides a general idea of which traits Sibelius may have incorporated into his orchestral style from Tchaikovsky. Adam Carse's analysis of Tchaikovsky's orchestration characteristics include: self-contained instrumental groups (e.g., strings, woodwinds, brass), bold treatment of the brass, and doubling of string parts in unison or octaves, all the while not requiring extra instruments to achieve a full extent of tone.³⁶ Furthermore, Carse describes Sibelius's orchestration techniques to have all of the simple methods of early Russians, which included grouping together instrumental families.³⁷ Surveys on the styles of Sibelius and Tchaikovsky also point towards these similarities in orchestration. They reference a use of long cantilena style melodies, syncopated violin countermelodies, brass chords with crescendos, low sonorities, pedal points, and ostinatos.³⁸ Additionally, the juxtaposition of strings, woodwinds, and brass as independent groups are also mentioned.³⁹ All of these orchestration similarities have been likened to Tchaikovsky.⁴⁰ No specific musical examples of these similarities with Sibelius's music are cited in the literature. However, in his discussion of Russian influences, Veijo Murtomäki points

³⁵ It is interesting to note that the Finns and Russians share the region of Karelia, which is the same location where Sibelius journeyed to meet traditional folk singer Larin Paraske in 1891. It is also where Nikolai L'vov and Ivan Prach (around 1790) took down folk-tunes for their anthologies that many nineteenth-century composers drew from in creating themes for their compositions (e.g. Rimsky-Korsakov, Rossini, Beethoven, Stravinsky, Tchaikovsky), see Goss, *Sibelius*, 130-131.

³⁶ Adam Carse, *The History of Orchestration* (New York: Dover Publications, 1964), 303-306.

³⁷ Ibid., 330. It is likely Carse was referring to Glinka, Borodin, Mussorgsky, Balakirev, though it is not certain.

³⁸ Murtomäki, "Russian Influence," 155-156.

³⁹ Lisa de Gorog as cited in Kraus, "The Russian Influence," 143. See also Carse, Orchestration, 330.

⁴⁰ Murtomäki states that by the time of his third symphony, Sibelius's compositional writing was already evolving. He began shifting away from what Murtomäki called the "governing elements" of melody and bass, towards more harmonic pillars, pedal points, melodic ideas with counter/parallel ideas, and overlapping/superimposed texturing. Cited in Murtomäki, "Russian Influence," 159.

out Sibelius's use of instruments. For instance, Murtomäki draws attention to similarity in Sibelius's use of a solo clarinet at the beginning of his First Symphony to Tchaikovsky's use a solo horn at the beginning of his Second Symphony (see Examples 1a and 1b).⁴¹





⁴¹ Murtomäki, "Russian Influence," 156-157.

⁴² Peter I. Tschaikowsky, Symphonie II, Op. 17 in C-Moll, (Wiesbaden: Brucknerverlag, 1948), 3.



Ex. 1b: Clarinet solo from Sibelius's First Symphony (movement I, mm. 1-10)⁴³

In both examples, the solo instrument is used to create a longing affect. Also, both are directed to play *espressivo* and are written within an *Andante* tempo marking. The similarities between their use of solo instruments make it appear that Sibelius may have been inspired by Tchaikovsky's method. Within the second movement of Sibelius's Second Symphony, Murtomäki draws attention to how his scoring for a soli bassoon passage supported by pizzicato low strings is also

⁴³ Jean Sibelius, *Symphonies 1 and 2 in full score*, (New York: Dover Publications, Inc., 1993), 1.

quite similar to Tchaikovsky's solo bassoon melody with supporting pizzicato strings found in the first movement of his First Symphony (see Examples 2a and 2b).⁴⁴



Ex. 2a: Bassoon solo with low string pizzicato from Tchaikovsky's First Symphony (movement I, mm. 9-14)⁴⁵



Ex. 2b: Bassoon soli with low string pizzicato form Sibelius's Second Symphony (movement II, mm. 40-43)⁴⁶

Despite the addition of timpani and bassoon II, the texturing and intended affect is again, quite similar. The only major difference is Sibelius's insistence of incorporating a pedal-point in both examples—which will be addressed later on. From these examples, we can surmise Sibelius may have used Tchaikovsky as a model for orchestration early on in his career. As we shall see in our

⁴⁴ Murtomäki, "Russian Influence,"157.

⁴⁵ Tschaikowsky, Symphonie II, 4.

⁴⁶ Sibelius, Symphonies 1 and 2, 197.

analysis of the Seventh Symphony, many of these orchestration techniques are shared between Tchaikovsky and Sibelius, and are found within many of his compositions.

Other Russian Composers

The use of orchestration in compositions by other Russian composers is also cited in the literature. Citations include Rimsky-Korsakov, Balakirev, and Borodin, though not as frequently. For instance, similarities were drawn between the use of low strings in creating an underlying ostinato texture in Balakirev's *Tamara* (completed 1882) and Sibelius's use of the viola/cello in a similar manner during the finale of his Second Symphony. Perhaps this trait may have aided in Sibelius's frequent use of string ostinato throughout his symphonies and other works (see Figures 3a and 3b).⁴⁷



Another example includes an equivalent use of a trombone theme found in Rimsky-Korsakov's *Russian Easter Festival Overture* (1888) to that of Sibelius's trombone theme used in the Seventh Symphony (see Examples 4a and 4b).⁵⁰ Though this example seems coincidental, their use in a majestic setting is quite similar.

⁴⁷ Ibid., 158.

⁴⁸ Mily Alexeyevich Balakirev, *Tamara* (New York: Eulenburg, 1975), 1.

⁴⁹ Sibelius, Symphonies 1 and 2 in full score, 265.

⁵⁰ Murtomäki, "Russian Influence," 158.



Despite a lack of examples provided in the literature, in the end, a shared cultural relationship between the people of Finland and Russia are undeniable. Helsinki's connection to the music center of St. Petersburg—including Kajanus's programming of Russian composers and the travel of artists between the two cities—makes it reasonable to believe Russian music had an influence on Sibelius, or at least, a strong impression on his early development as a composer and orchestrator.

Austro-German Influence

Richard Wagner (1813-1883)

The operas of Richard Wagner were not performed (in full productions) in Finland during the nineteenth-century, but his music still found its way into the important music discussions in Helsinki. Wegelius was the foremost Wagner specialist in Finland, convinced of Wagner's epoch-

⁵¹ Nikolay Rimsky-Korsakov, "Russian Easter Festival Overture, Op. 36," in *Capriccio Espagnol and Other Concert Favorites in Full Score* (New York: Dover Publications, 1998), 133.

⁵² Jean Sibelius, "Symphony No. 7 in one movement, Op. 105," in *Series I (Orchestral Works) Vol.* 8, edited by Kari Kilpeläinen (Leipzig: Breitkopf und Härtel, 2010), 9-10.

making ability, and viewed his music through aesthetic and theoretical analyses.⁵³ Furthermore, he gave lectures on the 'Ring cycle,' created the Wagner Society (1898-1899),⁵⁴ and wrote a biography on the operatic master. In his biography of Sibelius, Karl Ekman (1875-1942) noted that Wegelius tried hard to 'infect' Sibelius with an admiration for Wagner during his studies at the academy—believing Wagner was the future of music.⁵⁵ Though it is uncertain what is exactly meant by this statement, it likely falls along the lines of Wegelius's relationship with the literature and his attempt to get Sibelius to complete the same feat for the Finns that Wagner did for the Germans. Between 1892-1894, Sibelius was part of a circle of artists called the Leskovites whose members included author Adolph Paul (1863-1943), composer Armas Järnefelt (1869-1958), painter Eero Järnefelt (1863-1937), and composer/pianist Ferruccio Busoni (1866-1924). This group was known for holding lengthy discussions on the future of Finland and was part of the movement seeking to rediscover Finland's identity. Wagner's idea of Gesamtkunstwerk was a part of these discussions and it was at this point where incorporating the Finnish national epic, the Kalevala, came into play.⁵⁶ Ultimately this led to the use of symbolism among Finnish artists, who believed that art was the way to establish and reinforce the national identity of the Finnish people.⁵⁷

By 1894, Sibelius began composing an opera, "The Building of the Boat" (*Veneen luominen*) with librettist J.H. Erkko.⁵⁸ During this time Sibelius took a pilgrimage to the Bayreuth Festival in search of inspiration and to further study Wagner's scores of *Lohengrin, Tannhäuser*, and *Die Walkürie*.⁵⁹ Between his time spent in Bayreuth and Munich, he heard a number of

⁵³ Eero Tarasti, "Chapter 3: Sibelius and Wagner," in *The Sibelius Companion*, edited by Glenda Dawn Goss (Westport: Greenwood Press, 1996), 62.

⁵⁴ Ibid., 62

⁵⁵ Ekman, *Sibelius*, 49.

⁵⁶ Goss, *Sibelius*, 163.

⁵⁷ Ibid., 163.

⁵⁸ Barnett, Sibelius, 94.

⁵⁹ Ibid., 94. See also Goss, *Sibelius*, 180.

Wagner's operas, including the *Ring Cycle* (except *Das Rheingold*); which he came away from these performances with mixed feelings. However, when he heard *Parsifal* in July of 1894, Sibelius wrote to his wife, Aino, claiming that, "Nothing in the world has ever made so overwhelming an impression on me; it quite moves my innermost heart strings. I had thought I was already a dead tree, but no, such is not the case."⁶⁰ Despite this newfound inspiration from hearing *Parsifal*, Sibelius ultimately experienced what has been called a 'Nietzschean' response to Wagner in which he developed a love/hate relationship with the music. By August 1894, he came to the conclusion that Wagner's music was 'too calculated' and his musical ideas seemed 'manufactured.'⁶¹ Thus Wagner's influence among the symbolists began to fade. Sibelius denied any influence of Wagner on his music, a claim reinforced up by his faithful followers—such as Ekman, Tawaststjerna, and Törne. Yet, later in his life he acknowledged that composers of his generation wanted to ensure they were remembered as being absolute and original in their music as Wagner was.⁶² Later still, Sibelius admitted he wished he would have been more appreciative of Wagner than he actually was in his youth.⁶³

Though Sibelius denied any influence from Wagner on his compositions, scholars have found aspects of his early orchestration technique that are reminiscent of Wagner's style. Most commonly discussed are the similarities between Sibelius's *The Swan of Tuonela* from his *Lemminkäinen Suite*, *Op. 22* and the prelude to Wagner's *Tristan und Isolde*, *WWV 90*; and Sibelius first tone-poem *En Saga*, *Op. 9* to Wagner's prelude to *Parsifal*, *WWV 111*, among other works.⁶⁴

⁶⁰ Goss, Sibelius, 180.

⁶¹ Tarasti, "Sibelius and Wagner," 64.

⁶² Murtomäki, "Russian Influence," 153-154. See also Ekman, Sibelius, 209.

⁶³ Ekman, *Sibelius*, 263.

⁶⁴ See Tarasti "Sibelius and Wagner" for additional examples.

For example, Eero Tarasti and Erik Tawaststjerna point out the timbral similarities between the shepherd's 'alte Weise' in Act III of Wagner's Tristan and the english horn solo in Sibelius's The Swan of Tuonela.⁶⁵ Both instances are recitative-like and both are associated with death. For this reason, Sibelius may have chosen the english horn because of its dark, resonating quality evocative of longing and tragedy. Tawaststjerna did not believe Sibelius would have been able to conceive of this solo for only an english horn if he did not know of Wagner's use in *Tristan*.⁶⁶ He also notes that the opening of Sibelius's Swan of Tuonela is reminiscent of Wagner's Prelude to Lohengrin. In both pieces, the music shifts in its timbre as it ascends through the orchestra—the difference is that Wagner's music is presented in A-major and Sibelius's is presented in A-minor.⁶⁷ In a different musical observation, Tarasti remarks about similarities in the use of low strings and dark woodwind colors by Sibelius in the opening of his Fourth Symphony that are evocative of the darker tones heard in the opening measures of Wagner's prelude to Parsifal (see opening measures of both works).⁶⁸ Tarasti also observes that the use of individual instruments—or what he called 'actors'—in the opening of the third movement of the Fourth Symphony (e.g., flute, clarinet) are similar to the music leading up to Klingsor's entrance in the beginning of Act II (e.g., bass clarinet, clarinet in A) of *Parsifal*, which may indicate Sibelius's attraction towards darker timbres and utilizing individual instruments for effect (see Examples 5a and 5b).⁶⁹

⁶⁵ Tawaststjerna, Sibelius Vol. I, 172. See also Tarasti, "Sibelius and Wagner," 68.

⁶⁶ Ibid., 172.

⁶⁷ Ibid., 171-172

⁶⁸ Tarasti, "Sibelius and Wagner," 72.

⁶⁹ Ibid., 72.



Ex. 5a: 9 measures before Klingsor's entrance in Act II of Wagner's "Parsifal"⁷⁰



In a different example, both Tarasti and Goss also point out the similar use of string arpeggiation in the opening of Sibelius's *En Saga* to their use in Wagner's opening prelude to *Parsifal* and that it serves as the background for slower moving themes (e.g., woodwind, low strings, and timpani) (see Figures 6a and 6b).

⁷⁰ Richard Wagner, *Parsifal in Full Score*, (New York: Dover Publications, Inc., 1986), 236.

⁷¹ Jean Sibelius, "Symphony No. 4" in *Symphonies Nos. 3 and 4 in Full Score* (New York: Dover Publications, Inc., 2003), 101.



Other observations by scholars include the following: a direct borrowing of themes such as the first movement transitional motive played by the brass in the first movement of Sibelius's Fourth Symphony and *Parsifal's 'Wunde'* motive;⁷⁴ similarities in the chromatic, ascending violin line in Act III of Wagner's *Siegfried* to the violin part found at the start of the development in the first movement of Sibelius's Fourth Symphony;⁷⁵ and the idea that Sibelius's woodwind-heavy sound is suggestive of a Wagnerian style due to Sibelius having heard the Festspielhaus acoustic in Bayreuth, which apparently favors woodwinds and softens the brass.⁷⁶ Each of these examples

⁷² Jean Sibelius, "En Saga, Op. 9," in *Finlandia and Other Tone Poems in Full Score* (New York: Dover Publications, Inc., 1991), 1.

⁷³ Wagner, *Parsifal*, 6-7.

⁷⁴ Tarasti, "Sibelius and Wagner," 72.

⁷⁵ Ibid., 68-69.

⁷⁶ Tomi Mäkela, "Influence and Resistance from 1880 to 1929," in *Jean Sibelius*, trans. by Steven Lindberg (Woodbridge: The Boydell Press, 2011), 200.

show merit that Sibelius may have been influenced by Wagner in some manner, and like Tchaikovsky, used him as a model for orchestration. Unfortunately, scholarship has not undergone a complete account on how some of these similar orchestration techniques between Wagner and Sibelius may have evolved and were used in Sibelius's future works. Yet, there appear to be similarities in Sibelius's use of instruments in his early orchestral works to that of Wagner's suggesting his influence is plausible.

Anton Bruckner (1824-1896)

One of Wagner's greatest advocates was the Austrian composer, Anton Bruckner. As stated earlier, Sibelius came across the music of Bruckner when he was studying in Vienna between October 1890 and June 1891. It was during this time that he also heard Bruckner's *Symphony No. 3 in D-minor* [1888-1889 version]. In the following letter to his wife, Sibelius describes for us his impressions about the concert:

Today I went to a concert. There, a composer Bruckner was booed. To my mind he is the greatest of all living composers...It was his D minor Symphony (No. 3) that was played and you cannot imagine the enormous impression it has made on me. It has its shortcomings like anything else but above all it has a youthful quality even though its composer is an old man. From the point of view of form it is ridiculous.⁷⁷

We gather from his experience that Sibelius was very moved with this performance. If we pay attention to the latter portion of his statement, Sibelius criticized the formal structure of the work, but there must have been something else that drew his attention. Perhaps it was Bruckner's orchestral sound that gave Sibelius an overall positive impression.

Not only did Sibelius hear the Third Symphony, but some scholars suggest it was possible for Sibelius to be able to hear performances of the Fourth and Seventh Symphonies, in addition to being able to study them since they were already published by 1885.⁷⁸ Though Sibelius did not

⁷⁷ Tawaststjerna, Sibelius Vol. I, 77.

⁷⁸ Revers, "Jean Sibelius and Vienna," 16.

mention these latter two pieces in any known correspondences to date, Bruckner's general approach to orchestration in these pieces is similar to that of his Third Symphony. The following quote by Sibelius sheds some light on his impression of Bruckner's orchestration:

To Bruckner the orchestra was a huge organ. Writing scores was for him like sitting in the organ-loft of a church with all the keyboards in reach. He simply used the different registers, without thinking of their instrumental individuality. That is why he wrote flute passages for the horns, for instance.⁷⁹

On the surface Sibelius's impression seems like a general observation about Bruckner's sound. However, it is plausible Sibelius respected Bruckner's boldness in employing the various ranges of the organ that he was so used to hearing in order to achieve his sound for the orchestra, even if Sibelius did not agree with his choices. Sibelius's statement also brings forth some questions worth contemplating, such as: what did he mean when he said Bruckner wrote flute passages for horn? Is this observation in reference to the instruments' range, melodic writing, timbre, or something else entirely? Or, perhaps this statement was in response to how Bruckner utilized the horn passages in softer, more lyrical passages within the Third Symphony. Whatever the reason or reasons, Sibelius's statement gives us a sense that he had already began developing his own methods on how and where to use an instrument in an orchestral setting. In his statement above, Sibelius shows us that he may not have heard the horn as a useful lyrical instrument in the same manner a flute was applied by Bruckner. Scholar James Hepokoski suggests that at some point in Sibelius's development, 'Klang' (the palpability of the sound-object that includes timbre, chord spacing) became a primary element for his musical expressiveness and structure, citing *The Swan* of Tuonela, The Oceanides, and Tapiola, among his analysis to the Fifth Symphony.⁸⁰

⁷⁹ Törne, *Sibelius*, 90.

⁸⁰ James Hepokoski, *Sibelius: Symphony No. 5* (Cambridge: Cambridge University Press, 1993), 27-28.

Tawaststjerna also makes a similar reference, pointing out that Sibelius achieved a Bruckner-like organ color effect in the registration of his *Kullervo*, but with a different "sound constellation."⁸¹

Specific examples of orchestration techniques Sibelius may have acquired from Bruckner as found in the scholarship include the following: '*sound sheets*' – a series of overlapping figures traditionally presented in pattern(s) (e.g. ostinato); '*static chordal structures*' – sustained notes over a long period of time (e.g., drones, pedal points) placing the harmonic progression and musical energy in stasis; and '*variants in thematic contrast*' – subtle changes in orchestration upon a repetition or unfolding of motivic ideas.⁸²

Regarding the use of '*sound sheets*,' Peter Revers observes that the opening ninety-one measures of Sibelius's *En Saga* and the first half of the opening theme from the first movement of Bruckner's Third Symphony possess a parallel treatment of strings by creating a layered effect between parts on which a slower moving theme is placed over top (this is also similar to Wagner's use of string in the prelude to *Parsifal* mentioned earlier) (see Examples 7-9).



This is a technique that Sibelius eventually integrates within all of his symphonies in extensive and subtle ways. For instance, in the final movement of his Third Symphony Sibelius implements

⁸¹ Tawaststjerna, Sibelius Vol. I, 109.

⁸² Revers, "Jean Sibelius and Vienna," 18-19.

⁸³ Anton Bruckner, Symphony No. 3 in D-minor, (New York: E.F. Kalmus, 1985), 5.

on overlapping string ostinato to create an underlying texture on which a call and response between the low strings, woodwinds, and horns interject with one another (see Example 8).



In the Seventh Symphony, Sibelius incorporates an ascending string ostinato that serves as a base for the woodwind and brass to overlap the motivic/thematic material, while at the same using the ostinato to help lead the ensemble towards a climactic point (see Example 9 and footnote for additional examples).85



Ex. 9: String ostinato from Sibelius's Seventh Symphony (mm. 447-449)⁸⁶

⁸⁴ Jean Sibelius, "Symphony No. 3 in C-Major, Op. 52," in Series I (Orchestral Works) Vol. 4, edited by Timo Virtanen (Leipzig: Breitkopf und Härtel, 2009), 83.

⁸⁵ For additional examples of Sibelius employing a *sound sheet* technique, see: Symphony No. 1 (movement I, mm. 129-165); Symphony No. 2 (movement II, mm. 112-117); Symphony No. 3 (movement III, mm. 51-69); Symphony No. 4 (movement IV, 1 after Letter H-Letter I); Symphony No. 5 (movement I, mm. 130-end of movement); Symphony No. 7 (mm. 476-486). Please note this list is not exhaustive.

⁸⁶ Sibelius, "Symphony No. 7," 70.

Sibelius's use of '*static chordal structures*' are found in many of his compositions as early as *Kullervo* and *En Saga*. Revers points out a resemblance in the development of Bruckner's Third Symphony to the *Lento assai* section in *En Saga* in which the musical energy in both cases is halted or diminished (see Examples 10a and 10b).⁸⁷



Ex. 10a: Letter J, first movement of Bruckner's Third Symphony⁸⁸

⁸⁷ Revers, "Jean Sibelius and Vienna," 22-23.

⁸⁸ Bruckner, Symphony No. 3, 31.



Ex. 10b: Lento assai from Sibelius's En Saga⁸⁹

Such static figures are found in similar roles in Sibelius's symphonies, providing contrast within the formal structure. This technique has also been found serving other functions, such as a pedal-point or as simple as a fermata, that are independent from the formal structure and have no predetermined length to be classified as an application of this technique (see footnote for additional examples).⁹⁰

Lastly, 'variants in thematic contrast' in orchestration is a trait Sibelius would continue developing throughout his career. Hepokoski draws attention to this trait in Sibelius's compositions as a way to intersect thematic and harmonic designs in unpredictable ways that not only creates variety, but to also enhance and heighten the expressive quality of the music.⁹¹ Revers points out the subtle use of instrumentation in the first theme of *En Saga* compared to how Bruckner passes the first theme of his Third Symphony through a number of different versions.⁹² In the second movement of the Third Symphony, Sibelius first has the clarinet present a thematic

⁸⁹ Sibelius, "En Saga," 63.

⁹⁰ For additional examples of Sibelius employing *static chordal structures*, see: Symphony No. 1 (movement III, mm. 195-203); Symphony No. 2 (movement II, mm. 94-97); Symphony No. 4 (movement II, Letter C-Letter D).

⁹¹ Hepokoski, Sibelius Symphony No. 5, 28-29.

⁹² Revers, "Jean Sibelius and Vienna,"19. See source for example.
idea while the flute provides a short counter motive for contrast. Upon the second presentation of the theme, Sibelius adds the flute—in the same range—to the clarinet. Perhaps he believed this subtle addition of color enhanced the expression of the line within this particular moment (see Figures 11a and 11b).



This technique also appears in the Seventh Symphony and will be discussed in its analysis. So it seems the subtle changes in thematic material is a trait Sibelius shared with Bruckner and may have borrowed from him. More importantly, it is a matter of paying closer attention to these subtle changes—whether it be an addition and/or subtraction of instruments in themes or harmonies, or re-voicing—that make the difference in these presentations worth noticing.

Overall, it appears that Sibelius learned much about the orchestra and the use of instruments through his studies both at home and aboard. The teachings of Wegelius, Becker, Fuchs, and Goldmark allowed Sibelius to contemplate what he believed was the best use of instruments which eventually led him to begin formulating his concept of an orchestral sound. In addition, through the influence and his experience with the Russian and Austro-German schools of thought including Tchaikovsky, Wagner, and Bruckner—Sibelius was able to begin experimenting with

⁹³ Sibelius, "Symphony No. 3," 48.

⁹⁴ Ibid., 49.

orchestration in his own compositions that he continued to refine and individualize throughout his career.

Chapter 2: A Survey and Comparison of the Orchestration used by Sibelius and his Contemporaries

As described above, when we consider the social contexts and musical training of Sibelius's youth, we are able to see these factors may have had an influence, or at least an impact, on his development as an orchestrator. The established Russian and Austro-German music cultures provided a supportive foundation where Sibelius could begin conceptualizing his sound and how he used orchestration to achieve it. From this point, it is important to compare the use of orchestration within Sibelius's own orchestral works (e.g., symphonies versus tonepoems/incidental music) as well as the orchestral compositions of his contemporaries. These comparisons will help provide an understanding into his approach to orchestration and will also allow us to see the general differences in orchestration practice between his own works and his contemporaries.

Sibelius's Orchestration for Symphonic Works

Programmatic

The orchestration practices Sibelius utilized in his symphonies compared to his other orchestral works, or programmatic music, are quite different. For his programmatic works, Sibelius generally employed a larger ensemble compared to his symphonies, which often included larger percussion and woodwind sections (e.g., bass clarinet, contrabassoon, english horn, bass drum, cymbals), and multiple harps, resulting in different sound textures and coloring (see Appendix 2).⁹⁵ As stated earlier in this study, Sibelius's tone-poems and incidental music revolved around programmatic elements in which the music is more closely aligned with a predetermined idea (e.g., story or event, poem). His selection of instruments for this genre may have some sort of connection

⁹⁵ Not all of Sibelius's programmatic works comprised of an ensemble larger than his symphonies. However, the majority of these works incorporate at least 26 instrumental parts (there are a couple of exceptions that bring down this average—for example: *Valse Triste*).

with these outside factors directly or indirectly. Sibelius's selection of instruments for a symphony is more concrete due to the absolute and pure nature of its musical ideas.⁹⁶ As a reminder, for Sibelius, his conception of a symphony focused on the 'connection' between all of its parts, while his tone-poems/incidental music followed a programmatic nature that drew inspiration from the literature and other forms of art (e.g., *Kalevala*—the Finnish National Epic). Therefore, it is possible that the differences in orchestration between these two genres derives from the composer's belief that their styles required a different approach to orchestration. Further investigation comparing the orchestration practices between the two genres would be beneficial to this understanding.

The Symphonies

As stated in the introduction to this study, an analysis of the orchestration Sibelius used in his symphonies show he remained somewhat conservative (see Appendix 3). The basic instrumental choices for his symphonies call for the following voices: two flutes, two oboes, two clarinets, two bassoons, four horns, two to three trumpets, three trombones, timpani, and strings. Only in a few cases does Sibelius include more instruments in his symphonies, such as: piccolo (First and Seventh), harp (First and Sixth), bass clarinet (Sixth), tuba (First and Second), and auxiliary percussion—bass drum, triangle, cymbals (First) and glockenspiel (Fourth). Already this difference in instrumentation demonstrates that the sound palette between the two genres symphony and programmatic music—were conceived through different ways of thinking. Again, this aligns with Sibelius's emerging view of the symphony and its connection to the so-called

⁹⁶ We cannot deny that nature had a strong impression on Sibelius. For instance, we know that Sibelius was inspired by the swans he encountered while walking around his home, Ainola, and incorporated that experience into music for the finale of his Fifth Symphony—known as the swan theme. Some may argue this points towards a programmatic tendency. However, when classifying the differences between the two genres, we must keep in mind that the tonepoems and incidental music were specifically related to a non-musical factor from their inception.

'profound logic' by which he believed that all of the elements of a symphonic work should connect and integrate with one another at the deepest level. Another reason to consider regarding Sibelius's orchestration choices includes the availability of instruments or even the level of musical ability of his players. For instance, the following diary entry, dated June 9, 1910, illustrates Sibelius's musing on orchestration:

The 'epic' in instrumentation. The 'narrative.' Don't interrupt the mood earlier than necessary. When scoring a work one should in principle beware of leaving a passage without string instruments. It will sound ragged!—The different quality of the winds in different countries and cities, differently sized string sections and so on mean that the relationship between strings and winds is uncertain, variable and dependent on the circumstances. The sound is largely determined by the purely musical 'setting,' its polyphony and so on. Especially where dynamics are concerned.⁹⁷

According to the author, Sibelius then remarked on the limitations of winds in provincial orchestras, based on his own experience. With the exception of the Seventh Symphony, all of Sibelius's symphonies were premiered by the Helsinki Philharmonic Society. However, if Sibelius could have selected a larger orchestration for his programmatic compositions (i.e., tone-poems), then what would have discouraged him from using a larger instrumentation for his symphonies? Some of his programmatic works were premiered by ensembles outside of Helsinki, which raises the question regarding the availability or ability of instrumentalists as guided by his statement above. From this, we can conclude that Sibelius believed a standard sized orchestra was sufficient to achieve his desired sound for his symphonies, with few additional instruments as exceptions. At the same time, other factors may have caused him to select a more diverse range of instruments for his programmatic works compared to his symphonies.

⁹⁷ Barnett, Sibelius, 205.

A Comparison of Sibelius's Orchestration to his Contemporaries

After comparing the orchestration of Sibelius's works to the orchestration used by his contemporaries, Sibelius appears more conventional in his selections (see Appendix 2 and 4).⁹⁸ A reason for this outcome is that Sibelius may have put considerable thought into the capabilities of each instrument and their use. This notion is supported by a statement Sibelius made to author Santeri Levas when discussing his concept of instrumentation; Sibelius stated the following: "'I can say everything that I want to say from those [instruments] that are available today. One must only understand how to use them properly.""⁹⁹ From this statement it seems that Sibelius appeared to have been quite particular about his orchestration choices and that having extra instruments were simply inefficient. Additionally, this statement connects with Sibelius's earlier statement regarding his experience hearing Bruckner's Third Symphony during his youth, in which he commented that Bruckner wrote flute parts for the horns. With that being said, it appears that Sibelius strongly believed each instrument had a unique role to play in his overall symphonic sound and it should only be called upon for a specific purpose.

In the famous meeting between Gustav Mahler and Sibelius in 1907, Sibelius recalled Mahler describing the essence of the 'symphony' as containing the world and that it must embrace everything.¹⁰⁰ An overview of the instruments Mahler employed in his symphonies reveal he was true to his own philosophy (see Appendix 4). Take for instance, Mahler's first and last symphonies. Both have at least forty-five different instrumental parts each between the two works, and were composed over twenty years apart. His Fourth Symphony incorporates the smallest orchestration.

⁹⁸ Please note Appendix 4 does not account for all composers of the time period, but takes into consideration the more popularly discussed composers of the era.

⁹⁹ Santeri Levas, *Sibelius: A Personal Portrait*, trans. by Percy M. Young (Lewisburg: Bucknell University Press, 1972), 89.

¹⁰⁰ Ekman, Sibelius, 191.

Nevertheless, it is still on the larger side—thirty-eight parts—when compared to the average orchestration Sibelius used in his symphonies—which is around twenty-five parts. An overview of Richard Strauss's orchestral works show that he may also have believed more instruments would also have equated to more sound possibilities. In his many tone-poems, there is not one instance of a simple, classical-size orchestration. The smallest example is his *Tod und Verklärung*, but this already incorporated thirty-two instruments. Even though the tone-poem falls under a different category of expressiveness than the symphony, when compared to Sibelius's orchestration in his programmatic music, Strauss's is on average much larger. Fellow Nordic composer Carl Nielsen's symphonies are the most closely aligned to Sibelius's orchestration choices. However, he still incorporated an assortment of auxiliary instruments more frequently than Sibelius (e.g., two sets of timpani in *Symphony No. 4 "Inextinguishable;"* english horn; extra percussion).

These comparisons are not meant to denigrate the use of larger orchestration by Sibelius's contemporaries. Mahler, Strauss, and Nielsen achieved many great colors, affects, and textures through their orchestration choices. Instead, the comparisons illustrate that Sibelius conceived of his orchestral sound, particularly that of his symphonies, through the use of 'standard, classical' orchestral instruments with minor additions when needed. It appears Sibelius believed that standard orchestral instruments had the ability to do just cause to his conception of sound. Though the addition of extra instruments (e.g., english horn, bass clarinet, auxiliary percussion) to the orchestral palette was more often used in his programmatic works, these types of instruments were to be a last resort for his symphonies and their use needed to be completely justified so as not to overwhelm or muddy the clarity his wished to achieve. Therefore, an analysis of the ways in which

Sibelius used these instruments within the First, Third, and Seventh symphonies will allow us to determine if there is a consistency in their use, and also provides us a glimpse into his sound world.

Chapter 3: An Analysis of Orchestration within Symphony No. 7 in C-major, Op. 105

Genesis and Background of the Seventh Symphony

Before moving forward to the orchestration analysis of Sibelius's Seventh Symphony, it is important we touch upon the background in which the symphony was conceived. Sibelius first mentioned his Seventh Symphony in a diary entry dated December 18, 1917—alongside revisions for the Fifth Symphony and initial work on the Sixth Symphony.¹⁰¹ However, examination of sketches from as early as 1914 reveal melodies that bear similarities to the slow opening of the Seventh Symphony, suggesting Sibelius may have used previously conceived musical ideas for this composition.¹⁰² Sibelius's last symphony was completed in its final form on March 2, 1924 and its premiere was held in Stockholm on March 24 of the same year. Originally, it bore the title, Fantasia sinfonica I, though Sibelius hesitated to use this choice of title because he did not want people to misinterpret the work for something it was not. Commentators have suggested the use of Fantasia or Symphonic Poem within a title at the time insinuated specific compositional traits or qualities to a particular genre (e.g., programmatic), and Sibelius did not want the title to imply such.¹⁰³ Eventually, he settled on Symphony No. 7 – in one movement (Symphonie Nr. 7 in einem satz) for he realized the work was in fact a symphony, though of a different sort than those of the time.

¹⁰¹ Kari Kilpeläinen, "Sibelius's Seventh Symphony: An Introduction to the Manuscript and Printed Sources," trans./rev. James Hepokoski in *The Sibelius Companion*, ed. Glenda Dawn Goss (Westport: Greenwood Press, 1996), 240.

¹⁰² Ibid., 240. For more discussion on this topic, see Timo Virtanen, "From Heaven's Floor to the Composer's Desk: Sibelius's Musical Manuscripts and Compositional Process," in *Jean Sibelius and His World*, edited by Daniel M. Grimley (Princeton: Princeton: Princeton University Press, 2011), 58-73. PDF e-book.

¹⁰³ Simon Parmet, *The Symphonies of Sibelius: A Study in Musical Appreciation*, trans. by Kingsley A. Hart (London: Cassell & Company Ltd., 1959), 124. For further discussion on this subject, see also Veijo Murtomäki's "Symphonic Fantasy': A Synthesis of Symphonic Thinking in Sibelius's Seventh Symphony and Tapiola," in *The Sibelius Companion* ed. by Glenda Dawn Goss.

Scholars have debated the formal structure of the symphony, trying to categorize the composition and its sections according to formal symphonic ideas that were established in the eighteenth and nineteenth-centuries—such as sonata, rondo, and scherzo. A possible origin for such analyses, and one often cited in the literature, may have arisen from a letter Sibelius wrote about the work to his friend, Axel Carpelan on May 20, 1918:

"The VII Symphony. Joy of life and vitality, with appassionato passages. In 3 movements—the last an 'Hellenic rondo'...In regard to Symphonies VI and VII the plans may possibly be altered according to the development of the musical ideas."¹⁰⁴

Some commentators have used this letter to justify their assertions that the symphony was composed of multiple movements. However, such analyses are unnecessarily restrictive. They constrain the symphony to a form it does not possess, and they deceive the listener with false expectations. Sibelius did not intend a traditional symphony with sonata form. Rather, the Seventh Symphony aligns with Sibelius's long search for the meaning of the 'symphony.' We receive a glimpse of this thinking as early as 1907, when Sibelius spoke of the idea of the symphony and it's 'profound logic' with Mahler, and that there should be an inner connection between all motifs.¹⁰⁵ Sibelius believed the symphony was intended to be heard as a work with one continuous idea from beginning to end, allowing the musical content to determine its form. As suggested in the literature, perhaps this was Sibelius's attempt to erase the distinction between absolute and programmatic music, and instead, fuse together the elements from both genres in a somewhat hybrid model.¹⁰⁶ In the end, Sibelius's Seventh Symphony, as scholar Robert Layton puts it,

¹⁰⁴ Ibid., *The Symphonies*, 122.

¹⁰⁵ Ekman, Sibelius, 190.

¹⁰⁶ Goss, *Sibelius*, 421. Sibelius was not the first to conceive of an all-encompassing symphony in one movement. Composers before him (e.g., Franz Schubert's *Wanderer Fantasy*), and his contemporaries (e.g., Arnold Schoenberg's *Chamber Symphony No. 1*; Richard Strauss's tone poems) had set out to explore this idea. A formal analysis of the Seventh Symphony is not necessary at this time as it would take away the focus on orchestration. However, some resources that discuss the analysis of this symphony include Veijo Murtomäki's "The Seventh Symphony: Unity Gained," in *Symphonic Unity: The Development of Formal Thinking in the Symphonies of Sibelius*, trans. by Henry Bacon (Helsinki: Helsinki University Department of Musicology, 1993); Parmet's *The Symphonies*; Kari Kilpeläinen

"consummates the nineteenth-century search for symphonic unity."¹⁰⁷ For Simon Parmet, it is "the dome mounted on the granite structure of the earlier symphonies...its music is a concentration of the essence of the other symphonies' best qualities."¹⁰⁸ These perspectives no doubt also included Sibelius's treatment of the orchestra. Accounts of Sibelius's discussions on orchestration go hand in hand with his approach to the symphony, because he realized that each element must have a particular purpose whether it is a musical idea or the instrument expressing that idea.

A Comparison of the Sketches to the Final Version of the Seventh Symphony

A comparison of the sketches for the Seventh Symphony with its final version offers us some insight into Sibelius's orchestration process and allows us to infer what he deemed most important about his orchestral sound based on the alterations made for the final version. There are a number of orchestral sketches associated with this symphony. The most relevant for this study are sketches [0350-0356] located in the National Library of Finland in Helsinki. These provide the most complete representation of the symphony. Unfortunately, musical examples taken from the sketches cannot be used without the consent of the copyright holders.

An analysis of the designated sketches show there were no major re-working of sections when it came to Sibelius's orchestration of the Seventh Symphony.¹⁰⁹ Rather, it appears the overall goal of Sibelius's orchestration across his sketches was to achieve a certain clarity in his orchestral sound. This occurred in the form of making alterations to melodic lines, accompaniments, harmonies, and pedal-points.

[&]quot;Sibelius's Seventh Symphony;" and Tawaststjerna's *Sibelius Vol. III* 1914-1957, trans. Robert Layton, (London: Faber and Faber Ltd., 2008).

¹⁰⁷ Robert Layton cited in Michael Steinberg's *The Symphony: A Listener's Guide* (Oxford: Oxford University Press, 1995), 607.

¹⁰⁸ Parmet, *The Symphonies*, 121.

¹⁰⁹ One exception is the three versions of the ending in which Sibelius eventually compressed the ideas of the first and second versions to create the final version.

The most common way Sibelius achieved his desired clarity of sound was simply by adding or subtracting voices from the original sketches. Most often in his sketch corrections Sibelius reduced the number of voices being used. He either realized the original instrument(s) were superfluous and/or stifled a musical idea. For example, in measures 215-219 of sketches [0350] and [0355], Sibelius originally scored the woodwind family with the strings in presenting a chromatic ostinato texture as part of the transition that led to the C-minor presentation of the solo trombone theme. In the final version, Sibelius omitted the woodwinds from the ostinato. He may have realized the doubling of woodwinds with the strings clouded the clarity and intensity of the ostinato and decided the string timbres were sufficient for that particular texture. Furthermore, in measures 221-223 of sketch [0355], Sibelius had doubled the trombone I 'solo' with horns I and III. However, in the final version, he omitted the horns. In addition to the timbral quality of the trombone, perhaps Sibelius realized the solo trombone had the ability to state the musical idea independently and effectively among the dense orchestral texture—in this case, the string ostinato from the previous example. The horn may have simply added too much weight to the sound which may be another reason why he omitted it in the final version. Whatever the purpose, these examples already demonstrate Sibelius's search for refinement in presenting his musical ideas.

When Sibelius added an instrument(s) to the final version of the Seventh Symphony, it often helped connect, fill-out, and/or articulate the clarity of a musical idea. In the first example of the previous paragraph (mm. 215-219), the timpani was not originally scored, but in the final version Sibelius added the timpani—it served as a pedal-point so as to ground the orchestral sound and provided a subtle blending of parts. In measure 422 of sketch [0351], Sibelius did not originally include the timpani with the woodwind motivic line. However, in the final version, Sibelius added the timpani (This example of sketch [0351]) added the timpani with the woodwind motivic line. However, in the final version, Sibelius added the timpani most likely to assist the articulation of the woodwinds within the section. (This

articulative technique is commonly used within the Seventh Symphony and will be discussed below). Sometimes Sibelius even re-voiced an idea to achieve his desired orchestral clarity. For instance, in measure 71 of sketch [0355], the clarinet II is written a sixth below the clarinet I. The option for a two-octave presentation of the same musical idea—as found in the final version—was also included in the sketch. This example demonstrates that Sibelius pondered the presentation of his musical ideas and inserted alternatives into his sketches when necessary. In sum, Sibelius's desire for a clear presentation of musical ideas cannot go unnoticed. The subtle refinement in his orchestration revealed between the sketches and final version of the Seventh Symphony demonstrate the care and consideration he gave to these musical ideas.

An Analysis of Instrumental Families in the Final Version of the Seventh Symphony: Woodwinds, Brass, Percussion, and Strings

In a discussion about orchestration with his pupil, Bengt de Törne, Sibelius stated that "Orchestration is the discomfiture of absolute idealism."¹¹⁰ From this statement, it is reasonable to believe Sibelius implied that orchestration is an imperfect, yet essential, attempt to transfer the ideal vision (musical ideas) of the composer to the listener. Furthermore, Sibelius advised young composers to "always remember that even the best orchestration ceases to be good as soon as it becomes the aim of the composer instead of remaining a means...You must never write anything without knowing exactly how it will sound."¹¹¹ Here, Sibelius reveals his method of orchestrating, which was always employed in service of his musical ideas and not only according to pre-established patterns, forms, or guidelines. Phrased differently, the instrumental choices he made were considered carefully and with a specific purpose. With this in mind, we turn to the analysis of the Seventh Symphony, guided in our discussion by an awareness that Sibelius's use of

¹¹⁰ Törne, 53

¹¹¹ Ibid., 37

instruments and instrumental families was intentional, to specific effect, and shepherded by a clarity of musical conception.

The following orchestration analysis of the Seventh Symphony is broken down by instrumental families. Each are examined in three segments by their: (1) function; (2) common characteristics (e.g., individually and/or as a group); and (3) idiosyncrasies and less common characteristics (see page 2 and 3 for a layout of questions). A brief analysis of instrumental combinations between families will follow. Lastly, a comparison between Sibelius's two earlier symphonies (First and Third) will help us determine if there is a consistent manner in which Sibelius applied orchestration across his symphonies.

Please note there are innumerable ways to examine how Sibelius practiced orchestration. The steps employed in this study, I believe, are a good starting point for this topic. It begins a dialogue on identifying 'how' Sibelius utilized the instruments and it invites more detailed analyses of their use. I believe these steps will help guide us towards a better understanding in his use of orchestration and the impact it had on his concept of a symphonic sound so that future performers approach the distinctiveness of his orchestration with more care and consideration.

Woodwind Family

Function(s)

The primary function of the woodwind family in the Seventh Symphony is presenting motivic/thematic material. Sibelius employed the woodwinds in this way through both full and partial presentations in which he, at times, juxtaposed motivic/thematic material between different instruments.¹¹² Compared to one another, each individual member of the woodwind family was

¹¹² The idea of juxtaposing motivic ideas between different instruments was explored and further developed by Arnold Schoenberg called *Hauptstimme*, in which there is a continuous melody that threads its way through various voices, cited in Kilpeläinen pg. 265.

given an equal opportunity to present thematic ideas. From this information, we can deduce that Sibelius did not seem to favor one instrument(s) color or ability over another. Rather, he aspired to create a variety of colors and textures based on their qualities.

The following examples are different ways Sibelius employed woodwinds in a motivic/thematic function. In measures 7-9, Sibelius blends together the flute and the bassoon. The flutes are placed in a 'sweeter' and more transparent part of their range while the bassoons, placed in their middle range, presents a somber coloring, that creates an overall warm, yet thin texture (see Example 12).



On the other hand, Sibelius also used the bassoon in its lower range to present a thematic idea. For example, in measures 94-95 (paired with horn IV), while the oboe and clarinet present a leading melodic line overhead, the bassoon is given a three-note motive and is placed in the lower part of its range. Here, the bassoon has a fuller yet slightly rough quality to its timbre (see Example 13).



¹¹³ Sibelius, "Symphony No. 7," 5-6.

¹¹⁴ Ibid., 13.

Sibelius applied this same approach to the oboe as he did to the bassoon, demonstrating he was willing to incorporate an instrument's more exposed or unpolished qualities. In the previous example, the oboes—in thirds—present a fragmented portion of a different theme in their more expressive and penetrating range. However, in measures 14-16, the oboes are paired with the bassoon in its lower range resulting with a more resonant, but harsher sound quality (another example includes mm. 91-95) (see Example 14).



The clarinet was treated in a unique manner when it came to range. For example, in measures 71-73, Sibelius placed the clarinets two octaves apart when given the following thematic idea (see Example 15).



¹¹⁵ Ibid., 4.

¹¹⁶ Ibid., 10.

In this example, the clarinet I, in its 'clarion range,' provides a clear sound quality while the clarinet II, in its 'chalumeau range,' provides a darker and more sonorous sound quality to the texture. When played together, their combination creates a more 'open' sound quality that has the ability to blend in with almost all voices. Sibelius may have used the clarinet in this manner because the bassoon's timbre—if placed in the clarinet II range—did not provide the subtle balancing required for this section. These are some of many examples that showcase an assortment of woodwind qualities—such as exploring different range qualities and combinations—Sibelius utilized throughout the Seventh Symphony, resulting in a wide array of orchestral coloring and texturing. In the examples provided, we can suppose, therefore, that each woodwind instrument possessed a special timbral quality in presenting motivic/thematic material for Sibelius, and their combined use was essential in achieving his desired sound goal.

Secondary functional roles of the woodwind family found within the Seventh Symphony, though not as common, include serving in a harmonic and pedal-point manner. The former was used minimally, though for great coloristic effect. For example, in measures 60-63, Sibelius achieves a warm, yet slightly brighter coloring through the woodwinds by placing the flutes and clarinets in their lower range, while placing the oboes an octave above the flutes (see Example 16).



If, for instance, the oboe and flute parts were reversed, the result would have created a denser quality since the oboe's sound in its lower range is more difficult to control/blend.¹¹⁸ As written, the placement of the flutes and clarinets in their lower range with the oboes in their middle-upper range results in a slightly sharpened balance between the octaves. This slightly sharper presentation is evocative to the clarity of musical ideas revealed between the sketches above. Other examples of woodwinds serving in a harmonic function include measures 47-51 and 470-483.

The pedal-point function served as a connecting thread for the motivic/thematic ideas, harmonies, and the overall formal structure of the Seventh Symphony. Within the woodwind family, this method was employed most frequently through the bassoons and rarely by any other member of the family. For instance, during the shift towards C-minor in measures 226-235, Sibelius has the bassoon hold a pedal [C2] (doubled by Horn II and IV) to ground the harmonic stability for the rest of the ensemble (this is later passed off to the syncopated violins in measure 235) (see Example 17).

¹¹⁷ Ibid., 9.

¹¹⁸ Please note this does not take into consideration the blending with the rest of the ensemble, rather I am extracting out the woodwind instruments independently from the rest of the ensemble. In the example presented, it may also have been the best voice-leading practice for this outcome of orchestration.



In this example, Sibelius could have taken the contrabass away from the chromatic ostinato it shared with the rest of the string section. However, the pattern would have then lost the depth it needed to match the emphasis of the static-harmonies that were being held by the brass family. Furthermore, if Sibelius chose to have the contrabass section hold a pedal [C] with the bassoon

¹¹⁹ Sibelius, "Symphony No. 7," 31.

instead of playing the ostinato figure, it would have likely created too many overtones that may have risked the clarity of the overall sound palette (For other examples of when woodwinds served as a pedal-point function, see Appendix 5). The 'buzzing' quality of the bassoon's pedal in its lower range (paired with the horn II/III) was all Sibelius needed to ground the ensemble.

Most Common Characteristics

Woodwind Grouping

When presenting motivic/thematic ideas, Sibelius most often grouped the woodwinds together in three recurring methods. First, each woodwind is regularly paired with its partner (e.g., Flute 1, 2), and frequently these pairings are presented in unison or in intervals of thirds, sixths, or octaves. A good example demonstrating this grouping and use of intervals is found in measures 97-100 (see Example 18).



In this example, each member of the woodwind family is paired together (e.g., oboe I and II) and each also demonstrate the above mentioned interval pairings (except for the octave). For other examples of Sibelius writing the woodwind family in unison, thirds, sixths, and octaves, see measures 101-106 and 115-208.

¹²⁰ Ibid., 14.

Second, through most of the Seventh Symphony Sibelius has the woodwind family present motives in either heterophonic or homophonic textures, or a mixture of the two. For instance, in measures 18-22, the woodwinds are presented in a mixture of homophonic and heterophonic textures (see Example 19).



While both flutes and the clarinet I represent a main motivic idea that likely draws the listener to their part, the remaining woodwinds also present a variation of the same motivic idea, but in a more condensed rhythmic manner. This method of texturing is not uncommon within the

symphony (Also, note the use of the third and octave intervals in this example). For other examples of this woodwind texturing, see measures 71-80; 101-106; and 148-200.

Lastly, Sibelius has the woodwind family present motivic ideas, though less frequently, in a quasi-polyphonic manner. In these instances, parts are independent from one another yet they link a motivic idea together or finish a statement started by another. For example, in measures 110-113, Sibelius divided the clarinet and bassoon parts among each other in which the second part for each (i.e., clarinet II, bassoon II) completes the musical idea started by the first (the same treatment also occurs in measure 124-126) (see Example 20).

¹²¹ Ibid., 5.



Ex. 20: mm. 110-113, Motivic idea passed between Clarinets and Bassoons¹²²

In measures 94-96, the oboe begins a motivic idea that is taken up and completed by the clarinets (and violins) (see Example 13). In sum, these are some common instances where Sibelius used subtle shifts in instrumentation to achieve more dynamic coloring in his motivic/thematic lines by intersecting an assortment of woodwinds to complete these ideas.

Woodwind Pairing

Another common trait of Sibelius's treatment of the woodwind family in the Seventh Symphony is his frequent use of two particular instrumental pairings: (1) flute and bassoon; and (2) oboe and clarinet (see Appendix 6 for additional examples). The flute and bassoon are often paired together, creating a more 'open' sound quality when doubled in octaves and/or harmonized. For instance, in measures 84-89, the flute and bassoon present relatively the same material (see Example 21). However, in the second presentation (mm. 88-93), Sibelius alters the bassoon's starting pitch so the harmony could arrive on a stronger harmonic resolution.



Ex. 21: mm. 84-89, Flute and Bassoon pairing¹²³

¹²² Ibid., 16-17.

¹²³ Ibid., 12.

Notice the slight change in harmony of this repeated idea starting in measure 88. Though the bassoon presents the same ideas as the flute in this example, it augments the sound palette by offering a slight shading quality. This minute change in voicing is reminiscent of Bruckner's treatment of motivic ideas described in Chapter 2. For this reason, performers must be aware of these subtle changes so that listeners will hear the slight difference in the presentation of the repeated musical material. No matter how small the change, there was a purpose for their use.

Sibelius often paired the oboe and clarinet together when presenting imitative ideas first introduced by the flute and bassoon, or later to fill in the middle texture in strengthening the sound of the section (e.g., mm. 128-133). Though the oboe/clarinet combination does not occur as frequently as the flute/bassoon, both instruments complement each other. For instance, in measure 3, Sibelius has the clarinet help soften the intensity of the oboe while it plays in its lower register (see Example 22).



Ex. 22: m. 3, Oboe and Clarinet combination¹²⁴

On the other hand, the oboe helps provide a cleaner line when combined with the clarinet in its lower range (e.g., mm. 64-65). As a reminder, our observations of the symphony's sketches suggest Sibelius sought out a distinct clarity in his sound when presenting his musical ideas. From the examples provided it is then reasonable to believe this is a reason he pursued flute/bassoon and oboe/clarinet combinations. Their shared qualities presented an interesting mix of open and closed textures that allowed him to create a variety of sound densities and colors.

¹²⁴ Ibid., 3.

Voice-Crossing

Another common characteristic use of the woodwind family within the Seventh Symphony was voice-crossing. Through this technique, Sibelius was able to achieve a greater variety of coloring in his orchestral palette. This technique occurs most frequently between the flute, oboe, and clarinet, and less often with the bassoon, though it does occur in the latter's voicing.¹²⁵ Throughout the symphony, Sibelius voiced the oboe higher than the flute seventeen times; the clarinet is voiced higher than the flute seven times, and the oboe sixteen times; and the bassoon is voiced higher than the oboe four times, and the clarinet seventeen times (see Appendix 7). Let us examine the voice-crossing found in measures 71-79 as an example (see Example 23).



¹²⁵ In his *Principles of Orchestration*, Rimsky-Korsakov describes voice-crossing to attain certain special effects, see pages 36 and 47. Though he advised against frequent use of voice crossing for the sake of avoiding unnatural resonances, see Chapter 2 on melody. He further discusses the bad effect open harmonies can create and suggest they be used minimally and devoted to woodwind and brass, see page 78. Nikolay Rimsky-Korsakov, *Principles of Orchestration*, ed. by Maximilian Steinberg and trans. by Edward Agate (New York: Dover Publications, 1964). ¹²⁶ Sibelius, "Symphony No. 7," 10-11.

In this example, the clarinet I is placed in a clear part of its range, with the clarinet II two octaves lower in its dark and sonorous range. Both flutes—an octave lower than the clarinet I—are placed in the middle where they have a sweeter and more transparent quality. Sibelius could have given the flute or the oboe the clarinet I line. However, it would not have been as effective since the clarinet is more able to diminish and grow in volume than the others, and its sound can project much fuller in this case (Also, notice the *ppp* dynamic given to the clarinet I, while the oboes take over the middle register, noticeably altering the color as the intensity grows. In the end, voice-crossing allowed Sibelius to interlink the sound of the woodwind family together to create a balanced yet varied textured sonorities through the blending of different timbres and registers.

Additional Characteristics

In addition to the other more common characteristics described above, the following characteristics are also worth examining. First, Sibelius may have considered where to place the emphasis of sound through the use different registers. When pairing two different woodwind instruments together, Sibelius tended to emphasize the octave through doubling and/or giving each of the other voices a supporting harmonic pitch (usually the third or sixth). In measures 90-92, both flute and bassoon parts are paired together two octaves apart (see Example 24).



Ex. 24: mm. 90-92, Flute and Bassoon paired two octaves apart¹²⁷

¹²⁷ Ibid., 13.

The flute I and bassoon I begin on a concert [G], though two octaves apart, while the second parts of both instruments fill in the supporting harmonic pitches. This results is an 'open' sound quality with a hint of harmonic coloring. In measures 47-51, Sibelius placed the clarinets two octaves apart in which clarinet I doubled the flute I while clarinet II double the octave below oboe I (an additional example is found in mm. 71-78) (see Example 25).



If, for instance, Sibelius had the oboe double the flute during these two examples, it would have resulted in too bright of a tone and taken the focus away from the motivic/thematic presentation by the string family. In sum, Sibelius's consideration for the register placement of the woodwinds, allowed him to achieve a variety of sound qualities.

Second, as mentioned earlier, Sibelius slightly altered the woodwind voicing to present a variety of subtle colors within a repeated thematic idea. For example, in measures 80-81 and 84-89 (see Examples 21 and 26) Sibelius originally moves from an oboe/bassoon combination to a flute/bassoon (horn not discussed in this section).¹²⁹

¹²⁸ Ibid., 7-8.

¹²⁹ Please note how Sibelius subtly alters the coloring of the woodwinds in this example. This technique is similar to the Brucknerian technique addressed above.



Ex. 26: mm. 81-84, Oboe and Bassoon pairing¹³⁰

A comparison of the two presentations show that the flute II and both bassoon parts are voiced differently. Though the harmonic progression is the same, the voicing changes—the first time resulting in a first inversion A-flat major chord and the second time to a root position A-flat major chord. In his study of melodic lines in Sibelius's En Saga, Charris Efthimious notes that Sibelius seemed to rarely use the same combination of instruments twice and tried to avoid timbral repetition.¹³¹ This practice occurs frequently within the woodwind family of the Seventh Symphony and would be worth exploring in his other compositions.

Lastly, out of all the woodwinds used in the Seventh Symphony, Sibelius regularly shifted the bassoon's role between other instrumental families.¹³² In the symphony, the bassoon most often serves the function as a pedal-point in addition to its other role in presenting thematic ideas. Compared to the other members of the woodwind family, perhaps Sibelius saw the bassoon's

¹³⁰ Ibid., 10-11.

¹³¹ Charris Efthimiou, "On the Instrumentation of Melody Lines in Sibelius' Early Orchestral Works (1892-4), in Jean Sibelius's Legacy: Research on his 150th Anniversary, edited by Daniel Grimley, Tim Howell, Veijo Murtomäki and Timo Virtanen (Cambridge: Cambridge Scholars Publishing, 2017), 321-334.

¹³² It is interesting Sibelius used the bassoon in this manner but did not incorporate the bass-clarinet into the Seventh symphony as he did in his Sixth symphony. Afterall, he did say the following about the instrument: "You must remember that the bass-clarinet is an elderly gentleman; you mustn't ask him to run too fast!," in Törne, Sibelius, 89. The bass-clarinet would have fit in well with the pacing of the Seventh symphony. However, there must have been something about its quality that Sibelius did not believe acceptable for the symphony.

potential to blend well with the horn, cello, contrabass, and timpani. Thus he gave it a more malleable role within the instrumental palette.

Less Common Characteristics

At one point within the symphony, Sibelius inserts two piccolo parts in place of the flute, playing a total of seven measures (mm. 226-228; 238; 241-243). The reason Sibelius chose to incorporate the piccolo may have to do with the increasing intensity of the ensemble leading towards the climax of this particular section (see Figure 27).



Ex. 27: mm. 241-243, Piccolo introduced to augment woodwind motive¹³³

¹³³ Ibid., 36.

By measures 241-243, the brass are near their loudest given dynamic, with the trumpets and trombones presenting slow, static harmonies at a *forte* dynamic and two of the four horns presenting fragments of a motive in their upper range. The strings continue their dense ostinato pattern and the bassoons join them. The remaining woodwind voices present a fragment of the thematic idea together. After examining the woodwind voicing in this example, it seems Sibelius had to employ a higher register (e.g., the piccolo) otherwise it would not have cut through the density of the rest of the ensemble. In this case, the clarinet I is placed higher than the oboe. This may derive from the fact that the clarinet possesses a sharper quality in this part of the range (clarion range), while the oboes, doubled an octave lower, are more effective in this range at this point due of their thicker sound quality.¹³⁴ The First Symphony is the other symphony where Sibelius used the piccolo.

Finally, there is one instance in measures 511-516 in which the flute I and bassoon I are given a 'solo' together and are not joined by their respective instrumental partners until the second beat of measure 516 (see Example 28).



It is possible Sibelius specifically indicated this as a 'solo' in order to ensure the players would project above the string tremolo underneath. Also, it may be indicated as such so that both players

¹³⁴ See Rimsky-Korsakov, Orchestration, 16-17 for his descriptions of woodwind range.

¹³⁵ Sibelius, "Symphony No. 7," 77-78.

are not timid while playing and the balance between the two octaves is clearly heard. Other sololike instances, though not indicated as 'solo' in the score/parts, are found in measures 249 and 253-257.

Overall, Sibelius used the woodwind family in the Seventh Symphony in a variety of ways. Their primary function was to present thematic/motivic material, and less commonly function as pedal-points and harmonic fillers. Both functions were used as to maintain flow and connection within the symphony. The bassoon served the pedal-point function just as much as it presented thematic/motivic material. Lastly, Sibelius's treatment of woodwinds together in different combinations (e.g., flutes or clarinets; clarinet/oboe or flute/bassoon) along with their voicecrossing allowed him to subtly vary the coloring of themes, emphasize different registers, and vary the density of the overall sound palette.

Brass Family

Function(s)

The primary functions of the brass family in the Seventh Symphony are twofold: (1) to present static harmonic swells; and (2) to serve as a pedal-point for the ensemble. These functions could be seen as related but distinct—all static harmonic swells are, in essence, pedal-points, but not all pedal-points are static harmonic swells. Through these techniques, Sibelius used the brass family to emphasize and intensify the ending of phrases or segments within the formal structure. The trumpets and trombones were most commonly grouped together during the static harmonic swells (fast or elongated crescendos), while the horns served more as pedal-point figures (the horns were also the most frequently used brass instrument). This swell technique is reminiscent of Tchaikovsky's bold treatment of the brass discussed earlier, reminding us of the potential influence he had on Sibelius. An example of the brass family presenting a static harmonic swell is found in measures 100-101 (and 103-106) (see Example 29).



Ex. 29: mm. 100-101, Brass Harmonic Swell¹³⁶

In this example, Sibelius has the trumpets and trombones—on an octave [D#]—hold their representative static notes with a gradual underlying crescendo while the remainder of the orchestra complete their motivic ideas.¹³⁷ Though the horn II/III present a rhythmic syncopation during this example, they technically fall within this static function—holding concert pitches [C# - D#] in measures 101-101, and [E – D – Bb] in measures 103-106 (see Appendix 10 and 11). Furthermore, Sibelius may have used the brass family in this manner to create an underlying foundation in which the rest of the ensemble was able to grow towards a more dramatic climax. Aside from the percussion family, it seems Sibelius believed this was a trait only the brass family could achieve effectively. Put differently, during the lead-up of these brass swells near climactic points, Sibelius appears to create two largely independent textures that compete against each other for dominance of the phrase. An example includes measure 242-245 (see Example 28). Here, the woodwinds and strings compete with the brass and percussion families for dominance at the end of the phrase. Eventually the brass and percussion are phased out (starting in measure 244) as the

¹³⁶ Ibid., 14.

¹³⁷ This technique was also observed by Edgar Kirk in his analysis of Sibelius's *Symphony No. 2* and tone poem, *En Saga*. See Edgar Kirk, "A Study of the Orchestration Thechnic of Sibelius," (Master of Music thesis, Eastman School of Music, Rochester, 1948), 66-67.

other instrumental families take the lead to continue the forward movement of the music. Sibelius used the brass sparingly in this role most likely so as not to overwhelm the listener, but when he did, the result was powerful.

A secondary function the brass family is used for in the Seventh Symphony is presenting motivic/thematic material, though this is not as common. When a brass motivic/thematic idea did occur, trumpet I, trombone I, and horns I /III most often received the melodic line, though there are rare instances where the other brass instruments possessed a portion of the idea. Furthermore, during these few moments there is also more of a chance for contrapuntal writing between each part rather than a uniform representation as shown in the woodwind family. Take for instance, measures 60-70—the arrival of a primary thematic idea (see Example 30).







In this example, Sibelius allowed most members of the brass family to experience their own independence (the exception being the trumpets). Compared to the woodwind family, the brass provides a much more intense presentation of motivic ideas. This seems to occur during drastic changes in harmony and more commonly at higher climactic points within the formal structure. Additional examples of independent brass writing are found in measures 221-241 and 475-477.

Most Common Characteristics

Compared to the woodwinds, the brass family does not appear to possess any particularly unique characteristics, though there are a few ideas worth exploring. First, the trumpets and trombones are most frequently paired together during the course of the symphony when compared to their pairing with horns. A reason for this choice could be how Sibelius perceived the horn's timbral quality. Perhaps the horn would have caused these passages to sound too heavy, which dampened its effect for the emergent texture. This may also be a reason why he did not incorporate

¹³⁸ Sibelius, "Symphony No. 7," 9-10.

a tuba into the score. Second, from an intervallic perspective, Sibelius commonly voiced the trumpet and trombone parts in unison, octaves, and thirds. Most frequently the voicing for both instruments show there is an octave spread between two parts and usually a third presented below the highest note played. At times these are arranged in different harmonic inversions, such as first and second position, which allowed Sibelius to highlight the inner harmonies rather than the root (see Figure 2).

TROMBONE		TRUMPET	
Measures	Pitches in Part Order (I,II,III)	Measures	Pitches in Part Order (I,II,III)
82-82	E3-C3-E2	60-61	G4-E4-G3
242	G#3-B3-B2	242	Ab4-B5-B4
243	G#3-E3-E2	243	G#4-E4-E3
247-248	B3-G3-B2	311-314	E4-C4-E3
251-253	Bb3-Gb3-Bb2	320	C5-Eb5-Eb4
311	E3-C3-E2	321	C5-Ab4-Ab3
320	Eb4-C3-Eb3	396-399	G4-Eb4-G3
321	C4-Ab3-Ab2	407-408	Gb4-Eb4-Gb3
396-399	G3-Eb3-G2	522-523	G4-Eb4-G3

Fig. 2: Trombone and Trumpet Intervals (Representative example is not exhaustive. [C4] = Middle [C]

Furthermore, Sibelius usually wrote the horns in unison or harmonies of three to four pitches with horns I and III typically serving as high parts and horns II and IV serving as low parts serving as the center in which the ensemble's harmony revolved. Like the bassoons, Sibelius alternates the horn's role between the string and woodwind families. Most often this role is in the form of a pedal-point, at other times it is used as part of a melodic/thematic idea. For example, between measures 79-89, Sibelius joined the horn and the oboe in presenting a motivic idea and then he had them join the flute and bassoon in the second and third repetition of the same idea (see Example 31).



When considering the entire ensemble, the horns are not necessary in this example. The woodwinds have the ability to hold their ground since there is minimal activity from other instrumental families. However, with the horns an additional color to the overall quality of the motivic line emerges but does not dominate the overall coloring of the line. Therefore, it is possible Sibelius alternated the horns between instrumental families because of their ability to blend with various timbres and to provide additional support to the harmonic foundation without overwhelming the sound palette.

Less Common Characteristics

Compared to the woodwind family, the brass are given more opportunities in presenting a designated 'solo' line in the Seventh Symphony. Trombone I, trumpet I, horn I and horn III are each given a solo in the symphony. However, the trumpet I (mm. 223-225), horn I (mm. 236-241; 508-512) and horn III (mm. 236-241) are given less and shorter solo opportunities when compared to the trombone (mm. 60-70; 221-230; 475-484). As stated earlier, Sibelius doubled the trombone I solo with horns I and III in an earlier sketch of the symphony, but then omitted the horns in the final version. There must be a particular quality Sibelius heard in the trombone that led him to make this change. Similar to the flute and bassoon solo markings near the end of the symphony, Sibelius may have indicated these as 'solos' because he wanted the player to project a little more than normal to ensure their specific color or timbre emerged from the texture. Therefore, when

¹³⁹ Ibid., 11-12.

marked as a solo instrument, it is important for the performer to bring out the particular voice so it does not become lost in the texture.

Overall, Sibelius used the brass family somewhat sparingly throughout the Seventh Symphony. However, when he did include the brass family, it was for more powerful effects. Their function in presenting harmonic swells and pedal-points helped ground the orchestra harmonically, and also helped lead the ensemble towards dramatic climaxes. Rarely did they receive motivic/thematic material, but when given the chance, they were either as 'solos' or pairing for timbral and coloristic effect. Finally, Sibelius most often paired the trumpet and trombone together likely due to their timbral similarities. The horn, however, played a more malleable role between other instrumental families possibly due to its ability to blend with other instruments.

String Family

Function(s)

Similar to the woodwind family, the primary function of the string family in the Seventh Symphony is to present motivic/thematic material. Also, similar to the woodwind and brass families, the strings are commonly presented as a group. Sibelius gave the violin and cello the most motivic material and less to the viola and contrabass—most likely for harmonic and balance purposes.¹⁴⁰ Unlike the other instrumental families, however, the strings also functioned equally in the harmonic/pedal-point and rhythmic roles. A reason for this may be the fact that the string family makes up the majority of an orchestra's size, therefore allowing it to serve in multiple

¹⁴⁰ Regarding the cello, Jorma Lunenburger's study on Sibelius's use of the cello support its common use for thematic material. In the study, Lunenburger points out that the cello was used most commonly for 'cantilena' passages due to its more soloistic qualities (e.g., *Swan of Tuonela;* opening solo of *Symphony No. 4* and *Pohjola's Daughter; Spring Song;* and *Lemminkainen and the Maiden of the Islands*). See Jorma Daniel Lünenbürger, "Jean Sibelius and the Cello," in *Jean Sibelius's Legacy: Research on his 150th Anniversary,* eds., by Daniel Grimley, Tim Howell, Veijo Murtomäki and Timo Virtanen (Cambridge: Cambridge Scholars Publishing, 2017), 304.
capacities more equally. Examples for each of these functions are not necessary here as they are self-evidently demonstrated throughout the symphony.

Most Common Characteristics

String Division (or divisi)

There are various recurring string characteristics Sibelius implemented throughout the Seventh Symphony that are worth noting. These include, but are not limited to: string division (or divisi), pizzicato, tremolando, and ostinato. Throughout the symphony, Sibelius used string division to obtain various shades of coloring—typically dividing each string part between two to four parts. For example, in measures 22-49, Sibelius created a five-part string texture beginning with the viola/cello (two-part divisi) and contrabass, and gravitated towards a seven part-texture when the violins entered (see Example 32). This division allowed Sibelius to expand his texturing and overall range without having to add instruments from other families. In the following example, Sibelius creates a very colorful chorale affect through the use of string division.



Ex. 32: mm. 23-40 String texturing (example continues on next page)



Similar to the woodwind family, Sibelius also applied a voice-crossing technique within some instances of his string divisions. In measure 34 of the previous example, Sibelius placed the violin IIa higher than violin Ib. The most obvious reason for this choice was for octave balancing within the sections since each string group (e.g., violin I, violin II, viola, cello, contrabass) are presenting an independent line by this point. In the same example, the cello I line is written higher than the viola II starting in measure 23. This demonstrates Sibelius's interest in working with different blends within the same family. In a different example, measures 106-108, violin IIa is written higher than the violin Ib, while the violin Ia and violin IIb are in octaves (see Example 33).

¹⁴¹ Ibid., 6-7.



Ex. 33: mm. 106-108, Violin divisi voice-crossing¹⁴²

Perhaps Sibelius believed this was the best way to blend voices for texturing purposes as well as achieve and maintain intonation within the section or family. Or perhaps, taking the violins for instance, he intended to seat the violins antiphonally to create a more equal distribution of violin color across the ensemble, or, together as one large section to display a more centralized presentation of the violin color within the ensemble. This choice is dependent upon the conductor and would be essential for him/her to carefully consider how the strings are set-up for this purpose. Overall, there appears to be a similar application of this technique between the woodwind and string families by way of obtaining a certain coloring or texture within the sound.

Pizzicato

Another recurring string characteristic in the Seventh Symphony is Sibelius's use of pizzicato. This technique is most commonly found in the contrabass, though it is not uncommon

¹⁴² Ibid., 16-18.

in the other string parts.¹⁴³ When performed, a pizzicato creates a delicate coloring and articulation that provides an additional quality to the texture without being too prominent. When taking place in other string parts, the pizzicato is used as an accompaniment texture. For instance, in measures 50-55, the viola, cello, and contrabass present a walking pizzicato accompaniment to support the overhead violin and wind textures (see Example 34). Here, the pizzicato also provides a contrasting texture to the section while the violins above play with the bow (arco).



Ex. 34: mm. 50-53, Low String adding pizzicato to texture¹⁴⁴

As already mentioned, Sibelius employed the pizzicato technique most often in the contrabass. He often utilized the lower range of the contrabass-mostly in an octave or third division. This technique allowed a slight addition to the articulation of certain passages, very similar to the timpani (which will be discussed in the percussion section below). For example, in

¹⁴³ Kirk also makes this observation in his analysis of Sibelius's Second Symphony and En Saga. See Kirk, Technic, 16.

¹⁴⁴ Sibelius, "Symphony No. 7," 8.

measures 18-20, Sibelius had the contrabass execute a pizzicato while the rest of the strings were tremolo (see Example 35).



Sibelius used this technique to provide the slightest articulation quality without having to add another instrument to the texture. In this example, the contrabass doubles the cello, clarinet II, and bassoon II lines in providing an additional textural quality that challenges the tremolo and wind textures. A similar example also occurs in measures 99-101. Here, the contrabass matches the horn IV and both bassoons, but the use of pizzicato provides a more percussive articulation so it can emerge from the textures (see Example 36).

¹⁴⁵ Ibid., 5.



Ex. 36: mm. 99-101, Contrabass on pizzicato¹⁴⁶

If Sibelius chose to have the contrabass play with the bow (*arco*) in this example, it would most likely have sounded too heavy and thick, thus losing its effect. An *arco* effect along with the entrance of the timpani in measure 104 would not have been able to create the dramatic build towards the climax it intended.

The contrabass pizzicato technique also helps connect sections together without having another instrument hold a pedal-point. For instance, in measures 155-157 (and again in measures 180-182) the pizzicato serves as a connecting point between sections of the piece in much the same way Sibelius shifted the bassoon and horn between different instrumental families as a means to keep the ensemble together (see Example 37).

¹⁴⁶ Ibid., 14.



Ex. 37: mm. 154-157, Contrabass pizzicato used as a connector¹⁴⁷

The orchestral pedal was an issue Sibelius disagreed with Liszt about in his orchestration because he believed the pedal allowed the music to link and reduce the risk of any hollowness that would disrupt its flow (see footnote).¹⁴⁸ For Sibelius, the pizzicato, particularly in the contrabass, had the ability to soften the sound of a passage. Its less articulative punctuation compared to the use of the

¹⁴⁷ Ibid., 24.

¹⁴⁸ In his book, Törne recalled Sibelius commenting on Franz Liszt's lack of pedal in his orchestral compositions, quoting Sibelius as stating, "[Liszt] is too pianistic in his orchestral works and too orchestral in his piano pieces. While he was writing his scores he sat at the piano, pressing the pedal, and everything sounded perfect. But the orchestra there was no substitute for the pedal accommodating enough to avoid the danger of sudden emptiness, and fuse all the different and sometimes incompatible groups of sound," see Törne, *Sibelius*, 31. Törne also recalled Sibelius talking about the importance of establishing a pedal within the orchestra, saying, "The Orchestra, you see, is a huge and wonderful instrument that has got everything—except the pedal. You must always bear this in mind. You see, if you (*footnote continued from previous page*) don't create an artificial pedal for your orchestration there will be holes in it, and some passages will sound ragged. Many composers, even great geniuses, either never discovered this or entirely forgot it—Liszt, for instance," Ibid., 30-31.

bow provided subtle contrast in texturing (this observation excludes a more modern pizzicato technique introduced by Béla Bartók), and its use also had the ability to connect sections.

Tremolando (or tremolo)

The tremolando (or tremolo) is another commonly used string characteristic by Sibelius in the Seventh Symphony. Much like the pizzicato, its use provides an added layer to the texture that can grow from a background role to the foreground in an instant, as well as deliver additional energy to the musical idea. A tremolo occurs in either an unmeasured (e.g., free use) or measured manner (e.g., written as sixteenth-notes, fingered tremolo). An example of an unmeasured tremolo is found in measures 18-20 (see Example 35). In this example, the unmeasured string tremolo adds supportive energy to the repetitive woodwind theme, providing a great deal of agitation to the sound palette (other unmeasured examples include mm. 71-79; 245-257). An example of a measured tremolo is found in measures 282-408 (other measured examples: mm. 410-476). In this example, Sibelius uses the tremolo in the violin II and viola parts to serve as an accompaniment figure (see Example 38).



Ex. 38: mm. 282-286, Measured tremolo¹⁴⁹

¹⁴⁹ Sibelius, "Symphony No. 7," 42.

To boost the color, Sibelius divided the parts so they start opposite of each other, creating an overlapping and energetic effect.¹⁵⁰

Ostinato

Sibelius's use of an ostinato in the string family are also common. He often utilizes this technique to heighten the intensity of a section, allowing for a slower moving motive to take precedence. These patterns often take the form of scales and/or syncopations. For instance, in measures 208-241 the strings unify through an ascending and descending chromatic pattern while the brass family exerts a slow, unwinding theme over top (see also in mm. 449-486) (see Example 39).



Ex. 39: mm. 208-213, String chromatic ostinato¹⁵¹

Sibelius's use of a repeated syncopated ostinato also falls within this technique, giving the music a driving and at times, unsettling feeling.¹⁵² Different from an accompaniment figure, these ostinato patterns create a different quality of texture compared to ones that simply serve as background music. These patterns bring an added energy to the music, giving it forward momentum.

¹⁵⁰ Please note the tremolo technique can be considered an example of the Rhythmic function.

¹⁵¹ Sibelius, "Symphony No. 7," 28.

¹⁵² Other examples of syncopation ostinatos are measures: 93-106; 109-115; 119-127; 235-241; 487-494; and 518-520.

Less Common Characteristics

Like the brass family, the strings do not possess many idiosyncratic characteristics. There is one 'solo' written for the cello in measures 441-445 (see Example 40). In this example, it appears Sibelius wanted to maintain his string division in the viola and cello parts to maintain a blend of harmony, but he also offers the slightest hint of color from the lower octave to match the violins by employing one cello. Once again, this demonstrates Sibelius's attempt in providing a hint of color to the sound. The use of a solo string instrument goes in hand with his use of a solo woodwind or brass instrument.



Similar to the bassoon in the woodwinds and the horn in brass family, the contrabass is the odd member within the string family. Sibelius did not consistently use the contrabass throughout the symphony like other members of the string family, instead, he uses it selectively. He did so in more subtle ways to enhance the orchestra's sound where necessary, instead of utilizing it because it is available. Most often within the Seventh Symphony, the contrabass serves as a pedal-point (doubling mostly horn/bassoon and cello) and often joins the brass family to aid in the arrival of a climactic point. Furthermore, it is often used to provide subtle support thematically and

¹⁵³ Sibelius, "Symphony No. 7," 64-65.

harmonically. For example, in measures 162-166 (and again in mm. 187-192) the contrabass presents the thematic idea along with the woodwind family (see Example 41).



Ex. 41: mm. 162-167, Contrabass doubled with woodwinds¹⁵⁴

Note the *ppp* dynamic given to the contrabass versus the woodwinds *forte* dynamic (the second time the contrabass is *pp*). The contrabass maintains at least five dynamic levels away from the woodwinds. This example again demonstrates how selective Sibelius could be when thinking of employing color. In this case, he thought a slight boost of color from the lower octave would be sufficient to make the line project. Measures 208-225 is another instance where Sibelius incorporates the contrabass specifically for color (see Example 39). Here, the contrabass is only used at a certain part of the group register (along with the timpani) before it continues to play through the rest of the passage. Without it, the string ostinato would not sound as full. Once again,

¹⁵⁴ Ibid., 25.

this small boost to the balance and expression of an idea demonstrates Sibelius's intent to utilize an instrument specifically for their qualities.

In sum, the string family played multiple roles within the Seventh Symphony. Since the string family is the majority of the ensemble, Sibelius was able to implement various techniques of string division, tremolo, pizzicato, and ostinato to manipulate the sound and texture that he wanted to create. Like the woodwind and brass families, string solos were rare and not used by Sibelius unless they were absolutely necessary for the sound. Though Sibelius used the contrabass the least out of all members of the string family, it still played a vital role in connecting the symphony together through pedal-points and pizzicato.

Percussion Family

Function(s)

The timpani are the sole percussion instruments of its family employed in the Seventh Symphony, and its primary function is to serve as a pedal-point. Sibelius utilized the timpani to connect harmonies and structural segments in much the same way he used the bassoon, horn, and the contrabass to serve this function. As a pedal-point, the timpani adds to Sibelius's orchestral palette in a couple of ways. First, they act as filler for the texture, a task Sibelius may have deemed too difficult for instruments with similar qualities, such a bassoon, horn, trombone, tuba, cello, or contrabass. This also includes segments in which the timpani help phase out a group of instruments as the music moves into a new section of the symphony. Take for example, in measures 241-246 (see Example 42).



In this example, Sibelius has the timpani connect the ending of a previous phrase, in an overlapping fashion, to the beginning of a new section by continuing the timpani's 'trill' while at the same time gradually decreasing its dynamic towards a *pianissimo* until the new section takes hold (another example is mm. 263-266). Second, as a pedal-point, the timpani provide a reference point for

¹⁵⁵ Ibid., 36-37.

harmonic stability, which coincides with the pedal-point function. The previous case serves as an example in which the timpani trill also aids in keeping the ensemble harmonically grounded along with the brass family.

The timpani also serve a secondary function in presenting motivic/thematic ideas. In an interview with his biographer Santeri Levas, Sibelius provides us some insight about how he viewed the percussion family, stating the following:

"We can take them from primitive people, whose treatment of them is much more assured than ours. The significance of these instruments is much greater than people in general believe. Their time has now arrived. Drums are extremely important in the orchestra, and the drummer must be very musical—which is understood only by a very few."¹⁵⁶

A thorough analysis of the Seventh Symphony's timpani part reveals Sibelius was true to his word. At various points throughout the symphony, Sibelius has the timpani—to the best of its ability outline the rhythmic and/or motivic idea in a particular section. To further support this idea, the timpani play nine different pitches throughout the course of the symphony, allowing us to infer it served a motivic function. For instance, beginning in measures 110-114 (and again in mm. 125-126), the timpani complete a three-part round with members of the woodwind family—clarinets and bassoons (see Example 43).

¹⁵⁶ Levas, Sibelius, 89.



A two-part round between the woodwinds seems logical, but when the timpani enters, it completely changes the sound quality, disrupting the clarity of the rest of the ensemble due to its more resonating quality. Additionally, this combination is unexpected because it is not often that the timpani serve in a motivic/thematic capacity.

Common Characteristics

If unable to play a step-wise motivic idea, Sibelius utilized the timpani to emphasize the rhythmic aspect of a motivic idea. This technique provided a subtle, yet noticeable boost to the clarity of the sound, very similar to how the contrabass pizzicato technique was used.¹⁵⁸ For example, in measures 387-389, Sibelius has the timpani aid the oboe in articulating the rhythm of

¹⁵⁷ Sibelius, "Symphony No. 7," 17.

¹⁵⁸ Kirk made a similar observation in the third movement beginning at Letter F in the Second Symphony. Though the timpani assists the trumpet in articulating its theme, it is not quite in the same subtle manner used in the Seventh symphony, see Kirk, *Technic*, 88-89.

its theme, allowing it just enough emphasis to overcome the interweaving string accompaniment (see Example 44).



Ex. 44: mm. 387-389, Timpani used to enhance Oboe articulation¹⁵⁹

A similar idea is also used in measures 310-311. In this example, the timpani play a fragment of the melodic idea along with the violin, cello, contrabass, and woodwind sections. At the same time, the timpani play the driving rhythmic feature of the underlying accompaniment from the inner strings seen in the previous example. Furthermore, Sibelius also had the timpani help emphasize faster rhythmic spurts that needed assistance in clarity, which falls along the same idea as aiding

¹⁵⁹ Sibelius, "Symphony No. 7," 57.

in articulating a motivic/thematic idea.¹⁶⁰ Figure 3 demonstrate instances where Sibelius used the timpani to aid in articulating a motivic/thematic idea.

Instrument(s) Helped by Timpani	Measure(s)
All Strings and Woodwinds	206-208
Trumpet I	223
Flutes, Oboes, Clarinets	247
Horns I, III	236-240
All Woodwinds	262-266
Flutes, Oboes, Clarinets, Bassoons, Violin I, Cello, Bass	310-311
Woodwinds, Cello, Bass	395-396
Flutes, Oboes	422-424
Flutes, Oboes, Bassoons	434-436
All Woodwinds	438-440
All Strings	449-469

Fig. 3: Instances where Timpani is used to aid in articulating a motivic/thematic idea

Less Common Characteristics

A less noticeable but important characteristic for the timpani in the Seventh Symphony is to help signal the beginning and ending of phrases. Take, for instance, measures 179-180 (see Example 45). Rather than having the contrabass play this pattern, Sibelius used the timpani. A reason is they produce a driving effect to bring the segment to a close, giving a sense of finality.



Ex. 45: mm. 176-180, Timpani used to end section/phrase¹⁶¹

¹⁶⁰ Additional examples include measures 151-152; 173-174; 185; 198-199; and 247.

¹⁶¹ Sibelius, "Symphony No. 7," 26.

Taking this idea further, Sibelius gave the timpani a recurring rhythmic idea of their own presented in varied form throughout the symphony. Beginning as early as measure 1, this rhythm appears at various points throughout the symphony, and is also found in different variations (see Example 46).



Ex. 46: 3 Variations of Timpani motive used in Seventh Symphony¹⁶²

Sometimes the rhythm is used at the beginning of new sections, such as presented in measure 1, and at other times near the end, signaling a change is about to occur (e.g., measures 151-152). Additional examples of this motive being used are found in the following measures: 173-174, 185, 198-199, 206-207, 224, 226, 230, 233, 285, 304, 319-320, 391, 406-407, and 495-496.

Overall, Sibelius used the timpani in the Seventh Symphony most frequently as pedalpoints by way of fusing together the ensemble and the musical ideas. However, Sibelius also saw the melodic capabilities of percussion instruments, and was not afraid to use the timpani to present motivic/thematic ideas. If unable to complete the step-wise contour of the melodic/thematic idea, Sibelius then used the timpani to help enhance the articulation of a musical idea presented by another instrument—much in the same manner he used the contrabass pizzicato. Lastly, Sibelius had the timpani help signal beginning and ending of phrases, perhaps to aid in the pacing of the structure of the composition.

An Analysis of Cross-Family Blending and Combinations

Now that we have a clearer picture of the function(s) and characteristics of each instrumental family, we can move to a subsequent analysis of the Seventh Symphony that addresses Sibelius's use of cross-family blending and instrument combinations. Each instrumental

¹⁶² Ibid., 3 (measure 1), 10 (measure 71), and 24 (measures 151-152).

family is referenced to its combination with another to see if there are any qualities worth noting. The following description is how the order of the analysis will proceed: (1) the woodwind family will be cross-referenced individually with the string, brass, and percussion families; (2) the brass family will be cross-referenced individually with the string, and percussion families; and (3) the string family will be cross-referenced with the percussion family. Please note that after one family is cross-referenced with another (e.g., woodwinds referenced with strings), it does not need to be re-examined (e.g., strings referenced with woodwinds) in the subsequent families since it has already been addressed.

Woodwind Family

Combined with the String Family

Sibelius often paired the woodwinds with members of the string family in the Seventh Symphony. It is not uncommon for moments of individual woodwind instruments to be paired with individual string instruments. The most frequently used string and woodwind combinations include the violin and cello, while the viola and contrabass are less commonly used.¹⁶³ The flute is most commonly paired with the violins and at other times with the cello. The oboe is also paired frequently with the violins though usually another woodwind instrument is also concurrently paired with it when this occurs. This may due to the oboe's ability to project through the orchestral sound more effectively than the other members of its family. Like the flute, the clarinet is also most commonly paired with the violins perhaps to soften the brightness of the violin, while the bassoon is mostly paired with the cello and contrabass most likely to their shared timbral qualities. It appears that the main purpose for these combinations was to subtly alter the coloring and enhance

¹⁶³ Please note these observations do not include *tutti* presentation of woodwind and strings.

the sound palette, in addition to completing motivic ideas (similar to how the woodwinds would do with each other).

To increase the resonance and amplify the tone with these combinations, Sibelius used either unison or octave doubling, or added articulations. For example, in measures 162-163, the woodwind family presents a motivic idea that is then answered by the string family (see Example 41). In this example, the contrabass is added to the woodwinds to provide depth to the sonority and to soften their sound. It was also used to connect the motivic/thematic idea together through its slurring ability while the woodwinds are given a staccato articulation (same technique is used in mm. 176, 187, and 191). Another example of Sibelius combining the woodwind and strings to help enhance each other's sound is found in measures 54-56 (see Example 47).



Ex. 47: mm. 54-56, String and Woodwind doubling¹⁶⁴

Here, the flute (along with the oboe I and horn I) double the first violin line. Sibelius gave more attention to the middle register by placing the first violin part on an [A4] rather than an [A5]. He only adds the flute I on the [A5] to provide a hint of the upper partial to the texture. Furthermore, the placement of the oboe in the lower range is fuller in its presentation, adding an 'edge' to the violin (and horn) line. Overall, the combination of woodwinds and strings help increase the resonance of the string family and amplifies their tone, while at the same time the strings enhance the woodwind sonorities when needed for added color.

¹⁶⁴ Ibid., 8.

Combined with the Brass Family

When Sibelius combines the woodwinds with members of the brass family in the Seventh Symphony it is typically for holding static harmonies and pedal-point purposes, and less commonly used for enhancing motivic material. The horns are the most commonly paired brass instrument with the woodwind family, regularly used to help enhance or extend the bassoon line. A reason for this choice may be their similar sound qualities. For instance, in measures 225-235, Sibelius joins the horns with the bassoon to help complete the trombone solo phrase (see Example 48).



Ex. 48: mm. 236-238, Bassoon and Horn added to Trombone line¹⁶⁵

However, he begins only with 2 horns (Horn I and III) and on the second presentation (measure 228) he includes them all. The horns are also used in minor moments of blending with other members of woodwind instruments. In measures 52-59, each of the four horn parts double one or two members of the woodwind family. In this instance, the combination produces a very warm coloring yet the brightness of the woodwind voices still dominate the texture. In measure 80-89,

¹⁶⁵ Ibid., 34.

the horns first double the oboe and bassoon, and then flute and bassoon through a segment of a repeated motivic idea (see Example 49).



In this example, Sibelius demonstrates his ability to slightly alter the sound palette with minor adjustments. During the first presentation, the oboe's brighter quality along with the doubling of the bassoon and horn lines creates an even blending across the two families. However, during the second and third repetition of the musical idea, the register spacing between the flutes and that of the horns and bassoons produces a different quality to the sound texture. The flute floats on top of

¹⁶⁶ Ibid., 11-12.

the bassoon/horn line as it creates an opaque blending of timbres. As mentioned earlier, these subtle changes are evocative of Sibelius's experience with Bruckner's music.

The trumpet and trombone are paired the least with any member of the woodwind family. However, when they are paired, it is normally with the bassoon. As mentioned above, this was commonly used during static harmonic progressions and held pedal-points. This typically occurred during the lead-up towards a climactic point in the music likely due to their penetrating timbres. During these few occurrences, the trumpet and trombone are traditionally the dominating instruments while the bassoon or other woodwinds would simply add to the 'bulk' of the sound through doubling of octaves or providing inner harmony. For instance, in measures 103-105, Sibelius has the trumpet, trombone, and bassoon hold a concert [E] during a swell leading to the climax at measure 106. The combination of brass and bassoon at this point (along with the contrabass and timpani) give energy and support to the repeated high woodwind and string phrase (see Example 50).



Ex. 50: mm. 103-105, Bassoon doubling with Trumpet and Trombone on pedal-point¹⁶⁷

In addition to their similar sound qualities, another reason Sibelius combined the bassoon with the trumpet and trombone may be due to the bassoon's ability to produce a sonorous sound much like the brass are able to produce. This similar sound quality occurs best within the mid to lower register of the bassoon where it possesses a rougher trait. Other instances include measures: 243-245, 320-322, 407-408, 446-448, 476-482, and 498-499.

¹⁶⁷ Ibid., 15.

In the end, there may be a couple of reasons why Sibelius may not have combined the woodwind and brass families together as often. The first has to do with their primary function in the overall organization of the symphony. As mentioned earlier, the primary function of the woodwind family in the Seventh Symphony is to present motivic/thematic material while the primary function for the brass family is to hold static harmonies and pedal-points. Though each function must work together in achieving the musical outcome, their traits may not have been conceived in a manner that needed mixing. In his treatise on orchestration, Principles of Orchestration, Rimsky-Korsakov believed woodwinds should be used to reinforce the brass sound, but at the same time, soften it and reduce it of its characteristic qualities.¹⁶⁸ A second reason Sibelius did not combine or blend the woodwinds and brass together as often is likely to refrain the sound from getting too dense. After analyzing the brass family within the symphony, it was mentioned earlier that the horn functioned between different instrumental families while the trumpet and trombone were more or less strictly used to enhance the beginning and ending of phrases/climactic points. It for this reason we must continue to pay attention to Sibelius's voicing and register placement between parts. Furthermore, Sibelius may also have avoided frequently using this combination because he wanted to keep the brass family as an independent texture of its own throughout the course of the symphony. This independence of instrumental family from one another brings us back to Adam Carse's observations on Tchaikovsky's orchestration techniques mentioned earlier.

¹⁶⁸ Rimsky-Korsakov, Orchestration, 88.

Combined with the Percussion Family

Throughout the Seventh Symphony, Sibelius combined the timpani with the woodwind family in an interesting manner. As a reminder, the primary function of the timpani was to establish pedal-points that helped connect sections of the symphony together, and a secondary function to present motivic/thematic ideas. For the primary function, this was most commonly achieved with the bassoon and members of the brass family. Examples are not necessary since they are selfevidently shown throughout the score. But for secondary function of presenting motivic/thematic ideas, Sibelius combined the articulative capabilities of the timpani to enhance the woodwind sound As mentioned earlier, in measures 110-114, the timpani are included in a three-part imitative trio with the clarinet and bassoon (in measures 123-126 it joins flute and bassoon). Sibelius could have employed a member of the brass family or even a cello or contrabass to execute this passage. However, he instead incorporated the timpani because he believed in its ability to be expressive in presenting melodic ideas. Additionally, the timpani's expansive resonance during these instances created a unique effect.¹⁶⁹ In other cases, the timpani were used to enhance a woodwind's rhythm. In his treatise, Rimsky-Korsakov explains this type of combination should be executed concurrently with any significant rhythmic figure.¹⁷⁰ For example, in measure 387-389, Sibelius added the timpani to aid the oboe in its rhythmic presentation most likely to help it project through the violin and viola ostinato (see Example 51).

¹⁶⁹ Conductors should take care of these passages so the timpani does not cover the woodwind and syncopated lines. ¹⁷⁰ Rimsky-Korsakov, *Orchestration*, 117.



They were also used to create octave doubling that has often been found within the woodwind section. Other instances of this rhythmic assistance for woodwinds include measures 422-424, 434-436, and 438-440. In sum, Sibelius most often combined the timpani with the woodwind family for pedal-point purposes, but would also combined the two families for motivic or articulative reasons.

Brass Family

Combined with the String Family

When Sibelius combined members of the brass family with the string family in the Seventh Symphony it was most often for harmonic purposes. The viola, cello, and contrabass are the most frequently paired with horns likely due to their similar colors. The violin is rarely use in combination with the brass family, but when it is, it is concurrent with the viola. For example,

¹⁷¹ Sibelius, "Symphony No. 7," 57.

between measures 93-106, the horn and viola are doubled in presenting a syncopated rhythmic accompaniment for the section (see Example 52a and 52b).



Ex. 52: a) mm. 93-95, Doubling of Horns and Violas; b) mm. 109-110 Doubling of Violins and Violas¹⁷²

The softness of the horn's timbre and the brighter, articulative quality of the viola perfectly blend to create an equally balanced tone. Eventually, the horn syncopation is omitted in measure 109 and is replaced by the violins, creating an entirely different quality, one that is much brighter. This change demonstrates that Sibelius wanted to produce a noticeable contrast between the two. He does so by returning to the horn/viola combination for this rhythm in measures 119-128, and to the violin/viola combination starting in measure 124. Other than for harmonic functions there appear to be no other significant combinations of brass and string families (see Appendix 12 for additional examples of brass and string combinations).

¹⁷² Ibid., 13 and 16.

Combined with the Percussion Family

When joined with members of the brass family, the timpani is utilized primarily in a pedalpoint and harmonic function. Most often this is used to enhance phrase endings. An analysis reveal that trumpets and trombones are most commonly paired with the timpani, and less frequently with horns unless for *tutti* sections. For example, in measures 104-106, the timpani joins the trumpet and trombone on a concert [E] (along with the bassoon and the syncopated horn and contrabass) in a gradual crescendo towards the downbeat at measure 106 (see Example 50). Sibelius may have utilized this combination because he believed the timpani possessed the ability to slowly and/or quickly execute dramatic swells like the brass family, which greatly augments the effect leading up towards these climaxes. Additional brass and timpani harmonic functions include measures: 241-246, 312-314, 397-399, 407-408, 498-499, 508-509, 518-521, and 522-525.

In other instances, the timpani may be paired with a member of the brass family in serving as a pedal-point. For example, the trumpet and timpani are paired together on a concert [Bb] in measures 251-253. The combination is subtle yet creates an added layering to the held pedal over three octaves while the horns add to the harmony—resulting in Eb-minor in second position (see Example 53).



Ex. 53: mm. 251-252, Trumpet and Timpani pedal-point¹⁷³



Lastly, there is a moment when Sibelius added timpani to present a motivic idea with members of the brass family. This is found between measures 223-240. Here, Sibelius used the timpani to assist rhythmic fragments of the unwinding motives, very much in the same manner they were used with the woodwind family. In measure 236-240, the timpani aid the horn motive by striking the triplet rhythm to help it project through the dense string ostinato and sonorous trumpet and trombone harmony (see Example 54).

¹⁷³ Ibid., 40.



Ex. 54: mm. 235-240, Timpani aiding Brass Rhythm

In the end, Sibelius paired the timpani with all members of the brass family. It appears the main purpose he combined the brass family with the percussion—or in this case, the timpani—was to establish pedal-points that served as a foundation for harmony. Additionally, he combined these two families to boost phrase endings and climactic points within the music through the use of dramatic swells, which are commonly found throughout the symphony.

String Family

Combined with the Percussion Family

When Sibelius combined members of the string family with the woodwinds in the Seventh Symphony, he did so as to provide subtle gradations of coloring that slightly enhanced the sound palette, in addition to completing motivic ideas. When he combined the string family with members of the brass family, it was most often for harmonic purposes. Sibelius's purpose for combining members of the string family with the timpani is most commonly for subtle enhancement of the texture or to add to the rhythmic clarity of a musical idea. Most often these examples are found in the lower strings—cello and contrabass—though there are a few instances that involve the violins and violas. As a pedal-point, the timpani helped enhance a musical idea presented by the strings. For instance, in measures 209-213 the timpani enter at the same point as the contrabass to complete the string chromatic ostinato (see Figure 55). Mentioned earlier Sibelius originally had the woodwind family double this ostinato with the string family in an earlier sketch before he decided to only use the timpani. This combination was most likely used at this point to fuse together the string sound in which the timpani, with its more subtle dynamic of *ppp* to a *p*, served as a filler to the color of the sound.



Ex. 55: mm. 208-213, Timpani paired with contrabass¹⁷⁴

A similar example in measures 488-494, which includes the cello and contrabass, Sibelius scores the timpani with the low string (and bassoon) passage to help augment the underlying effect. Other pedal-point effects that utilize both the timpani and strings simultaneously include measures: 104-106, 200-204, 215-219, 220-221, 449-476, and 499.

¹⁷⁴ Ibid., 28.

Furthermore, Sibelius also added the timpani to the strings to assist in articulations just as he did with the woodwinds. For instance, in measures 154-155, Sibelius added the timpani to help the strings articulate a motivic idea (alongside the woodwinds) (see Example 45). He did this to ensure the clarity of the musical idea but also to obtain a subtle and supportive tone underneath the idea to augment its projection. Other instances where the timpani aid in articulation, include measures 179-180, 207-208, 247, 310-312, and 395-397.

Chapter 4: A Comparison of Orchestration between the First, Third, and Seventh Symphonies

Observations on the Sketches and the Final Versions from the First and Third Symphonies

Similar to the observations made regarding the differences between the sketches and the final version of Sibelius's Seventh Symphony, so too an overview of the sketches and final versions for the First and Third Symphonies is necessary. These observations will assist in uncovering whether Sibelius's approach to altering his orchestration was done in a similar manner. Observations of the First Symphony were taken from the first complete manuscript of the symphony located in the Sibelius Museum in Turku, and also from sketches [0123-0133] located in The National Library of Finland in Helsinki. Observations of the Third Symphony were taken from sketches [0226-0236] also located in The National Library of Finland. (Please note only in the second movement of the Third Symphony was there a major re-writing of the movement with regards to orchestration. A discussion of this movement in particular is not necessary at this time, but a copy of this version is found in the Jean Sibelius Works edition (JWS) published by Breitkopf & Härtel.) Again, a comparison of the sketches of these earlier symphonies with their final version provides insight into Sibelius's orchestration process and allows us to gain a glimpse of what he saw most important about his orchestral sound based on the alterations made for the final version.

As was observed between the sketches and the final version of the Seventh Symphony, the reduction of instruments and the re-voicing of certain musical ideas also appear as the most common alterations between the sketches and final versions of the First and Third Symphonies. As stated in the previous chapter, these choices most likely dealt with Sibelius's aim at achieving the utmost clarity in presenting his ideas. Again, Sibelius likely chose to reduce the number of instruments in a particular passage because he either realized the original instruments were superfluous and/or stifled a musical idea. Similar to the changes found in the Seventh Symphony,

these changes also occur in various forms within the sketches for the First and Third Symphonies including alterations to melodic, accompaniment, harmonic, and pedal-points. For instance, in measures 49-54 in the first complete manuscript of the First Symphony, Sibelius originally intended the woodwind theme to be supported by a violin tremolo of the same idea, but was later taken out (see Example 56).



Ex. 56: mm. 49 (A)-54, Woodwind theme without Violin tremolo from first movement, First Symphony¹⁷⁵

¹⁷⁵ Sibelius, Symphonies 1 and 2, 3-taken from final version.
Perhaps Sibelius removed the violins and their tremolo so it did not disrupt the quality of the musical line presented by the woodwinds and provided the contrast needed to counter the energetic nature of the music that started at the *Allegro energico* in measure 29. In measures 38-41 from sketch [0229] of the autographed score of the first movement from the Third Symphony, Sibelius had both the trumpet and trombone hold a concert [F#] along with the horns. Sibelius omitted the trumpet and trombone in the final version and found the horn sufficient to support this pedal-point. This choice was likely made due to the more muffled nature of the trombone's presence and the brightness of the trumpet of this softer section. Gained from these observations is that Sibelius sought out the best instrumental combinations when presenting his ideas. The changes he made are most often subtle and did not require much effort to their alterations. Overall, they are noticeable enough and would prove effective in the end.

The re-voicing of a melodic line for a different instrument, or altering the harmony or register of an instrument are also commonly found in these comparisons. In measures 18-22 in the second movement of the First Symphony (first full manuscript), Sibelius originally scored the melodic phrase for clarinet and viola, but in the final version he re-voiced this phrase for a muted first violin (*sul D*) and cello (see Example 57). A possible reason for this change is the color (e.g., muted violin on a [D] string) and subtle clarity this combination of instruments provided. Or, maybe Sibelius originally intended an antiphonal effect that would begin with the violin and cello in measure 9 and then pass off to the clarinet and viola starting in measure 18. Instead, he decided to have the original voices—violin and cello—complete the musical phrase. So it appears Sibelius's desire for the clearest presentation of his ideas through orchestration are somewhat consistent across the three symphonies. Whether a change was large or small, melodic, harmonic, and accompaniment lines all faced the same scrutiny to achieve the appropriate balance and clarity.



Ex. 57: mm. 18-23, Violin and Cello Theme from second movement, First Symphony¹⁷⁶

A Comparison of Instrumental Families: Woodwinds, Brass, Percussion, and Strings

From this point forward, a comparison of how Sibelius utilized instrumental families between the three symphonies will allow us to determine if he employed his orchestration in a

¹⁷⁶ Ibid., 49.

consistent manner. The following analysis takes the orchestration techniques observed in Sibelius's Seventh Symphony and compares them to the orchestration techniques observed in his First and Third Symphonies. The comparison includes a synthesized explanation of the functions, as well as the common and less common characteristics detected within each instrumental family.

Woodwind Family

After comparing the function and common characteristics of the woodwind family found in the Seventh to those of the First and Third symphonies, there are similarities across the three.¹⁷⁷ Like the Seventh, an analysis of the two early symphonies show the primary function for the woodwinds is melodic/thematic, and both also serve a secondary harmonic/pedal-point function. The assignment of thematic material is not as equally representative between members of the woodwind family within the First and Third symphonies as compared to the Seventh. However, Sibelius still provided the woodwinds moments to showcase their abilities, which also includes providing each member of the woodwind family a 'solo' opportunity in each of the earlier symphonies. As a reminder there is only one instance where the flute and bassoon are labeled as 'solo' in the Seventh Symphony (see Figure 4).

Symphony			
1	3	7	
Movement I: 362-365	Movement I: 89-91; 93-95	511-516	
Movement III: 110-113	Movement II: 156-159; 167-169		
Movement I: 129-145	Movement I: 146-152	None	
	Movement II: 153-155		
Movement I: 1-32; 349-356	Movement I:141-151	None	
Movement IV: 353-360	Movement II: 163-165		
Movement I: 201-212	Movement I: 135-143	511-516	
	I Movement I: 362-365 Movement III: 110-113 Movement I: 129-145 Movement I: 1-32; 349-356 Movement IV: 353-360 Movement I: 201-212	Symphony 1 3 Movement I: 362-365 Movement I: 89-91; 93-95 Movement III: 110-113 Movement II: 156-159; 167-169 Movement II: 129-145 Movement II: 146-152 Movement I: 129-145 Movement II: 153-155 Movement I: 1-32; 349-356 Movement I: 141-151 Movement IV: 353-360 Movement II: 163-165 Movement I: 201-212 Movement I: 135-143	

Fig. 4: Woodwind solos from Symphonies 1, 3, and 7

The chart indicates that a woodwind solo is not uncommon in Sibelius's symphonies. The flute and clarinet are given more solo opportunities when compared to the oboe and bassoon. However,

¹⁷⁷ See Appendix for woodwind range comparison between the three symphonies. Excluding the piccolo, the chart shows a fairly consistent use of range between each of the woodwind instruments.

an analysis of the remaining symphonies would help determine if certain woodwinds are used more often than others and under what circumstances (e.g., tempo, key).

When comparing the harmonic and pedal-point functions, there are more instances in the First and Third symphonies compared to the Seventh Symphony. However, this may simply be due to the length of the earlier symphonies. Like the Seventh Symphony, Sibelius most commonly employed the bassoon to a pedal-point function within the First and Third. Furthermore, as found in the Seventh Symphony, the bassoon is the lone member of the woodwind family that shifts its role between the brass and string families. For instance, in the first movement of the Third Symphony, the bassoon is paired with the horn in measures 40-42; while it is paired with the cello and contrabass in measures 173-176 in the first movement of the First Symphony (see Examples 58a and 58b).



There are moments, though, in which Sibelius had other members of the woodwind family serve within this role by holding a series of harmonies. For example, in measures 165-168 in the second

¹⁷⁸ Sibelius, "Symphony No. 3," 9.

¹⁷⁹Sibelius, Symphonies 1 and 2, 15.

movement of the First Symphony, the flute, oboe, and clarinet play static harmonies with the horn in the process of resolving to G-minor (see Example 59).



Ex. 59: mm. 165-168, Woodwind and Horn static harmonies, second movement, First Symphony¹⁸⁰

This technique was not common within the Seventh, but this choice may be due to Sibelius's continued growth as an orchestrator.

Within the First and Third Symphonies there are also a fair number of instances of voicecrossing. The end goal, however, appears to be aimed at voice doubling and the balancing of octaves. This technique is more commonly found with the clarinet written higher than the oboe, the oboe written higher than the flute, and less common for the bassoon. Nevertheless, Sibelius used this technique to interlock the woodwind section together to create a balance of registers—a more 'open' sounding quality—and subtle coloring. Take for instance the voice-crossing of the

¹⁸⁰ Ibid., 68.

oboe over the flute in measures 72-82 found in the second movement in the First Symphony (see Example 60).



Ex. 60: mm. 72-78, Oboe Voice-crossing with Flute, second movement, First Symphony¹⁸¹

Here, the range between flute I and oboe II is an octave plus a perfect fifth (the top flute [G6] is doubled by the [G2] of the timpani). This intervallic separation already creates a thinner texture. Additionally, the crossing helps the instruments compliment and contain the intensity of the instrumental timbres. For instance, rather than having the flute II play the leading line, Sibelius gave it to the oboe I most likely because its timbral intensity matched that of the flute I. Another instance includes measures 63-67 in the first movement of the Third Symphony (see Example 61).

¹⁸¹ Ibid., 55.



Ex. 61: mm. 63-64, Clarinet voice-crossing Oboe, first movement, Third Symphony¹⁸²

Here, both clarinets are written higher than the oboe II. In this instance, it is possible that Sibelius thought the timbre of the oboe better served to aid in outlining harmonies while the clarinet had more capability to blend in the filler harmonic content. In this example, the clarinet could also have been given the oboe line. However, if the oboe were given the clarinet part, it would have not blended as well because of the bright character of the instrument. Overall, voice-crossing was a technique Sibelius used in various ways within his symphonies, and it seems to be a trait he continued to develop throughout his career as he aimed to create a variety of coloring through instrumental blending.

Not included in the Seventh Symphony but found within the First and Third is the use of a woodwind ostinato. In the first movement of the First Symphony, the woodwinds are given a builtin group ostinato through a sequence from measures 249-282 (see Example 62). This ostinato passes through all the woodwind parts (concurrently the cello/contrabass have their own ostinato underneath), creating an intertwined texture.

¹⁸² Sibelius, "Symphony 3," 11.





In measures 202-216 in the first movement of the Third Symphony, an ostinato is used in the woodwinds over top of the string theme (bassoon not included) (see Example 63). In this case, the woodwind ostinato is used to provide an energetic drive for the slower string theme.

¹⁸³ Sibelius, Symphonies 1 and 2, 79.



Ex. 05. min. 202-203, woodwind osunato, first movement, find Symphony

Though a woodwind ostinato is not found in the Seventh Symphony, it does not mean it may not have been utilized as an effect in the other symphonies (e.g., 7 measures before the recapitulation

¹⁸⁴ Sibelius, "Symphony 3," 33.

in finale of the Second Symphony). An analysis of Sibelius's other symphonies would help determine if an ostinato technique within the woodwind family was commonly employed.

Lastly, similar to the Seventh Symphony, Sibelius used two piccolos to balance an intense moment in the fourth movement of the First Symphony. In measures 239-337, the piccolo was used to create an additional octave—which in turn counterbalanced the motives given to the brass family—while simultaneously heightening the intensity of the passage (see Example 64). The piccolo is only utilized in the First and Seventh symphonies and not the Third. Therefore, we can assert that their limited use was due to its timbral properties for certain contexts which is why it was not assigned to the other symphonies.



Ex. 64: mm. 239-240, Piccolo introduced, fourth movement, First Symphony¹⁸⁵

¹⁸⁵ Sibelius, Symphonies 1 and 2, 129.

Brass Family

There appears to be a shared relationship between the functions and common characteristics of the brass family found in Sibelius's First and Third symphonies when compared to his Seventh. The brass family's primary function as pedal-point and holding static harmonies closely aligns with their use in the Seventh Symphony. The horn is still the most commonly used to serve this role likely due to its blending ability with other instrumental families (e.g., bassoon, timpani). In the First Symphony, the trombone have more opportunities to serve along the same capacity as the horns in this function, and the trumpet was used least in this role. In the Third Symphony, the brass instruments are more closely aligned with the harmonic swells that led towards phrase endings and climaxes as is found in the Seventh.

Between the three symphonies, the tuba is only utilized in the First Symphony. It is also used in the Second Symphony, but since this analysis does not include the Second Symphony, we will not assess if Sibelius utilized it consistently between both pieces. However, when speaking of the tuba's timbre, Sibelius stated the following :

"You know as well as I do that the timbre of the tuba simply does not fit in with that of the trombones. And if for purely dynamic reasons you think you must let the tuba support the trombones, do try to make it as unobtrusive as possible by adding other instruments like the bassoons, double basses and so on...Personally, I feel convinced that a composer can do without the tuba. I do not like this instrument; to my mind it is far too heavy—what the Germans call *schwerfalling*. In my later works I have eliminated it, as, for instance, in my Fourth Symphony."¹⁸⁶

Based on his statement, and besides using the tuba in two symphonies, it is clear that Sibelius did not think a tuba's timbre was the right fit for a symphony. When he did apply it within the First Symphony, it was most commonly paired with timpani or the contrabass, and less often with the other brass instruments. If the tuba was paired with other members of the brass family, it often led

¹⁸⁶ Törne, *Sibelius*, 34-35.

towards a climax. This demonstrates Sibelius's attempt to keep the tuba as being less obtrusive as possible. Sibelius's omission of the tuba from the Third to Seventh symphonies brings up discussion on whether his concept of using the tuba for his programmatic works must have been different from the symphony. He incorporated the instrument in many of his early orchestral works prior to the First Symphony (e.g., *En Saga, Lemminkäinen* (last movement only), *Karelia Suite*) and even after the Seventh Symphony (e.g., *The Tempest*). A study comparing his use of the instrument between both genres would be beneficial to understanding his choices. What we can gain from his use of the tuba in the First Symphony is that he was selective in its use much like he became selective in the use of the contrabass—to use an instrument only when it is necessary to help enhance the sound and clarity of the musical idea.

Within the First and Third symphonies, the brass family was given more opportunities to present motivic/thematic ideas when compared to the Seventh Symphony. Put in a different way, more chances were given to all members of the brass family and not only the horns. One explanation may have to do with the change in Sibelius's stylistic periods. For instance, the First Symphony was written before the end of the nineteenth-century. Romanticism and a grandiose sound was still popular among composers (e.g., Mahler, Strauss) and this is likely to be a reason why Sibelius used them in this manner. Furthermore, by the time of his First Symphony, Sibelius had written a handful of symphonic poems, so he was quite familiar with orchestration. It was after his First and Second symphonies that he began to shift his personal definition of the symphony. Also, it was at this point when he began to develop a more selective use of the brass (mainly trumpet, trombone, and tuba) to fit his sound concept for a symphony, setting them apart to how he used them in his programmatic music. Horns appear to be the exception in this instance because of their ability to shift between different instrumental families due to their more subdued color.

They held multiple roles within the orchestra (e.g., motivic, pedal, harmonic) while the trombone and trumpet were used more selectively for their more majestic qualities. Nevertheless, Sibelius's choice in giving motivic/thematic material to the brass family was likely dependent upon the quality of their tone. This is evident in the three trombone 'solos' implemented in the Seventh Symphony and also the horn section 'soli' used in the finale of the Fifth Symphony.¹⁸⁷

The brass families' common characteristics found in the Seventh Symphony vary somewhat when compared to the First and Third symphonies. In the Third Symphony, the trumpet and trombone parts are used in a similar manner for gradual harmonic swells that lead toward a climax. However, in First Symphony, the trumpet and trombone are often paired together that lead up to a climax, but there are also instances when the horns join them or replace the trumpet's role. This raises the question whether Sibelius eventually realized having the horn included in this combination created too heavy of sound for his taste which is why he excluded it in later symphonies.

Furthermore, the voicing of the trumpet and trombone also varies between the two earlier symphonies. For instance, in the Third Symphony, the trombones are often written an octave between the outer two parts and a third lower than the first part—similar to the Seventh Symphony. But in the First Symphony, the trombone is doubled with the horn more often (in addition to doubling with the trumpet), which may have caused Sibelius to choose different voicing methods. A reason may be his use of the tuba. Voicing in the trombone is more commonly found in complete triads versus omitting a note of a chord and then doubling one note to create a more 'open' sound. In this case, the second and third trombone parts were voiced closer to each other in the First Symphony. Despite this difference of brass voicing, the end result is less clarity in harmonies

¹⁸⁷ Originally this section was intended for the trumpet, but Sibelius changed it because eventually it was not the right coloring that would match the swan theme he heard outside, Hepokoski, *Sibelius Symphony No. 5*, 36-37.

which is why he may have gravitated towards a more 'open' brass quality in his later symphonies. This transition can already be seen in the Second Symphony.

There are a couple other uses of the brass family between the three symphonies are worth noting. One technique not used in the Seventh Symphony, but was used in the First and Third symphonies were muted horns. An explanation for his choice may simply be circumstantial (e.g., First Symphony: Movement I, mm. 122-124; Third Symphony: Movement III, m. 75). Another use worth noting is of brass 'solos.' Both the trumpet and horn were given a solo in the First Symphony, but no brass 'solo' was given in the Third Symphony. The trumpet solo occurs in measures 354-360 in the first movement, while a horn solo is used in measures 85-93 in the second movement, and measures 357-360 in the finale. It appears that a brass solo was used specifically for a designated color, though, an investigation into the use of brass solos in Sibelius's other symphonies will provide us more insight into their use.

Overall, Sibelius used the brass family in a fairly consistent manner across the three symphonies. The most common use for the brass family was to serve a harmonic and pedal-point function for the ensemble's harmonic stability and for more intense climactic arrivals by use of harmonic swells. They were also used to present thematic/motivic ideas, though this is was not as common. Sibelius voiced trumpet and trombone parts more often in triads in his earlier works and eventually seemed to have gravitated to more open voicing in his later symphonies. The use of mutes appear to be circumstantial while the use of brass solos were found in two of the three symphonies, but their use can only be speculatively attributed to their specific timbral qualities. Therefore, further investigation into the remainder of Sibelius's symphonies will provide more details regarding these characteristics.

String Family

An overview of the string family in both the First and Third symphonies show they function in all three roles—motivic/thematic, harmonic/pedal-point, rhythmic—as they do in the Seventh Symphony. As stated earlier, the string family makes up the majority of an ensemble's size, which is the most likely reason they were treated in this manner. Therefore, examples of these functions are not necessary for they are self-evidently found within each symphony.

Many of the common string characteristics found in the Seventh Symphony also appear often in the First and Third Symphonies. From this information, we can conclude that Sibelius treated the string family in a particular manner within his symphonies. Take for instance, the use of the string tremolo. In the Seventh Symphony, this technique was used in subtle ways—measured or unmeasured—to achieve certain effects. In the First Symphony, Sibelius often employed a measured tremolo to create intense atmospheric moments, texturing, or for added emphasis to a particular line. For example, in measures 103-108 of the first movement, Sibelius used a measured tremolo to create a light, yet energy-driven texture for the upcoming woodwind entrances (see Example 65).





¹⁸⁸ Sibelius, Symphonies 1 and 2, 10.

Sibelius did not use the tremolo as frequently in the Third Symphony. However, when employed, it was used to create a layered textural effect. For example, in measures 340-370 in the third movement, the measured tremolo is very much reminiscent of Sibelius's ostinato technique (see Example 66).



Ex. 66: mm. 340-342, String measured tremolo used with motive, third movement, Third Symphony¹⁸⁹

But within this example, the violins are given a motivic idea with the tremolo. One might say this is simply short hand writing for the eighth-notes. However, the purpose of the technique appears to create an added layer to the sound texture without adding more instrument while at the same time drive the music forward. By measure 348 all strings play a measured tremolo accompaniment. From these examples we can conclude that the tremolo is a commonly used technique employed by Sibelius in his symphonies.

Sibelius's use of string ostinato is also commonly used in the First and Third symphonies. There are many instances where Sibelius used an ostinato to create different texturing in the First Symphony. Sometimes he blended different patterns together, such as a syncopation followed by a measured tremolo, that provide an unwavering of the sound palette that eventually unifies. One

¹⁸⁹ Sibelius, "Symphony 3," 111.

example is found in measures 129-165 in the first movement of the First Symphony (see Example 67).



Ex. 67: mm. 143-145, String syncopation transition into measured tremolo, first movement, First Symphony¹⁹⁰

Here, a syncopated ostinato begins in measure 129 and then switches to a measured tremolo, which also can be analyzed as a type of ostinato due to its repetitive nature. The switch between syncopation and measured tremolo (both of which can be considered a form of ostinato) begin in measure 144 where Sibelius inserts a *Poco a poco più stretto e crescendo*. In the Third Symphony, the ostinato is also used often. Like the tremolo, they are also used to create additional textures that serve as an accompaniment and are equally as important as the motivic/thematic idea they support. Most often the ostinato is played with the bow, but sometimes Sibelius incorporates a pizzicato technique for an ostinato. This occurs twice within the second movement of the Third Symphony—measures 155-164, and 167-190 (see Example 68).

¹⁹⁰ Sibelius, Symphonies 1 and 2, 13.



Ex. 68: mm. 157-160, Low String ostinato with pizzicato, second movement, Third Symphony¹⁹¹

In measures 155-164, Sibelius has the low string ostinato performed on a pizzicato to create a contrasting color to the bowed ostinato presented earlier in the movement. As a result, a completely different character supports the motivic/thematic idea being presented.

Sibelius's use of pizzicato coloring is commonly employed in the First and Third symphonies. There are many instances throughout the First Symphony in which the pizzicato technique was used by the entire string section for additional effect of articulation for another instrumental part (e.g., bassoon) and for accompaniment purposes. Most often this technique is found in the contrabass. For example, in measures 55-61 in the first movement of the First Symphony, rather than having the contrabass play their whole-notes with the bow (*arco*), Sibelius had it play pizzicato to add a slight punctuation to the bassoon/horn line so they could be heard apart from the rest of the string section (see Example 69).

¹⁹¹ Sibelius, "Symphony 3," 63.



Ex. 69: mm. 54-58, Contrabass pizzicato technique, first movement, First Symphony¹⁹²

Within the Third Symphony, Sibelius also employed the pizzicato technique most often through the contrabass, though there are instances where other members of the string family shared this technique. An example of Sibelius using the pizzicato to assist the articulation of a musical idea is found in measures 312-315 in the final movement of the Third Symphony (see Example 70). Here, the contrabass pizzicato provides added punctuation to the woodwind ostinato that shared the same pattern as the contrabass line.

¹⁹² Sibelius, *Symphonies 1 and 2*, 3.



At this point, a bowed (*arco*) contrabass part would not have provided the right color to the texture as it was building energy towards a smaller climactic point at measure 316 (where the contrabass plays a countermelody with the bow alongside the bassoon). In all, the pizzicato technique was commonly used by Sibelius for providing articulation, accompaniment, and contrasting textures.

¹⁹³ Sibelius, "Symphony 3," 106.

String division (divisi) was commonly found in the Seventh Symphony and was used to obtain various shades of coloring. The string division technique was also regularly used in both the First and Third symphonies and was most commonly used for harmonic purposes. It was not used necessarily for creating a different texture as evident in the Seventh Symphony (e.g., measure 22). However, it seems that Sibelius began developing his taste for the division in other ways as he matured as a composer (e.g., first movement, Sixth Symphony).

The cello was the only string instrument assigned a 'solo' in the Seventh Symphony, but this was simply for an added boost of color to a particular line it shared with violin I. Sibelius did assign some 'solo' parts to other string members in both the First and Third symphonies. For instance, the contrabass was given a five-measure 'solo' in the third movement (mm. 189-194) of the First Symphony. This solo shares the same function the cello solo had for the Seventh Symphony in which it was merely used to provide an additional boost of color to the line. There are two violin 'solos' in the first movement (mm. 199-206) of the Third Symphony and a 'soli' section for four violin players in the second movement (mm. 136-145) of the same symphony. These were used for more melodic purposes. The Fourth Symphony has a cello solo in the first movement. However, there are no string solos in the Second, Fifth, or Sixth symphonies. Furthermore, there are no viola solos within the First, Third, and Seventh symphonies, though he did write a viola solo in his first tone-poem En Saga. Again, it appears that Sibelius gave a 'solo' to an instrument based on the quality of an instrument if it would help enhance the expression of a musical idea. More investigation into his use of string solos in the symphonies would be beneficial to the current study.

Overall, it appears Sibelius treated the string family in a similar manner across the three symphonies. The string family served each of the motivic/thematic, harmonic/pedal, and rhythmic

functions most likely due to the larger size of the family compared to the other instrument families within the ensemble. Furthermore, Sibelius regularly incorporated tremolo, pizzicato, and division techniques within in all three symphonies, and each were used in different ways to achieve his desired effect. String solo passages were found in all three symphonies. However, there is not much we can surmise from their use besides their specific quality for a particular moment—much like his use of woodwind and brass solos.

Percussion Family

Sibelius's overall treatment of the percussion family between the three symphonies was also very similar. Their primary function was to serve as a pedal-point for the orchestra. Like the Seventh Symphony, Sibelius executed this technique frequently within both the First and Third symphonies by utilizing the timpani to connect harmonies and structural segments. Furthermore, Sibelius also used the timpani to serve as a motivic/thematic function, though not as obvious when compared to its use in the Seventh Symphony. For example, within the First Symphony, the timpani presents the most obvious motivic material in the third movement (mm. 4-6), while in other movements the timpani plays part in the rhythmic essence of the themes as found in the Seventh (see Example 71).



Ex. 71: mm. 1-8, Timpani motive, third movement, First Symphony¹⁹⁴

¹⁹⁴ Sibelius, Symphonies 1 and 2, 81.

For the Third Symphony, there are many instances in which the timpani presented motivic ideas in a condensed manner (short ostinato patterns) versus a full out imitation of another instrument as heard in the Seventh Symphony. For instance, in the first movement, measures 202-216, the timpani was given its own rising and falling motive that countered the string melody (see Example 72).¹⁹⁵



Ex. 72: mm. 202-205, Timpani motive, first movement, Third Symphony¹⁹⁶

In this example, the timpani emerges as an independent texture that compliments the theme and woodwind ostinato above it. Another instance includes a three-note motif found in the second movement of the Third Symphony. For example, in measures 93-94, Sibelius has the timpani present (with the horn) a three-note theme that is then repeated throughout the remainder of the movement in other voices. Another example is found in the third movement in measures 328-334. Here, the timpani joins the brass in presenting a condensed version of the final theme (see Example 73).

¹⁹⁵ One could even say it is a more condensed version of the ostinato pattern being played in the woodwinds. ¹⁹⁶ Sibelius, "Symphony 3," 33.



Ex. 73: mm. 328-331, Timpani paired with Brass Family, third movement, Third Symphony¹⁹⁷

The timpani part fills in the missing rhythms not played by the brass. Particularly the grace note attack in measure 328 and the two eighth-notes in measure 330. Compare this example to the string presentation in measure 246-248 to see similarities (see Example 74).



Ex. 74: mm. 246-250, Theme presented by Strings, third movement, Third Symphony¹⁹⁸

The manner in which Sibelius employed the timpani in helping enhance the articulative qualities of motives/themes in the Seventh Symphony is also found in both the First and Third symphonies. This technique was mostly employed toward woodwind instruments to aid in clarity in both the Third and Seventh symphonies. Although, in the First Symphony it was used more openly across instrumental families, perhaps due to its more "romantic" intent. There are times,

¹⁹⁷ Ibid., 109.

¹⁹⁸ Ibid., 96.

however, in which combinations reflected that of the Seventh Symphony. Such an example includes the second movement, measures 72-81 (see Example 75).



Ex. 75: mm. 72-76, Timpani paired with Flute/Oboe, second movement, First Symphony¹⁹⁹

At this point, the timpani doubles the flute and oboe to set up the rhythmic accompaniment. Sibelius used the timpani to provide the subtle coloring necessary to compliment these upper voices. A cello or contrabass pizzicato would not have sufficed perhaps due to the ringing quality of a pizzicato or keeping an entire low string section together. Another instance where the timpani is used to aid in the clarity of articulation is found in the third movement. In measures 109-112 Sibelius added the timpani to overlap with the start of the flute section. Why he chose to continue using the timpani at this point, when the flute is in a register where it can clearly be heard and the rest of the ensemble is tacet, is uncertain. However, from previous observations, it appears Sibelius wanted to help articulate the start of this motive in addition to adding a lower register to the sound palette (see Example 76).

¹⁹⁹ Sibelius, Symphonies 1 and 2, 55.



Ex. 76: mm. 109-113, Timpani paired with Flute, third movement, First Symphony²⁰⁰

In the Third Symphony, there are many instances where Sibelius has the timpani assist other instruments in their articulation. While some are part of larger phrase endings which are naturally common (e.g., first movement, mm. 198-201), other instances occur in providing a slight boost to clarity of sound or articulation (e.g., second movement, mm. 93-100). In sum, it appears that Sibelius did use the timpani to help articulate motivic/thematic ideas.

Lastly, between the three symphonies, only the First Symphony incorporates multiple percussion instruments—timpani, bass drum, triangle, and cymbals (the Fourth Symphony is the other symphony that incorporates multiple percussion instruments besides the timpani). Again, this may have to do with Sibelius's ties to a romantic soundscape at this point in his life, but also with the influence of Russian music on his development. Since Sibelius only used timpani in the Third and Seventh Symphonies (and also in the Second, Fifth, and Sixth Symphonies) we can gather that he did not see the need for more percussion instruments unless it was absolutely necessary to support or present a musical idea. As mentioned earlier, Sibelius tended to score more percussion instruments for his programmatic music—which were directly tied to an outside factor

²⁰⁰ Ibid., 91.

(e.g., story, experience, etc.). This leads us to conclude that these added percussion instruments were intended more for effect. Overall, it appears Sibelius viewed the timpani as the best instrument out of the percussion family that could support as well as present musical ideas.

Other Instruments

Sibelius included a harp in the First Symphony but not for the Third and Seventh Symphonies. The only other symphony he uses a harp is in the Sixth. A reason why Sibelius included the harp in the First Symphony may relate to the romantic soundscape which was still prominent at the time. It was not uncommon for him to use the harp in his programmatic works (see Appendix 2). Therefore, an investigation into how Sibelius utilized the harp between the First and Sixth Symphonies would be beneficial to understanding its particular role within the symphonies as well as the programmatic works.

Conclusion

The analyses of Sibelius's symphonies in this study are not intended to create a formulation for his method of orchestration. Rather, they are to help open our eyes to his orchestration process and help us hear his music in the manner he heard it. Sibelius was a master of orchestration and highly individual, this is a certainty. However, we must not take his orchestration for granted for there is much to learn about his orchestral sound that is often overlooked. We should acknowledge that his development as an orchestrator is owed to the influence of his cultural upbringing in Helsinki, the close connection to the Russian school in St. Petersburg, as well as the orchestration practices he observed during his early studies in Berlin and Vienna. His exposure to the orchestral compositions of Tchaikovsky, Wagner, Bruckner, among others were of extreme importance in his formative years in his search for understanding orchestration and developing his own aesthetic. These contextual factors are the first step in understanding Sibelius's concept of sound.

The analysis of the First, Third, and Seventh Symphonies reveal that Sibelius approached his orchestration of instrumental families in a fairly consistent manner despite each of the symphonies falling under different stylistic periods in his career. Sibelius lent towards having the string and woodwind families serve primarily in a motivic/thematic function, while the brass and percussion families served in a harmonic and pedal-point function. Each instrumental family also served a secondary role, even if for a moment. At times, Sibelius deviated from his commonly used orchestration techniques across the three symphonies, but for the most part, there is consistency in their presentation. The analysis of the early sketches of the three symphonies also reveal the most common way Sibelius achieved his desired clarity of sound was by adding or subtracting voices in the final version. The most logical explanation is that he realized the original instrumentation was superfluous or it simply stifled the musical idea. What we gain from these observations is that Sibelius developed a specific idea on how and when to use certain instruments within his symphonies. There was a reason why he selected a particular instrument or instruments to present a musical idea. As performers, we must not overlook the orchestration practices of Sibelius's symphonies in favor of only understanding their structural or harmonic entities. We must recognize that each instrumental family served a particular purpose in the overall scheme of his symphonies. Once this is acknowledged, we can apply it to our own performance practice of Sibelius's symphonies in order to achieve a more expressive, well-balanced, and cohesive performance.

Despite the differing styles of the symphonies, future investigations that include an analysis of the orchestration practice for each symphony—following the guidelines presented in this study—will help confirm if the current findings are applicable across all of his symphonies. Further explorations between Sibelius and those who may have influenced his orchestration practices (e.g., Wagner, Bruckner, Tchaikovsky) will flesh out the claims made in the literature and provide more concrete examples to this cause. Likewise, a study of Sibelius's use of orchestration within his programmatic music (e.g., tone-poems, incidental music) is important to the current study since it could reveal whether Sibelius approached these works with a different perspective on orchestration due to their representative quality (e.g., literature, affect, emotion).

This study is intended to begin a much needed dialogue to understand Sibelius's orchestration practices and the attention performers need to take in order to achieve the orchestral sound he intended. A misunderstanding of his orchestration practices often leads to ineffective performances, confused musical goals, and lost textures, lines, and nuance. In attending to Sibelius's orchestration practices in our performances, we may begin to ameliorate these concerns and come to appreciate the individuality and inventiveness of the composer and his symphonies.

Appendix

Author	Source	Page(s)
Carse, Adam	"Chapter XIV: Strauss, Debussy, Elgar," in <i>The History of</i> Orchestration	330
Efthimious, Charris	"On the Instrumentation of Melody Lines in Sibelius' Early Orchestral Works (1892-4)," in Jean Sibelius's Legacy: Research on his 150 th Anniversary	310-334
Helasvuo, Pekka	"Indication of Articulation and Accentuation in Sibelius' Notation	335-347
Kirk, Edgar Lee	A Study of the Orchestration Thechnic of Sibelius	Master's Thesis focused on Sibelius's orchestration for Second Symphony and "En Saga"
Lünenbürger, Jorma Daniel	"Jean Sibelius and the Cello," in Jean Sibelius's Legacy: Research on his 150 th Anniversary	298-309
Murtomäki, Veijo	"Russian Influences on Sibelius," in Sibelius Forum: Proceedings from The Second International Jean Sibelius Conference	153-161
Tawaststjerna, Erik	Sibelius, Volumes I-III (translated by Robert Layton)	Aspects of orchestration mentioned throughout book
Törne, Bengt de	Sibelius: A Close-Up	Aspects of orchestration mentioned throughout book
Wood, Ralph	"Sibelius's Use of Percussion." Music and Letters 23, no. 1 (Jan., 1942)	10-23

1. Additional Sources Mentioning Sibelius's Orchestration

Composition	Opus No.	Composed	Instrumentation
Cassazione	6	1904	*2/2/2/2-4/2/3/0-timpani-strings
Kullervo	7	1892	2(Picc)/2(Eh)/2(BCl)/2—4/3/3/1—timpani, cymbals, triangle—strings
En saga	9	1892 (rev. 1902)	2/2/2/2—4/3/3/1—cymbals, bass drum, trianglestrings
Karelia Suite	11	1893	3(Picc)/3(Eh)/2/2—4/3/3/1—timpani, bass drum, cymbals, triangle, tambourine—strings
Skogsrået (The Wood Nymph)	15	1894-95	2(Picc)/2/2(Bcl)/2—4/3/3/0—timpani, triangle, bass drum, cymbals, tambourine—strings
Vårsång (Spring Song)	16	1894	2/2/2/2—4/4/3/1—timpani, glocken—strings
Lemminkäinen Suite	22	1895	2(Picc)/2(Eh)/2(Bcl)/2—4/3/3/1—timpani, triangle, bass drum, cymbals, tambourine, harp—strings
Finlandia	26	1899 (rev. 1900)	2/2/2/2—4/3/3/1—timpani, bass drum, cymbals, triangle— strings
King Kristian II Suite	27	1898	2(Picc)/2/2/2—4/2/3/0—timpani, triangle, tambourine, cymbals, bass drum—strings
Kuolema (Death)	44	1904 (rev. 1904, 1906, 1911)	Org. String orchestra, bass drum and bell Valse Triste: 1/0/2/0—2/0/0/0—timpanistrings
Pelléas and Mélisande Suite	46	1905	1(Picc)/1(Eh)/2/2—2/0/0/0—timpani, bass drum, triangle— strings
Pohjola's Daughter	49	1906	2(Picc)/2(Eh)/2(Bcl)/2(Contra)—4/2(2 cornet)/3/1— timpani, harp—strings
Belshazzar's Feast Suite	51	1907	2(Picc)/1/2/0—2/0/0/0—bass drum, cymbals, tambourine, triangle—strings
Pan and Echo	53a	1906	2(Picc)/2/2/2—4/3/30—timpani, cymbals, bass drum, triangle—strings
Swanwhite Suite	54	1908	2/2/2/2—4/0/0/0—castanets, timpani, triangle, harp— strings
Nightride and Sunrise	55	1908	2(Picc)/2/2(Bcl)/2(contra)—4/2/3/1—timpani, bass drum, snare drum, tambourine, triangle—strings
The Bard	64	1913 (rev. 1914)	2/2/2(Bcl)/2—4/2/3/0—timpani, bass drum, tam-tam, harp—strings
Luonnotar (Daughter of Nature)	70	1913	2(Picc)/2/2(Bcl)/2—4/2/3/0—2 set of timpani, 2 harps— strings
The Oceanides	73	1913-14 (rev. 1914)	2(Picc)/2(Eh)/2(Bcl)/2(contra)—4/3/3/0—2 set timpani, triangle, glockenspiel—strings
The Tempest	109	1925-26	3(Picc)/2/3(Contra)/2—4/3/3/1—timpani, cymbals, bass drum, snare drum, castanets, triangle, snare drum, glocken, tambourine, harmonium, harp—strings
Tapiola	112	1923	3(Picc)/2(Eh)/2(Bcl)/2(contra)-4/3/3/0-timpani-strings

2. Sibelius's Instrumentation for Tone Poems and Incidental Music

*Chart reads in the order of flute(piccolo)/oboe(english horn)/clarinet (bass clarinet)/bassoon (contrabassoon)—horn/trumpet/trombone/tuba—percussion—strings

SYMPHONY No.	1	2	3	4	5	6	7
YEAR(S) COMPOSED	1888-89	1901-02	1907	1910-11	1915-19	1923	1924
WOODWINDS							
Piccolo	2	*	*	*	*	*	2
Flute	2	2	2	2	2	2	2
Oboe	2	2	2	2	2	2	2
Clarinet	2	2	2	2	2	2	2
Bass Clarinet	*	*	*	*	*	1	*
Bassoon	2	2	2	2	2	2	2
BRASS							
Horn	4	4	4	4	4	4	4
Trumpet	3	3	2	2	3	3	3
Trombone	3	3	3	3	3	3	3
Tuba	1	1	*	*	*	*	*
PERCUSSION							
Timpani	X	X	Х	Х	X	X	Х
Bass Drum	X	*	*	*	*	*	*
Cymbals	X	*	*	*	*	*	*
Glockenspiel	*	*	*	Х	*	*	*
Triangle	X	*	*	*	*	*	*
Harp	1	*	*	*	*	1	*
STRINGS							
Violin I	X	X	Х	Х	X	X	Х
Violin II	X	X	Х	Х	X	X	Х
Viola	X	X	X	Х	X	X	X
Cello	X	X	X	Х	X	X	Х
Contrabass	X	X	X	Х	X	X	X
TOTAL NUMBER of INSTRUMENTS	31	25	23	24	24	26	26

3. Sibelius's Instrumentation for Symphonies 1-7

(*)Instrument not used

(x) Instrument being used.Numbers indicates how many of each instrument is being used in woodwinds, brass, and percussion.

	Don Juan (1888): 3(Picc)/2(Eh)/2/2(contra)-4/3/3/1-timpani, triangle, cymbals, glockenspiel,
	harp—strings
	Death and Transfiguration (1889): 3/2(Eh)/2(Bcl)/2(contra)-4/3/3/1-timpani, tam-tam, 2
	harns—strings
	Till Eulensniegel's Merry Pranks (1895): 3(Picc)/3(Eh)/3(Contra)—4/3/3/3/1—timnani
	hass drum snare drum cymbals triangle ratchet—strings
	Thus Snoke Zarathustra (1896): $\Lambda(2Picc)/\Lambda(Eh/Bcl)/\Lambda(contra)_6/\Lambda/3/2_timpani_3_2$
Richard	$\frac{1}{100} \frac{1}{100} \frac{1}$
Strauss	$\frac{1}{2} \frac{1}{2} \frac{1}$
(1864-1949)	Don Quixote (1897): $5(\text{picc})/5(\text{En})/5(\text{En})/4(\text{contra})=0/5/5/1=\text{tenor tuba-unipani+2}=$
	narp—strings (Solo violoncello)
	Ein Heidenleben (1898): $4(\text{picc})/4(\text{Eh})/4(\text{Eb/Bcl})/4(\text{contra})-8/5/3/1$ -tenor tuba-timpani+4-2
	harps—strings
	Symphonia Domestica (1903): 4(picc)/4(Eh/Ob d'amore)/5(Eb/Bcl)/5(contra)-8/4/3/1-4 opt
	sax.—timpani+2—2 harp—strings
	An Alpine Symphony (1911-1915): 4(2Picc)/4(Eh/Heckelphone)/4(Eb/Bcl)/4(contra)—
	20(Wagner Tuba)/6/6/2-2 set timpani+3-2 harps-celesta/organ-strings
	Symphony No. 1 (1884-88): 4(3picc)/4(Eh)/4(2Ebcl/1Bcl)/3(contra)-7/4-5/3-4/1-2 set
	timpani+3—harp—strings = 50 parts
	Symphony No. 2 (1888-94): $4/4/5/4$ —10/8/4/1—2 set timpani+4—2 harps—organ—strings—choir
	+ soloists
	Symptony No. 3 (1803-06): $\Lambda(\Lambda)/\Lambda(Eh)/5(Bcl/2Ehcl)/\Lambda(contra) = 8/\Lambda/\Lambda/1 = 2$ set timponi+5 = 2
	Symptony 10. 5 (1055-70). $4(4)/4(En)/5(BCh/2EDCh)/4(Contra)-6/4/4/1-2$ set unipani+5-2
	$\frac{1}{2} = \frac{1}{2} = \frac{1}$
	Symphony No. 4 (1899-1900): $4(2picc)/3(En)/3(Eo/Bci)/3(contra)-4/3/0/0-umpani+4-narp-$
Gustav	strings—alto solo.
Mahler	Symphony No. 5 (1901-02): $4(2picc)/3(Eb)/3(Eb/Bcl)/3(contra)-6/4/3/1$ -timpani+4-harp-
(1860-1911)	strings
(1000 1)11)	Symphony No. 6 (1903-04): 4(1)/4(Eh)/3(Bcl)/4(contra)—8/6/4/1—timpani+10—celesta—harp—
	strings
	Symphony No. 7 (1904-05): 5(2picc)/4(Eh)/5(Bcl/Eb)/4(contra)-4/3/3/1-tenorhorn-
	guitar/mandolin—timpani+5—2 harps—strings
	Symphony No. 8 (1906-07): 6(2picc)/5(Eh)/6(2Eb/Bcl)/5(contra)-8/8/7/1-mandolin-
	timpani+4-2 harp-celesta/piano/harmonium/organ-strings (Chorus)
	Symphony No. 9 (1909-10): 5(picc)/4(Eh)/5(Bcl/Eb)/4(contra)—4/3/3/1—timpani+4—2 harps—
	strings
	Prélude à l'après-midi d'un faune (1894): 3/2(Eh)/2/2-4/0/0/0-2 harps, crotalesstrings
	Nocturnes (1897-1899): 3/2(Eh)/2/3-4/3/3/1-2 harps, timbales, cymbals, snare drumstrings
Claude	La Mer (1903-1905): 2(Picc)/2(Eh)/2/3(contra)—4/3(2 cornets)/3/1—timpani, bass drum, cymbals,
Debussy	triangle, tam-tam, glocken, 2 harps—strings
(1862-1918)	Images (1905-1912): 2 $\operatorname{picc}/3/2(\operatorname{obce} d'amour/Fh)/3(Bcl)/3(\operatorname{contra})=4/4/3/1=timpani snare$
(1002 1/10)	drum tambourine castanets 2 harps celesta triangle xylophone cymbals 3 bells—
	strings
	Symphony No. 1 (1890-02) · 3(Pice)/2/2_1/2/3/0_timpani_strings
	Symphony No. 2 (1001-02): $3(\text{Dicc})/2(\text{Eh})/2/2 / 4/3/3/1$ timpani strings
	Symphony No. 2 (1901-02). $3(1 \text{ free})/2(\text{En})/2/2(-4/5/5/14))/2/2(1 + timponi - strings$
Carl Nielsen	Symphony No. 5 (1910-11): $3(Picc)/3(Eii)/3/3(contra) = 4/3/3/1 = unipani = strings$
	Symphony No. 4 (1914-10): $S(Picc)/S/S(contra) = 4/S/S/1=-2$ set of umpani-strings
(1865-1931)	Symphony No. 5 (1921-22): $3(Picc)/2/2/2-4/3/3/1$ —timpani, cymbals, triangle, tambourine, snare
	drum, celestastrings
	Symphony No. 6 (1924-25): 2(Picc)/2/2/2—4/2/3/1—timpani, glockenspiel, xylophone, triangle,
	cymbals, snare, bass drum—strings
Paul Dukas	Symphony in C major (1896): 3(nicc)/2(Fh)/2/2_1/3/3/1_timpani_strings
(1865-1935)	

4. Orchestration Practices of Sibelius's Contemporaries

	Symphony No. 4 (1893): 3(2picc)/2(Eh)/3/2—4/2/3/1—timpani—strings
Alexander	Symphony No. 5 (1895): 3(picc)/2/3(Bcl)/2—4/3/3/1—timpani+4—harp—strings
Glazunov	Symphony No. 6 (1896): 3(picc)/2/3/2—4/3/3/1—timpani+2—strings
(1865-1936)	Symphony No. 8 (1905): 3(picc/alto)/3(Eh)/3(Bcl)/3(contra)—4/3(picc)/3/1—timpani+2—strings
	His Neoclassical period 1920-1954
Igor	Symphony in E-flat (1905-1907): 3(picc)2/3/2-4/3/3/1-timpani+3-strings
Stravinsky	Symphony in C (1938-40): 3(picc)/2/2/2-4/2/3/1-timpani-strings
(1882-1971)	Symphony in Three Movements (1942-45): 3(picc)2/3(Bcl)/3(contra)-4/3/3/1-timpani+1-
	harp—piano—strings
	Second Period: 1908-1920—showcases some neo-classical ideas
	Chamber Symphony No. 1: (orig. 1906): 1/2(Eh)/3(Eb/Bcl)/2(contra)—2/0/0/0—string quintet
Arnold	Chamber Symphony No. 1 : (1922 orchestral version/rev. 1935): 3(picc)/3(Eh)/3(Eb/Bcl)/3(contra)
Schoonhong	—4/2/3/0—strings
(1974 1051)	Chamber Symphony No. 2 (1906-39): 2(picc)/2(Eh)2/2-2/2/0/0-strings
(1874-1951)	Five Pieces for Orchestra (1909) (1909/rev. 1949): 4(2picc)/3(Eh)/5(Eb/Bcl/contraBcl)/4(contra)
	Pierrot lunaire (1912): 1(picc)/0/1(Bcl)/0—piano—violin/viola, cello

*Please note this list is not an exhaustive representation of composers from the late nineteenth to early twentiethcenturies.

5. Woodwinds Functioning as Pedal-Point in Seventh Symphony

Instrument(s)	Measures		
Bassoons	60-69		
Bassoons	71-72		
Bassoons	Beat 3 of 103-105		
Piccolo I / Oboe I	226-228		
Bassoons	Beat 3 of 243-245		
Flutes	289-293		
Bassoons	319-322		
Bassoons	343-351		
Bassoons	363-368		
Bassoons	370-385		
Oboes	379-385		
Bassoons	407-408		
Clarinets	422-425		
Bassoons	446-451		
Bassoons	476-482		
Bassoons	509-510		
Clarinets	518-519		
All Woodwinds	523-525		

	Flute/Bassoon	Oboe/Clarinet
	7-9	3
	11	64-65
	90-93	115-118
	115-118	128-133
	124-126	409-410
Measures	128-147	413
	258	416-417
	278-279	495
	360-365	
	403-404	
	411-419	
	511-516	

6. Flute/Bassoon & Oboe/Clarinet Pairing in Seventh Symphony

7. Woodwind Voice Crossing Chart from Seventh Symphony

		Flute Voice-Crossing
Instrument	Measures	Description/Observations
	58-63	• Oboe 2 is highest – leads upward with violin/viola. Perhaps it is the 'brightness' of the oboe in this range and the warmer tone of the flute in its lower range that creates a more equal blending of textures
	73-75	• Oboe 1 is doubling Flute 1 in same octave in presenting motive, but is higher than Flute 2—which provides a harmonic attribute
	75-77	• Oboe 1 is a 3 rd higher than Flute 1 & 2 which double the clarinet motive down an octave. Oboe parts serve as harmonic support – same a Flute 2 did in m. 73-75
79-80 162-167 182-192 169-173 175 182 187-188 191-192	79-80	• Oboe 1 takes lead from Flute 1 in resolving to the C7 chord. Flute 1 could have resolved it but it must be the Oboe's ability to cut through with the Horn and String texture in why he chose it instead of the flute.
	162-167 182-192	 Oboe 1 & 2 are in octaves, but Oboe 1 plays leading idea with Bassoon and Bass while Flute harmonizes in 3rds with the Clarinet. Perhaps in this range Sibelius felt the Oboe would bring out the octave spread of motive clearer. 2nd time the Oboe is paired with Clarinet and Bass – alternates texturing for a higher emphasis on register (see Flute/Bassoon 3rd placements) / 1st Time lower emphasis (see Flute/Clarinet 3rd placements)
	169-173	 Oboes are in Octave with Flute 1, but Oboe 1 placed higher than Flute 2. Flute 2 doubles Bassoon at the start but provides additional harmony with Bassoon and Clarinet in contrary motion
	175	• Oboe 1 goes up to play octave with Oboe 2 while Flute 1 stays in 3rds with Flute 2
	182	• Oboe 1 plays Bb with Flute 1 but is Major 2 nd higher than Flute 2
	187-188 191-192	 Oboe 1 is placed higher than both Flutes as it plays octave with Oboe 2. It is paired with Clarinet and Bass – Flute is paired with Bassoon in 3rds. Again most likely to bring out a brighter octave spread with subtle harmonic input.
	197-198	• Oboe 1 & 2 are in octaves. Oboe 1 matches Flute 1 while Flute 2 plays harmonic role in contrary motion versus the Bassoon and Clarinet

	270-271	 Both Oboe lines are harmonized higher than the Flutes. In the lower range the Flutes tend to provide a warmer sound while the Oboe tends to not blend as well in the context of this more pastoral texture. Flutes are unison with Clarinet for 1 measure
	366-367	 Flute & Oboe voiced so the 5th drone is more distinct in the Oboe while the Flute 2 provides a subtle inner harmony along with a stagnant held 6th by the Bassoon/Viola/Cello
	379-382	 Oboe 1 & 2 play a minor 7th (M2) spread. This is doubled 2 octaves lower in the Bassoon (trumpet/Violin/Bass) which creates an open sound. Flute doubles Clarinet – present theme in a more closed harmony of 3rds.
	434-437	• Both Oboes are in unison with Flute 1 (in octave with Bassoon) while 2 nd Flute (and eventually) Oboe 2 begin to harmonize subtly. I believe it helps spread the balance of sound between voices.
	484-487	 Oboe 1 aids in octave with Flute 1 while Flute 2 plays inner harmony. Demonstrates he wanted a subtle coloring that would not jeopardize the thematic idea.
Clarinet	47-51	 Clarinets are 2 octaves apart and double the Flute 1/Oboe 1 parts. Clarinet 1 is higher than Oboes and in same range as Flute. Perhaps this helps soften the sound while the Oboe may have been too bright during this crescendo. Or he kept the Oboe lower because it can on its own bring out the harmony in the register.
	71-73 75-77	 Clarinet 1 takes top voice while both Flutes double one octave below. Again this must be the coloring of these octave placements that he chose this. By measure 78 he finally places Flutes up an octave to match Clarinet – this occurs during the gradual swell in sound indicated in the orchestra.
	179-184	 179 – Clarinet 1 harmonizes a 3rd higher than Flute 2 and Oboe 2 181 – Clarinets take motivic lead while Flutes play more harmonic role in presenting material.
	363-364	 Paired with Flutes /Violins in presenting motivic fragment. Clarinet 1 doubles Flute 1 in adding weight to line while Flute 2 harmonizes down a 3rd. Choice is because the Flutes play in the 3rd below is much more subtle than the Clarinet, whose open 5th drone in the measure helps balance the voice
	379-381	Clarinet 1 doubles Flute 1 while Clarinet 2 doubles Flute 2
	484-487	 Clarinets are in octaves. Clarinet 1 doubles Flute 1 in same register while Flute 2 provides subtle inner harmonic coloring.

Oboe Voice-Crossing					
Instrument	Measures	Description			
	3	 Clarinet 1 doubles Oboe 1 while Oboe 2 plays 3rd lower Concentration of the Oboe 2 provides most effective attack for "FZ" 			
Clarinet	18-21	 Clarinet 1 doubles Oboe 1, but goes higher to play Flute rhythm Clarinet 2 & Oboe 2 are doubled – along with Bassoon 2 			
	47-51	 Sibelius keeps Oboe 3rds concentrated in lower range while placing Clarinet 1 higher to match Flute in unison. Allows an inward growth for the crescendo that equalizes the balance among registers. 			
	64-68	• Clarinet 1 placed 1 octave higher, perhaps to soften the line with the Horn 1, Violin and Oboe blend.			
	75-79	• Clarinet 1 takes leading role while Oboe harmonizes between their registers.			
	154 / 201 / 204	• Clarinet 1 plays 3 rd higher while Oboe 2 is on its lowest note			
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	181-182 183-184	• Clarinets take leading motive in octaves while Oboe harmonizes with Flute/Bassoon in between their octave placement.			
	226	Clarinet 1 placed octave higher than Oboe 2			
	238 / 241	 Clarinet 1 placed octave higher than Oboe 1 – perhaps to help soften the shrill of the piccolo sounding an octave higher even still. Oboe would not be as effective at that point in the piece. 			
	380-389	• Clarinet goes above Oboe with melodic idea or harmony, though not as significant in its role.			
	491-495	• Clarinets and Oboes are in octaves but Clarinet 1 matches register of Oboe 1 while Oboe 2 Is octave higher than Clarinet 2			
	521-522	 Clarinet 1 doubles Oboe 1 Oboe 2 plays lowest note (B) and resolves upwards. Same as measure 3 attack on downbeat. Exploiting the colors of the lowest register. 			
Bassoon	152-154	• Bassoon 1 at two points play same line as Oboe 1 while Oboe 2 is a 3 rd below. Combines their bright/edgy qualities in this range.			
Dassoon	176 / 179 / 201	• Bassoon 1 plays higher than Oboe 2 – which doubles the octave and provides harmony for the line.			

Clarinet Voice-Crossing				
Instrument	Measures	Description		
	47-49	 Clarinet 2 starts below both Bassoons in m. 49. 48 – Bassoon 1 plays a third higher than Clarinet 2 49 – Clarinet 2 plays first note below both bassoons. Provides good blend with other winds harmonizing. This is for the crescendo leading into m. 50. 		
	147-149	• Bassoon 1 plays 3 rd higher than Clarinet 1 and 6 th higher than Clarinet 2		
	152-154	 Bassoon 1 starts above Clarinet 1. Both start above Clarinet 2 in m. 154 – Shows that Sibelius may have be trying to place emphasis in certain timbral qualities of register (see examples) 		
Bassoon	162-163 166-167 169-173	• Bassoon 1 plays above both Clarinet 1 & 2 when harmonizing and when in octaves		
	179	Bassoon 1 plays above Clarinet 2		
	187-188 191-192	Both Bassoons are higher than Clarinet 2		
	194-195 197 / 201 / 204	 Bassoon 1 voiced higher than both Clarinets (194-197) Bassoon 1 voiced higher than Clarinet 2 (201/204) 		
	242-243	Bassoon 1 voiced higher than Clarinet 2		
	318 / 405	 Bassoon 1 doubles Clarinet 1 Bassoon 1 higher than Clarinet 2 		
	521-522	• Bassoon 1 voiced 3 rd higher than Clarinet 2 before resolving downwards.		



8. Woodwind, Brass, and Percussion Range for Symphonies 1, 3, and 7

Instrument Range between Symphonies						
SYMPHONY	No. 1	# Notes	No. 3	# Notes	No. 7	# Notes
WOODWINDS						
Piccolo 1	C#6 – F7	16	N/A	0	G#5 – C7	16
Piccolo 2	G5 – B6	16	N/A	0	E5 – A6	17
Flute 1	D4 - B6	33	C4 - C7	36	C4 – Bb6	34
Flute 2	C4 – G6	31	C4 - C7	36	C4 – Ab6	32
Oboe 1	B3 – E6	29	B3 - D6	27	B3-C#6	26
Oboe 2	B3 – D#6	28	B3 - D6	27	B3 – B5	24
Clarinet 1	C#3 – Eb6	38	D3 - F6	39	E3 – Db6	33
Clarinet 2	C#3 – A5	32	C#3 – B5	34	D3 - Ab5	30
Bassoon 1	Bb1 - A4	35	B1 - C5	37	Bb1-Bb4	36
Bassoon 2	Bb1 - A4	35	B1 - Bb4	35	Bb1 – Bb4	36
BRASS						
Horn 1	Eb3 – D#5	24	C3 – D5	26	C2 – E5	40
Horn 2	Ab2 – Ab4	22	E2 – A4	29	C2 - C5	36
Horn 3	Eb3 – D5	23	C3 – D5	26	C2 - C5	36
Horn 4	Eb1 - G4	40	E2 – A4	29	Bb1 - G4	33
Trumpet 1	C4 – A5	21	C4 – E5	16	G3 – G5	24
Trumpet 2	Bb3 - F5	19	B3 – E5	17	G3 – Eb5	20
Trumpet 3	A3 – G5	22	N/A	0	E3 – C5	20
Trombone 1	C3 – A4	21	G3 – A4	14	E2-G4	27
Trombone 2	E#2-G4	26	C3 – A4	11	E2 - Eb4	23
Trombone 3	D2 - C4	22	G2 - C4	17	E2-C4	20
Tuba	G1 – G3	24	N/A	0	N/A	0
PERCUSSION						
Timpani	F#2-E3	10	G2 – E3	9	G2 – E3	9
Harp	B1-C7	61	N/A	0	N/A	0

9. Instrumental Range between Symphonies

The following diagram showcases the pitch range Sibelius employed from the wind, brass, and percussion families between the first, third, and seventh symphonies. Each pitch between C1 and C8 were assigned a number (e.g.,1=C1, 85=C8). The numbers inside each of the colored bars display the number of available pitches that were possible between the lowest to the highest (Please note each instrument may or may not have played each pitch between their lowest and highest range—this is simply to explore Sibelius' sound-palette).

Comparing the number of pitches available between each instrument, we can infer that most of the instruments are utilized in a similar manner across the three symphonies with regards to their range. An exception seems to be the first and second trombone, and the fourth horn (see chart) in which the range for at least one of the symphonies is not as closely related to the other two. Regardless, the raw data illustrates that Sibelius tried to draw the most color from each instrument by utilizing as much of their range (sound-palette) as possible from his early "National-Romantic" compositional period to his later "Symphonic Unity" period. Further clarification of this would be to apply the same method to the remaining symphonies.

Instrument(s)	Measures
Horns	7-10
Horns	18-20
All Brass at different pts	90-106
Horns	109-115
Horns	119-128
Horns	131-137
Horns	174-180
Horns	199-208
All Brass at different pts	224-258
Trumpets, Trombones	311-314
All Brass at different pts	320-331
Horns, Trumpets	337-389
Trumpets, Trombones	396-399
All Brass at different pts	407-418
Trumpets, Trombones	434-448
All Brass at different pts	470-496
Horn IV, Trombones	508-513
All Brass at different pts	518-525

10. Brass Pedal-Point Examples in Seventh Symphony

11. Brass 'Swell' Examples in Seventh Symphony

Instrument(s)	Measures
Trumpets, Trombones	100-101
Trumpets, Trombones, Horn IV	103-106
All Brass	242-245
All Brass	263-266
Trumpets, Trombones	311-314
Trumpets, Trombones	396-399
All Brass	407-408
Trumpets, Trombones	446-448
All Brass	495-496
All Brass	498-499
All Brass	522-524

Instruments	Measures	Notes/Observations	
Horns, violins	4-5 / 8-10	Strings blend well with horn because of its rounded quality in which they can overlap seamlessly without being noticed. Same occurs at m. 8-10 in which the horns hold pedal C-major dyad while the strings enter overlapping from bottom upwards in a phasing manner.	
Trombone, contrabass	82-83	Contrabass is added to assist the trombone entrance since the Trombone is marked <i>PPPP</i> while contrabass is divisi with a <i>PP</i> dynamic.	
Horn, contrabass	99-103	Sibelius adds contrabass pizzicato to the underlying horn/bassoon motive which provides a slight articulative quality to the idea.	
Horn II/IV, violins	236-241	Horn II and IV join the violin on the syncopated concert [C] while upper horns I and III play fragment of motif and the other strings continue their ostinato pattern.	
Horn, trumpet, violin 2, viola	246-257 / 324-331	Horns (and trumpet) hold dyadic harmony while the second violin and viola present same harmony but in a rhythmic sense. This is Sibelius's way of creating a stable foundation on which the rhythm can also take part. Same idea occurs in mm. 324-331.	
All brass, strings	311-314/396-399	Sibelius has the brass hold an [E] and [C] of a first inversion C-major swell while the strings rhythmically outline a measured tremolo arpeggiated manner. Passage repeats 396-399 in Eb	
Trombone III, contrabass	476-481	Contrabass duplicate the trombone III and horn IV on pedal points.	
All brass, viola, cello, contrabass	498-499	The viola, cello, and contrabass duplicate the brass crescendo and are given a tremolo to continue with the agitation of the moment.	

12. Brass and String Combinations in Seventh Symphony

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