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# Re-inventing the nineteenth-century tools of unprescribed modifications of rhythm and tempo in performances of Brahms's symphonies and concertos

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# Chapter 3, A brief Overview of Other Characteristics of the Project Orchestra and its Playing

The main focus of this dissertation is, as its title suggests, modification of rhythm and tempo. The flexible handling of these two features, however, is not necessarily the first thing that stands out in, nor even the most striking characteristic of, the playing style of the project orchestra.

Reactions from listeners vary from person to person. Some listeners react strongly to the absence of continuous vibrato, while others are surprised by the sound of the period instruments; some comment on the choice of tempo or the abundant use of portamento in the string orchestra. In this chapter I offer an overview of other characteristics, beyond modification of rhythm and tempo, which can be heard in the performances of the project orchestra.

The following contains a description of the size and seating of the orchestra, the musicians and their instruments, and the handling of bowing, and articulation, vibrato, portamento and tempo, each in separate chapters. This overview does not offer as much detail as the chapters on modification of rhythm and tempo do, but I have striven to clearly show how my approach to each element is rooted in my understanding of historical sources. The manner in which I have tried to re-invent the expressive tools of vibrato and portamento, is arguably somewhat more pragmatic than the way I have handled the topic of modification of rhythm and tempo. It is clear to me that my project offers only a glimpse of what might be developed through further research and experimentation in the field of orchestral performance regarding each of these elements.

## 3.1 Size and Seating

Decisions regarding size and seating have a very great influence on the sound, balance and flexibility of an orchestra. In her article "Performing Brahms's music: clues from his letters," Avins comes to the conclusion that,

while Brahms worked with small orchestras such as the Court Orchestra in Karlsruhe and the Court Orchestra in Meiningen, there are no concrete indications to suggest that he actually preferred smaller orchestras.[171] In fact, there is plenty of evidence pointing to the fact that he enjoyed large orchestras. As Avins confirms, many passages in his correspondence allude to his desire for and pleasure in relatively large orchestras. Brahms worked on his orchestral pieces with the small orchestra in Meiningen, enjoying the high standard of playing there. In a letter to Ferdinand Hiller, he mentions that the musicians of the Meiningen Orchestra are "truly industrious people," and praises their "magnificent accomplishments."[172] Avins assumes that he praised the Meiningen Orchestra in spite of rather than because of its small size. A letter from Bülow to Strauss in 1886 reveals, on the other hand, that Brahms was "against augmenting the strings for No. XIII [*Symphony IV*]." Bülow, who had on many occasions stressed the importance of enlarging the Meiningen Orchestra, regarded Brahms's opposition to this idea "as another personal fiasco."[173] Unfortunately there is no record of the reasons why Brahms might have argued against augmenting the string section on this occasion.

There is documentation regarding the exact size and proportions of the Meiningen Orchestra. In the preface of his Urtext edition of the *Fourth Symphony*, Robert Pascall mentions that it premiered with the Meiningen Orchestra on 25 October 1885 with 51 or 52 players, including a string section of 10 first violins, 7 or 8 seconds, 5 violas, 4 cellos, and 4 basses. The size of the Meiningen Orchestra should not be considered a fixed quantity though. It is a documented fact, for instance, that Steinbach wanted the string orchestra to be enlarged to 16-14-8-8-7 for his concerts in London. He proposed hiring extra musicians from Berlin, Cologne and Frankfurt.[174] My

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[171] Avins, "Performing Brahms's music," in *Performing Brahms,* p.18.
[172] Avins, *Life and Letters*, pp. 581-582 quoting a Letter to Ferdinand Hiller of 1881.
[173] Schuh, W and Trenner, F. *Hans von Bülow and Richard Strauss correspondence*, Letter of 18/30 March 1886, Boosey and Hawkes, Bonn, 1953, p. 27.
[174] This is shown by Volker Kern and Herta Müller in *Die Meininger kommen!* (Meininger Museen, 1999) p. 59 (Quoting from Steinbach's cost estimate to Georg II for the concerts in London).

string section can be seen as a variation on the basic Meiningen formation, consisting of 9 or 10 first violins, 9 seconds, 7 or 8 violas, 6 cellos, and 4 basses. I chose the size of the Meiningen Orchestra at the premiere of the *Fourth Symphony* as a reference point for my project orchestra for practical and ideological reasons, not because I believe it to be the size that Brahms ultimately might have preferred himself. I made some adjustments in the proportions between the sections, as can be seen in the numbers given above. In my opinion it is better to have 6 instead of 4 cellos to balance the voices in the string orchestra. In a review in the *Allgemeine Musikalische Zeitung*, the 5 (!) double basses of the Meiningen Orchestra are praised lavishly:

> The five double basses stand out even more favourably, from the half-hearted and lukewarm treatment of these instruments, which has become common practice even in many good orchestras. Here the bass is really bowed properly; that means bowed out fully, not merely superficially.[175]

In my opinion, adding a 5th bass to the section would have a detrimental effect on the balance between cellos and basses and between the higher and lower strings in my particular formation; hence my choice for 9-8-7-6-4.

Deciding the size of the various sections of the string orchestra should, of course, always be done with due consideration not only for the proportions within the string orchestra, but also for the balance between winds and strings. Daniel J. Koury, for instance, has written extensively about sizes and proportions of nineteenth-century orchestras. He notes that seeking out a working ratio between numbers of strings versus woodwinds versus brasses can be quite confounding in the context of the nineteenth-century orchestras. After comparing various sources and orchestra lists, he concludes that one cannot reduce the historical evidence to any simple overall formula which could be universally applied:

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[175] Wiener Algemeine Zeitung November 29, 1884. *Noch weit günstiger stechen die fünf Kontrabässe von der auch in manchen guten Kapellen üblich gewordenen halben und lauen Behandlung dieser Instrumente ab. Hier wird der Bas wirklich gestrichen, das heist ausgestrichen, nich nur angestrichen.*

> If then, one wants to produce a performance that is 'faithful' as to orchestral size and proportions, probably the only recourse open would be to research the orchestra the composer was most familiar with at the time of composition. This can provide a close basis, provided the size of the hall is also taken into consideration.[176]

Koury's opinion strengthens me in my belief that it makes sense to use the Meiningen Orchestra formation, with which Brahms was intimately familiar, as a model for my project orchestra. The formation of about 50 musicians aligns with the size of orchestra Brahms must have heard when his symphony was first rehearsed and performed.

This is an orchestra size that I feel comfortable with as a conductor. As discussed in Chapter 2.1, I have aimed to create a shared artistic basis for my approach to this repertoire with the members of the orchestra. I felt it important to choose a formation that allowed me to establish a sense of connection and communication with each of the players in the group. Moreover, my ideal orchestral formation is one in which everybody matters, so that the absence of even one string player makes a palpable difference. My conviction that a shared feeling that every individual orchestra member is important can increase energy levels and commitment in the orchestra is not based on historical evidence but on my personal experience as a conductor over roughly the past two decades and as a concertmaster during the two decades before that.

Other factors in deciding the size of the orchestra related to practicalities and finances: I could neither afford nor manage a larger group, even if I had wanted to. Finally, the size of the two halls in which we worked, the 'Haitink zaal' of the CvA and the 'Stadsgehoorzaal' in the city of Leiden are of modest proportions and would not have allowed for much bigger formations to perform symphonic repertoire successfully in them.[177]

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[176] Koury, D. J. *Orchestral Performance Practices in the Nineteenth Century, Size, Proportions, and Seating*, U.M.I Research Press, Ann Arbor, Michigan, 1986, p. 168.

[177] Brahms wrote about the fact that the Meiningen Orchestra was more suitable for the smaller hall of Elberfeld than the larger Gürzenich hall in a letter to Franz Wüllner of November 1885 *(Zudem past unser Orchester in Elberfeld besser als in Eurem grossen Gürzenich) Briefwechsel XV: Johannes Brahms in Briefwechsel mit Franz Wüllner,* ed. Ernst Wolff, (Berlin: Verlag der

Taking the size of the hall into consideration also aligns with Koury's recommendation and is certainly something that nineteenth-century organisers and performers would have done. Bülow, for instance, worked hard to convince the duke and his wife of the necessity for every single extra musician. The budgets had to be balanced on their tours, and the travel costs for every individual musician also had to be considered. Bülow carefully planned every invitation to key players that he felt he needed to improve the standards of the orchestra.[178] I can relate to these considerations, as the organiser of this project. I do find it important to explain my reasons for choosing the size of my project orchestra without claiming that my choices resulted in what Brahms would have considered the ideal size of orchestra.

As well as size, seating is an important factor to consider, as it affects communication between different sections of the orchestra. Seating obviously also determines the location within the orchestra from which individual players deliver their contributions to the musical narrative and this can influence the way the audience perceives the music. I have based my seating arrangements for the project orchestra on photographs of the Meiningen Orchestra. Looking at the first two photographs below, the first thing I noticed is the fact that the orchestra under Bülow is standing and is sitting under Steinbach. It is not clear whether this reflects a permanent change in the way they performed but standing does seem to have been a customary thing in German orchestras of the time.[179]

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Deutschen Brahms-Gesellschaft, 1922) and Steinbach hired extra musicians for their concerts in London, where he performed in the James Hall for an audience of over 3000 people.

[178] See also Chapter 1.2 on Bülow's revolution.

[179] David Wooldridge, for instance, has commented that "[i]t was of course customary for the German orchestra to perform standing until the last years of the 19th century." Wooldridge, *Conductor's World,* p. 112.

Figure 3.1: Photograph of Hans Von Bülow with the Meiningen Court Orchestra.[180]

Figure 3.2: Photograph of Fritz Steinbach with the Meiningen Court Orchestra.[181]

The Austrian music critic Eduard Hanslick (1825-1904) described Bülow's arrangement, in which the musicians were standing up, as a novelty of dubious value, as he considered it 'a return to the old habit, originating in the limited spaces in which concerts took place in the past and in the

[180] "Hans von Bülow mit der Meininger Hofkapelle 1882 in der alten Philharmonie in Berlin." Photograph from the collection of the Meininger Museums, shown in *Die Meininger kommen!* by Kern and Müller, p. 43.

[181] "Fritz Steinbach mit der Meininger Hofkapelle auf der Bühne des alten Meininger Hoftheaters (1899?)." Photograph from the collection of the Meininger Museums, Ibidem, p. 57.

etiquette at the princely court concerts.'[182] The concert reviews of the Meiningen Orchestra under Steinbach that I have seen do not specify whether the orchestra stood or sat.

I also compared the seating arrangements of other orchestras of the time to determine what might have been customary elsewhere, but unfortunately the pictures of orchestras that I found did not show the orchestra in action. The photos shown here indeed appear to be staged. This may well have been a necessity, as the shutter speed of photographic technology of the time, any movement could easily have resulted in blurred images.

Figure 3.3: Photograph of The Berlin Philharmonic in 1882.[183]

[182] Hanslick, E, *Concerte, Componisten und Virtuosen der letzten fünfzehn Jahre 1870-1885. Kritiken von Eduard Hansslick*, Allgemeinder Verein für Deutsche Literatur, Berlin, 1886, pp. 416-417. It was probably in Vienna that the habit of the musicians sitting down first became customary. At least Dittersdorf writes in his autobiography: 'As conductor of Bishop von Grosswardein, I had long music stands and benches made; because I introduced the Viennese method of playing whilst seated, and I arranged the seating of the orchestra in such a way that every player faced the listeners' (1764). Standing can in any case help guard against an easily acquired carelessness and *nonchalance* on the part of the players; sitting preserves their strength. The first is more military, the latter more humane.

[183] Photograph (anonymous) of BSO in 1882 on the website of the Berlin Philharmonic. https://www.berliner-philharmoniker.de/en/history/beginning/#event-establishmentaofaaanewaorchestra (Last accessed September 2022).

Figure 3.4: Photograph of Boston Symphony Orchestra in 1891 (with Arthur Nikisch).[184]

Even though these photos were probably staged, the way that the various instrument groups are placed can tell us something about their position in actual performance. This seems all the more likely because the positions in the photographs does correspond with what we know about their positions from other sources (see below). Based on these sources, I produced my own seating arrangement: one I have used over the past decades. I place the second violins opposite the firsts on the conductor's right-hand side and the basses behind the winds, as this appears to be a common feature in all examples of nineteenth-century symphony orchestra seating arrangements.

Figure 3.5: Nieuwe Philharmonie Utrecht, 2017 (Johannes Leertouwer).[185]

[184] Photograph (anonymous) of the Boston Symphony Orchestra in 1891 on the website of the Stokowski org. https://www.stokowski.org/Principal_Musicians_Boston_Symphony.htm (Last accessed September 2022).
[185] Still from a videorecording of a live performance with NPhU of the First Symphony in Utrecht, 2007.

My decision to ask the orchestra to sit was based on a combination of practical and ideological arguments. First of all, my project weeks were very intense, with long days of rehearsals and recordings of up to six hours for seven days in a row. It would have been very tiring for the orchestra members to play standing up for so many hours and so many days on end. Apart from that, I must confess that, in those instances where I asked my orchestra to stand, I have never found a fully satisfactory solution for the fact that the cello section remains seated. I personally find this to be detrimental to the communication between the cello section and the standing musicians, and something not sufficiently compensated by the benefit that some players feel freer when standing. Even if the cellists are seated on raised podium parts of 20 or 40 centimetres in height, this problem is not fully resolved in my opinion.

For the project concerning the *Second Symphony* in 2020, I intended to work with a variation of the basic seating arrangements as proposed by the conductor George Henschel, who provided this image in a letter to Brahms.[186]

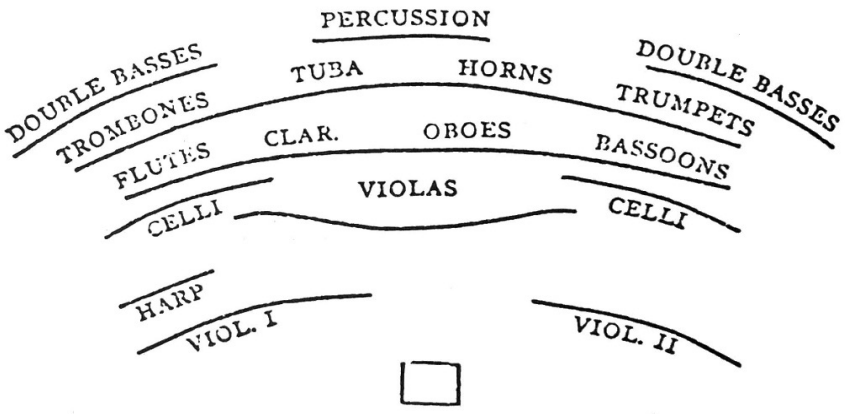


Figure 3.6: Illustration in a letter from Henschel to Brahms.

However, due to the government's social distancing measures, intended to prevent the spread of corona-virus, the distance between the basses and the cellos (as well as the rest of the string section) became too large for them to

[186] Henschel, *Personal Recollections,* p. 84.

play together. To overcome this practical problem, I positioned the cellos (8 for this production because I felt that the importance of the cello part in the *Second Symphony* demanded extra players) in one row, with 2 basses to the left and 2 to the right of that slightly curved arch. The viola section was seated in front of the cellos. This was the resulting arrangement:

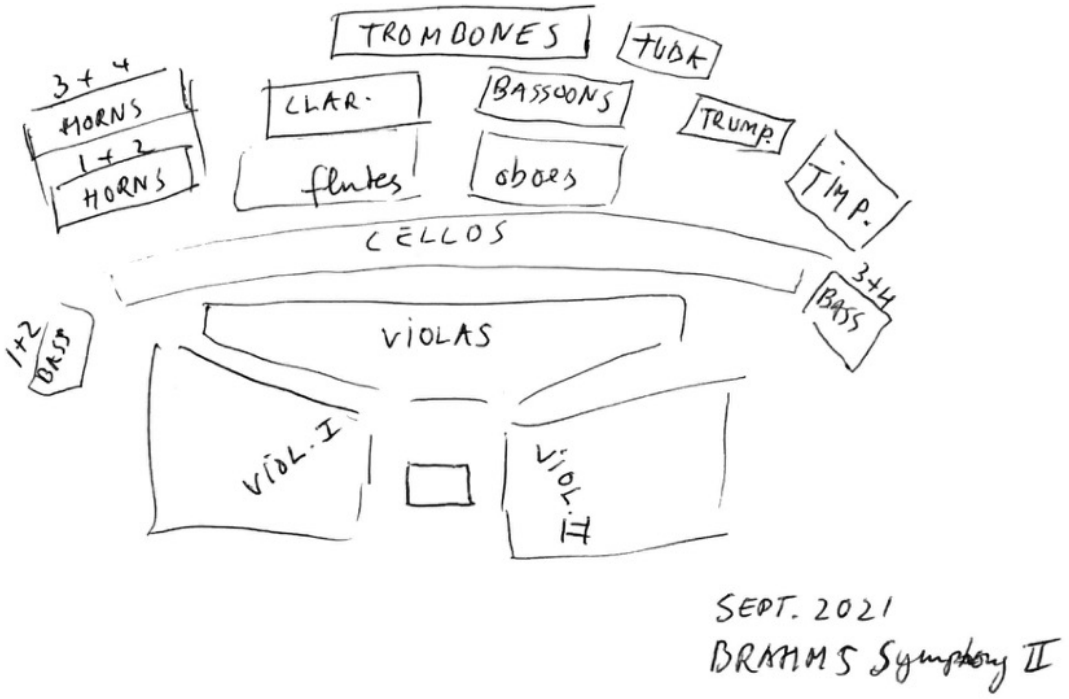


Figure 3.7: Sketch by author of seating arrangement 2021.

All my arrangements were variations of historical examples, with sometimes the basses behind the winds, sometimes the timpani and trumpets in the back row, and sometimes the trombones on the right (as for example in the *First Symphony*, where the trombones only play in the Finale). In the literature on orchestral seating for symphonic performances in the nineteenth century, I have not found evidence that the seating arrangements of the various orchestras would be changed, depending on the repertoire. Today MPP orchestras are often very reluctant to vary their seating. HIPP orchestras appear to be more flexible and sometimes change their seating even for different pieces in one programme. Authors like Elliot Galkin and Daniel Koury give many examples of seating arrangements of nineteenth-

century orchestras, but they do not write about the issue of changing seating for specific repertoire or individual pieces.[187]

The most consequential characteristic of all historical examples surveyed, and indeed one that all nineteenth-century seating arrangements for orchestral performances seem to have in common, relates to the placement of the second violins opposite the firsts. First and second violins often play in octaves, and it can be an advantage for the first violins to hear the lower octave, usually coming from the second violins in their left ear or by their side. This is the case in seating arrangements that became the new standard over the course of the twentieth century, where the second violins are positioned on the inside of the first violins at the same side (left of centre as seen by the audience and by the conductor).

The historical seating arrangement with opposing groups, whilst allowing good contact between lower and upper octaves, has the distinct benefit of highlighting the moments when Brahms and other composers distribute their material so that the first and second violins can engage in dialogue with their voices coming from opposite sides. Twentieth-century seating arrangements, where the first and second violins are on the same side of the orchestra, greatly diminish this effect. One might argue that other string groups like violas and cellos also sometimes engage in dialogue with the violins and with each other. Yet I consider the lively exchanges between first and second violins to benefit most from the opposed seating arrangement.

Certain special moments in Brahms's music also benefit from this arrangement. For example, the first entry of the second violins after 52 bars of rest in the first movement of the *Second Symphony* becomes even more remarkable if the second violin call comes from the opposite side of the orchestra when they answer the first violins.

[187] Galkin, E. W. *A History of Orchestral Conducting in Theory and Practice.* Pendragon Press, New York, 1988, and Koury, D. J. *Orchestral Performance Practices.*

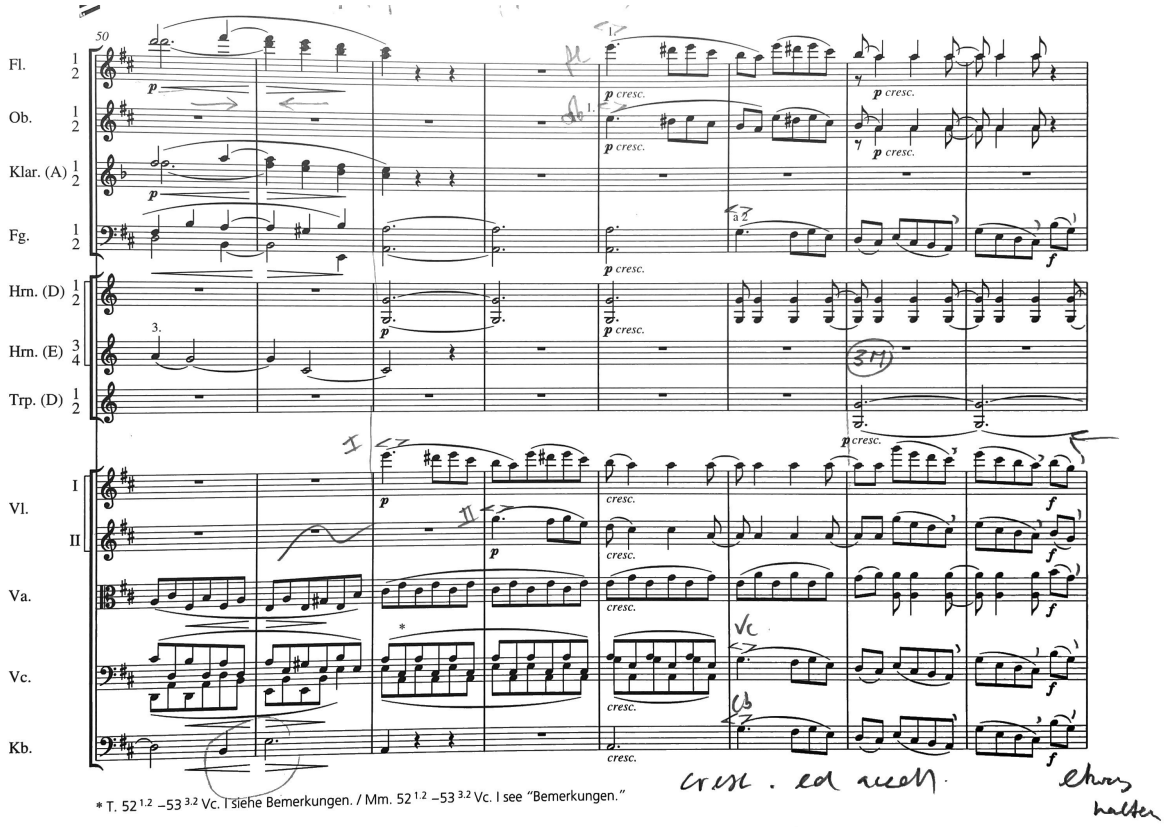


Figure 3.8: Breitkopf & Härtel Urtext Edition Second Symphony (Score) page 3 (partially shown).

A similar effect is achieved in bar 293, the last bar on the page in the example below, with the answer in the second violins. From bar 290 on, the order of the thematic entries is: horn 1, oboe 1, violin 1, violin 2. Here, the physical space between the individuals and the groups playing these thematic entries creates a sensation of these “calls” originating from different places. I like the description of these figures as "calls" because they consist of the first bar of the main theme from the introduction of the Finale, played there by the first horn.[188] The second violin entry coming from the right-hand side of the orchestra then enhances the feeling that this call is coming from “across the valley” as it were.

[188] The theme is based on the Alphorn melody which Brahms had sent to Clara Schumann in 1868. Blume refers to this theme as ‘Motiv des Westminster-Glockenspiel’ while Giselher Schubert suggests that this theme represents the forces of nature.

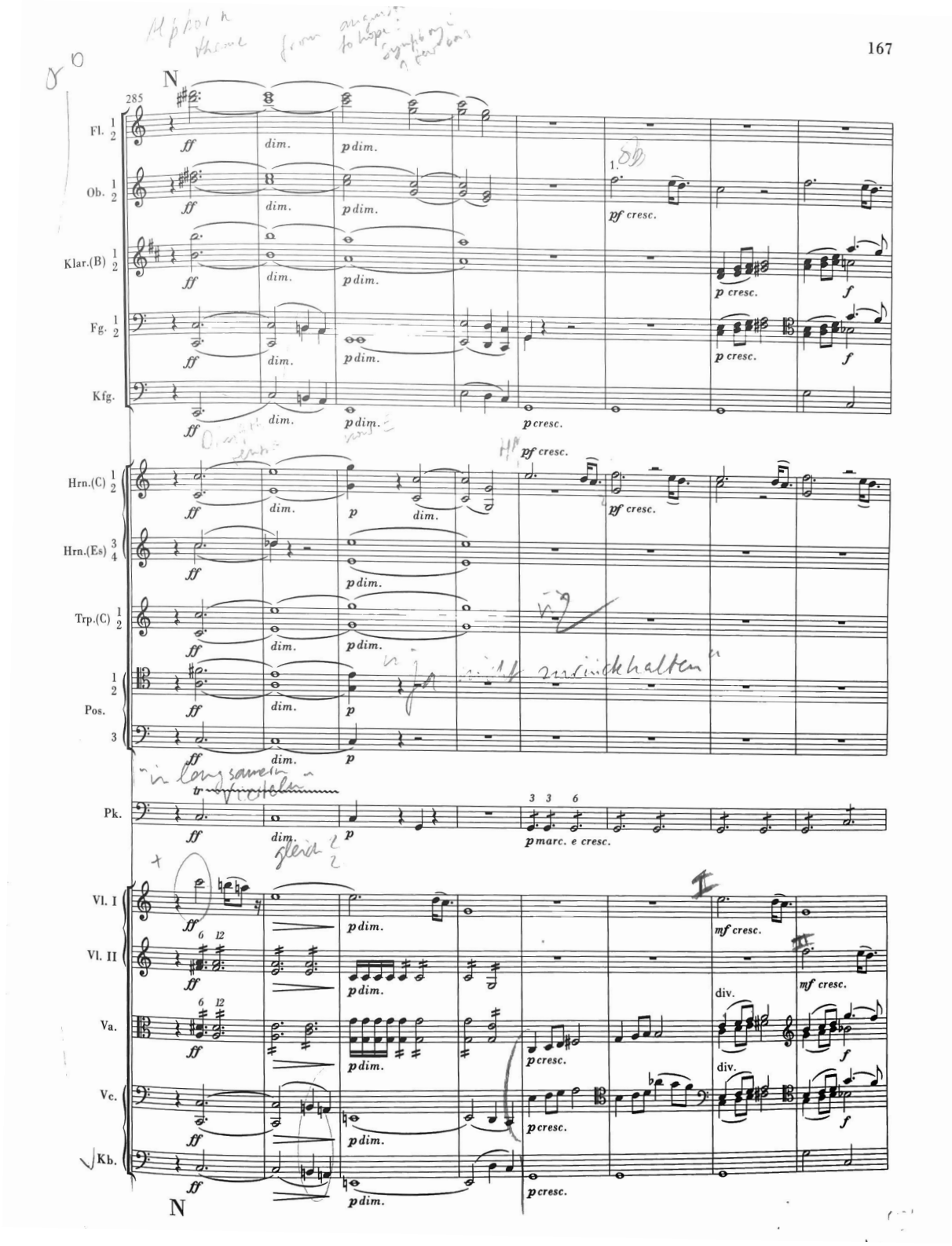


Figure 3.9: Breitkopf & Härtel Urtext Edition First Symphony (Score) page 167.

## 3.2 Musicians and Instruments

I assembled the project orchestra from musicians at different stages of their careers. The principal string players and the solo wind and brass players are, with a few exceptions, professors at the CvA, as are the soloists in the concertos. In close consultation with these musicians, I invited their most qualified students and former students to make up the rest of the ensemble.[189] What I have asked these players to do has been outside their comfort zone, even for players with extensive experience in other period instrument orchestras. This is perhaps particularly true of the musicians of my own generation, who have worked and lived with artistic principles other than those I propose in this project. As Brown mentions in the documentary film on the first project year, each musicians had to develop new personae as performers in order to be able to work with nineteenth-century expressive tools.

As someone who has worked in the HIPP field and in higher education for more than thirty years, I believe that the mental capacity to effect this change does not necessarily relate to age. I have seen flexible old professors and rigid young students as well as dogmatic and open-minded musicians of all ages. The musicians in the project orchestra came from both the Early Music and Modern departments of the CvA. Some of them had experience with playing on gut strings while others did not; some had played nineteenth-century wind instruments before while some had not. I strongly believe that a project such as this benefits from the fact that the participating musicians come from diverse backgrounds and different generations, which can help to stimulate a climate of curiosity and discovery. I think it also creates a situation in which new ideas are not received by a unified group of like-minded individuals, as might be the case in an established orchestra working in the same style on a regular basis, but rather examined from a variety of different angles.

[189] For instance, the second wind and brass players were chosen directly by their principals, and the string section was completed in consultation with the CvA's head of strings.

When it came to choosing instruments for this project, I started by interviewing the principal wind players about their preferred instruments and the pitch that would be most suitable for these instruments. We chose A=438 and I left the choice of instruments to the players themselves, but I did ask for German nineteenth-century instruments, or copies thereof. For students who did not own such instruments, I rented them (oboe, clarinet and trombone). The string players all played on instruments fitted with gut strings; the top two, sometimes three, strings on each instrument being plain gut, while the lower strings being wound gut. Some people had suitable nineteenth-century instruments and others – with the help of a violin maker or other expert – made their "modern instruments" suitable for gut strings. They all used nineteenth-century bows if they had them or could borrow them. This is not the place for a comprehensive discussion of the characteristics of a string orchestra using gut strings compared to metal strings, let me just say that I personally prefer gut strings in all music of all periods.[190] Leaving that personal preference aside, I can say from experience that all experiments with expressive fingerings and a limited use of vibrato (left hand), as well as variations of bow speed and pressure (right hand) gain depth, colour, and expression when conducted on gut strung instruments.[191]

The German violin pedagogue Siegfried Eberhardt (1883-1960), who goes into detail about his opinion on strings, makes his position immediately clear with the subtitle of his book, *Die kunstfeindliche Stahlseite* (the steel string as the enemy of art). In his book, one can find a diatribe against the use of steel strings:

> The discovery of the steel string signifies the triumph of weak inertia, the pyrrhic victory of a pitiful, materialistic, superficial conception of an original expression of art, which stands alone in its subtlety [...] But no tranquilisers

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[190] I recorded Berio's *Corale su Sequenza VIII per violino, due corni e archi* (1981) with violinist Joe Puglia in 2016. Both orchestra and soloist played on gut strings. Joseph Puglia (viool), Ellen Corver (piano), Nieuwe Philharmonie Utrecht o.l.v. Johannes Leertouwer, Attacca ATT 2016147.

[191] Juxtaposing gut and steel like this is admittedly based on a simplification of the real choices string players face when choosing their strings, as a wide range of strings made of synthetic gut imitations is now available. Having said this, my experience is that pure gut strings are preferable not only over steel and other metal ones, but also over synthetic strings.

> should put his [the user of steel strings] conscience to sleep before the realisation that he is committing an injustice to the instrument that he pretends to love above all else.[192]

Eberhardt goes on to write about the string tension of steel strings as a vital factor in reducing the expressive possibilities of the player:

> In addition, however, the greatest constraint is the stiffness of the steel strings, which oppress the instrument itself in a paralysing, frosty torpor compared to the elevated free and elastic, spirited and warmly vibrating real strings, which by the nature of their material merge with the wood and the magic of its sound.[193]

Eberhardt's remarks coincide with my experience in the use of gut strings. In addition to what he writes about the nature of the gut strings, there is another factor that I find to be crucially important. The fact that the gut-mounted instruments have a less powerful sound can be used to great advantage, as it forces the musicians who play these instruments to think about dynamics in terms of character and colour rather than volume or decibels. This also holds true for nineteenth-century wind instruments, as they too appear to favour colour over sheer power. The benefit of concentrating on character rather than volume, or perhaps more precisely, always having to consider the expressive motivation behind a particular dynamic, is that it can help bring out a wider range of emotions in the musical narrative.

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[192] Eberhardt, S. *Wiederaufstieg oder Untergang der Kunst des Geigens, Die kunstfeindliche Stahlseite.* Hansen, Kopenhagen, 1938, p. 59. *Die Entdeckung der Stahlsaite bedeutet den Triumph schwächlicher Trägheit, den Pyrrhussieg einer kläglichen, materialistischen, veräußerlichten Auffassung über eine schöpferisch ursprüngliche Kunstäußerung, die in ihrer Feinheit einzig dasteht. […] Alles Morphium aber soll sein Gewissen nicht einschläfern vor der Erkenntnis, daß er ein Unrecht begeht an dem Instrument, das er angeblich über alles liebt.*

[193] Ibid, p. 61. *Dazu kommt aber als stärkste Minderung noch die Spannungsstarre der Stahlsaiten, die das Instrument selbst Bedrücken in einer lähmenden, frostigen Erstarrung gegenüber den erhoben frei und elastisch, beseelt und warm schwingenden echten Saiten, die sich aus der Natur des Materials mit dem Holz vereinigen und dem Zauber des Klanges verschmelzen.*

Brahms's preference for natural horns has been well documented, though he must have heard his music played on valve instruments. The fact that he embraced the difference between open-sounding and closed-sounding notes on these instruments and used those differences to such great effect in his writing, is another indication that the capacity to produce an even sound was not high on Brahms's list of priorities when it came to choosing instruments. My project was not intended to recreate the sound world of the Meiningen Orchestra or any other particular nineteenth-century orchestra. I hope that more researchers and musicians will be able to conduct projects dedicated to nineteenth-century orchestral instruments in the future, as I am convinced that one can learn a lot in this field. To me, it seems particularly important to investigate the question of valve brass instruments, because to my ear they produce a much more compact sound. In Vienna, the first performance of the *Second Symphony* was played on valve trombones, but these instruments were discarded before the first performance of the *Third Symphony* there. There is substantial conflicting information about the use of natural horns in nineteenth-century orchestras from which, at the very least, one can conclude that the choice between valve and natural instruments was not as black and white as it might appear today.[194]

In the second project, in which we played the *Double Concerto* and the *Second Symphony*, the trumpet players in my orchestra played the symphony on early trumpets and the concerto on later nineteenth-century instruments. They proposed to do so in order to balance the sound of the natural horns in the symphony, having the same notes sound open and closed. But the notes Brahms gave them in the *Double Concerto* were hardly playable on early trumpets, which one may take as an indication that he wrote this piece with later trumpets in mind. I believe that such types of subtle sound difference deserve further investigation and research.

[194] John Ericson writes about the use of natural horns and valve horns in Brahms and other nineteenth-century music in his article "Brahms and the Orchestral Horn" https://www.public.asu.edu/~jqerics/brahms-natural-horn.html. (Last accessed November 2022).

Detailed nineteenth-century descriptions of the particular sound of orchestras are rare, but Hanslick did write about the sound of the Meiningen Orchestra in 1884 in his *Kritiken*:

> In terms of precision down to the smallest detail, the Meininger Kapelle is not surpassed by any orchestra in the world and its level hardly reached by one. [...] The Meiningen musicians cannot compete with Vienna's 'Philharmoniker' in the sensual beauty and fullness of sound, the warmth, the temperament of the performance, in short, the splendour of the mass effect. Of course, one must not forget that Bülow's orchestra has only 48 men, while our Philharmonic has 80 to 90. It may be as much due to the quality of the instruments as to the players that the intoxicating shine and the warm colours that emanate from the Philharmonic Orchestra are missing from the Meininger. Bülow's violin players are capable musicians without the ravishing power of the Viennese violinists; double basses and trombones excellent, the oboes often sharp and screaming, clarinets and horns good, although not equal to the Viennese masters of these instruments. The connoisseur will value the effects all the more that Bülow attains with this weaker formation, here by wisely saving the lights, there by concentration of all forces in one point, for example in the final movement of the C minor Symphony, and the Freischütz Overture. An inventive and experimental spirit, Bülow has also introduced effective innovations in his orchestra that other conductors did not think of. This includes the five-string double basses, which give the low C, while the usual four-string ones only reach down to the E; furthermore, the so-called Ritter *Altoviolen,* of stronger build than the ordinary violas, surpass them in tonal richness and reduce the wide distance from this violin class to the violoncellos; finally, the chromatic timpani, which can be immediately re-tuned during the performance by a pedal stroke.[195]

[195] Hanslick, *Concerte, Componisten und Virtuosen der Letzten fünzehn Jahre, 1870-1885*, p. 414. *An Präzision bis ins kleinste Detail wird die Meininger Kapelle von keinem Orchester der Welt übertroffen ja schwerlich von einem erreicht. […] Worin die Meininger sich mit Wiens ‚Philharmonikern' nicht messen können, das ist die sinnliche Schönheit und Fülle des Klanges, die Blutwärme, das Temperament des Vortrages, endlich der Glanz der Massenwirkung. Man darf freilich nicht vergessen, dass Bülows Orchester nur 48 Mann zählt, hingegen unser Philharmonisches deren 80 bis 90. Es mag ebenso sehr an der Qualität der Instrumente wie an den Spielern liegen, dass der berauschende Glanz und das warme Colorit, welches von dem Philharmonischen Orchester ausströmt, den Meiningern fehlt. Bülows Violinspieler sind tüchtige Musiker ohne die hinreißende Gewalt der Wiener Geiger; Kontrabässe und Posaunen vortrefflich, die Oboen häufig scharf und schreiend, Klarinetten und Hörner gut, wenngleich den Wiener Meistern dieser Instrumente nicht ebenbürtig. Der Kenner wird die Wirkungen umso höher anschlagen die Bülow mit dieser schwächeren Kapelle hier durch weises Aufsparen der Lichter, dort durch Conzentration aller Kräfte, auf einen Punkt erzielt, z. B. im Schlusssatze der C-moll Symphonie und der Freischütz Ouvertüre. Ein erfinderischer und experimentierender Geist, hat Bülow auch in seinem Orchester wirksame Neuerungen eingeführt, die anderen Dirigenten nicht einfallen. Dahin gehören die fünfseitigen Contrabässe, welche das Tiefe C geben, während die üblichen vierseitigen bekanntlich nur bis ins E hinabreichen; ferner die*

Apart from innovations regarding the string instruments (there are no Ritter-violas or 5-string basses in the instrument collection of the Meininger Museums), I find Hanslick's description of the oboe sound striking. Particularly for oboists, the choice of instrument has evident consequences for the sound. The type of instrument that was in use in Meiningen at the time of Bülow's and Steinbach's tenure was probably of a type that produced a piercing, rather nasal sound. Not necessarily a choice that present-day oboists feel they have to make, but certainly an interesting topic for further research.

On my website, I provide a list of participating musicians and the instruments they used in the project:

### List of musicians and instruments

https://brahms.johannesleertouwer.nl/orchestra/

I think it is fair to say that the sound of the project orchestra differs from the sound of MPP and indeed HIPP orchestras, due to choice of instruments and particularly to how these instruments are played. As a result, the project orchestra's sound probably aligns somewhat more closely with the sound of nineteenth-century orchestras of Brahms, Bülow, and Steinbach than to the sound of modern orchestras. At the same time though, it must be said that the choice of instruments in my project orchestra was based on a pragmatic rather than a research-driven approach. I think further research in the field of choice of instruments and the coherence of such choices in relation to orchestras and repertoires of a particular composer or period could be extremely interesting and helpful when it comes to understanding the orchestral sound worlds of the past. Clearly such research would be very expensive, as detailed investigations would have to be

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*sogenannten Ritterschen Altoviolen die von stärckerem Baue als die gewöhnlichen Bratschen, diese an Tonfülle übertreffen und den allzu weiten Abstand dieser Geigenklasse von den Violoncells vermindern; schließlich die chromatischen Pauken, welche während des Spiels durch einen Pedaltritt sofort umgestimmt werden können.*

conducted. Instruments would need to be purchased or copied and musicians would need to invest substantial amounts of time learning to play a range of different instruments.

## 3.3 Bowing and Articulation

My approach with the string orchestra has been relatively simple when it comes to bowing and articulation, which I based on the available overviews of nineteenth-century bowing techniques. Spohr, for instance, begins his list of the technical tools required for beautiful performance featuring refined bowing in his *Violinschule* with:

> The finer nuances of bowing, both in relation to the character of the tone, from strong, even rough to softly whistling, and particularly in relation to the accentuation and individual characterisation of musical phrases.[196]

The fact that Spohr lists the fine art of bowing as his first point can be seen as confirmation of its importance. It is particularly important to distinguish between those techniques that Spohr advocates as being part of the correct performance *(richtigen Vortrag)* and those that are in the domain of beautiful performance (*schöner Vortrag*), such as the one quoted above. Spohr insists, for example, on the student's ability to play *detaché* and other bow strokes in such a manner that all notes have the same strength and duration. This does not constitute an artistic ideal, but rather a prerequisite for the performer to be able to make decisions about how to shape musical phrases based on artistic choices, and not on technical limitations. As Spohr himself writes, beautiful performance must be preceded by correct performance.

Regarding the desire for unification of bowings in sections of the string orchestra, there are some conflicting opinions to be found in nineteenth- and early-twentieth-century writings. In his *Handbuch Historische Orchesterpraxis* researcher Kai Köpp quotes Spohr, Gassner and Joachim/Moser.[197] Spohr writes in his method that:

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[196] Spohr, *Violinschule* p. 195. *Die feinern Schattierungen der Bogenführung, sowohl im Bezug auf den Charakter des Tons vom starken, selbst rauhen bis zum sanft flötenden, wie auch besonders auf Accentuirung und Sonderung der musikalischen Phrasen.*

[197] Köpp, K. *Handbuch Historische Orchesterpraxis Barock-Klassik-Romantik.* Bärenreiter, Kassel, 2009, Zweiter Auflage 2013. pp. 94-96.

> The most difficult task, however, lies in distributing the bow strokes so that everyone plays exactly together.[198]

Spohr goes on to express his admiration for the exceptionally unified manner in which the violinists in the orchestras of conservatories in Paris, Prague and Naples play. Ferdinand Simon Gassner (1798-1851) also advocates unification of bowings in his writings. On the other hand, Joachim/Moser (partly quoted by Köpp) write:

> It must be admitted without further ado that the uniformity of the bowing is not only pleasing to the eye, but in many cases also benefits the sound of the orchestra, especially in detached passages. If, for example, the uniform designation of the ripieno parts by the conductor or concertmaster extends only to the simultaneous down or up bows and to the change of bow where it coincides with the beginning or end of a musical phrase, then such a practice can only be endorsed. But if it goes so far as to demand the strings to change bows at the same time in passages intended by the composer as a sustained note, a phrase that belongs together, or a melody with a long breath, then it must be rejected under all circumstances.[199]

As one can see, different opinions on the question of unification of bowings in orchestral playing exist within what we might call the German school. Given the fact that Blume provides numerous bowings for sections in Brahms's symphonies, and the fact that the Meiningen Orchestra had more rehearsal time than other orchestras, including sectional rehearsals in which they could unify the bowings of the string players in each section, I have chosen to unify the bowing in the project orchestra and only on rare

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[198] Spohr, *Violinschule* p. 248. *Die schwierigste Aufgabe ist es aber 5) in der Einteilung der Bogenstriche mit den mit spielenden genau zusammen zu treffen.*

[199] Joachim/Moser, *Violinschule* p. 16. *Es sei ohne weiteres zugegeben, dass die Einheitlichkeit der Bogenführung nicht nur das Auge angenehm berührt, sondern in zahlreichen Fällen auch dem Klang des Orchesters, besonders in detachierten Passagen, sehr zu statten kommt. Erstreckt sich beispielsweise die einheitliche Bezeichnung der Ripienstimmen seitens des Dirigenten oder Konzertmeisters nur auf die gleichzeitigen Ab- oder Aufstriche und auf den Bogenwechsel da, wo er mit dem Anfang oder Ende einer musikalischen Phrase zusammenfällt, so kann einer derartigen Praxis nur das Wort geredet werden. Geht sie aber so weit, den gleichzeitigen Bogenwechsel von den Streichern auch an solchen Stellen zu verlangen, die vom Komponisten als ausgehaltene Note, zusammengehörige Phrase oder langatmige Melodie gedacht sind, dann ist sie unter allen Umständen zu verwerfen.*

occasions apply 'free bowing' in order to establish a longer legato line than would otherwise be possible.

For the purposes of this brief discussion, I will use a simple division of legato and non-legato types of bow strokes and my understanding of their application as being part of beautiful performance in orchestral playing.

### LEGATO

The nature of legato and the relationship between its expressive quality and tools such as vibrato, portamento, and modifications of rhythm have been discussed in the films presented in Chapter 2.2. The question of Brahms's possible expectations regarding the length of final notes under legato slurs and the extent to which first notes under these slurs should be lengthened - discussed at the same place as well as in my discussion of Blume's instructions in Chapter 1.8 - is complex and does not yield any rules that might be universally applied. What I think can be stated with confidence, as Brown notes in *Performance Practice in Johannes Brahms's Chamber Music*, is that "Brahms would have expected the notes within a slur to be executed with uninterrupted legato."[200] This may seem a rather obvious statement, but I have noticed that many young string players today sacrifice a seamless legato by interrupting the movement of the bow momentarily in order to make their position changes inaudible. In mainstream higher education string teaching, there is a tendency to value a clean sound, devoid of any portamento, over legato. This seems to me to be the exact opposite of what might have been expected of string players in the nineteenth century.[201]

As discussed in Chapter 1.8, Blume systematically suggests that after a legato slur, one should add or imagine a 16th rest. This is his way of suggesting a shortening of the last note under the slur, as he writes that the rest should be made at the expense of the preceding note. My interpretation of Blume's instructions implies playing a smooth and uninterrupted legato

[200] Brown, *Performance Practice in Johannes Brahms's Chamber Music* p. 7.
[201] In Chapter 3.4 the way the connection between legato and portamento was perceived by orchestra members will be discussed.

under every legato slur as well as separating the slurs from each other, or from other notes before or after the slurs, in a clearly articulated manner. How much separation I apply depends entirely on the desired musical effect. I do not think it makes any sense to apply Blume's uniformly marked 16th rest systematically. Consider Brahms's remark to Joachim: "By the way, I think that the slur over multiple notes does not take anything away from the duration of any of them," as discussed in Chapter 1.7. This is at odds with Blume's systematic instruction to shorten the last note under legato slurs over multiple notes.

### Staccato, spiccato and other non-legato bowing techniques

For string players, the habit of describing various sorts of articulated or non-legato notes in terms of categorised bow strokes has contributed to a tendency to perform such notes in a uniform and even manner, regardless of intervals, harmonic tension, and any other factors that might suggest unevenness. As Brown indicates in *Classical & Romantic Performing Practice,* an understanding of specific techniques of bowing, and how and where they might have been employed historically, can throw considerable light on attitudes towards articulation as a whole. Not only does he discuss a wide range of bow strokes in his book, but Brown also addresses the discussion about spring bow (spiccato and sautillé), mentioning many instructions from methods and other sources.[202] Robin Stowell categorises types of bow strokes with Tourte model bows providing an impressive menu of possibilities, few of which have survived into present-day performance practice.[203] The abundance of different types of nineteenth-century bow strokes and the fact that many of them have disappeared in today's practice is an indication of the fact that the focus of violin technique and methods has gradually shifted more to the left hand.

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[202] Brown, *Classical & Romantic Performing Practice,* p. 259-281.
[203] Stowell, R. *Violin Technique and Performance Practice in the Late 18th and Early 19th centuries.* Cambridge University Press, Cambridge, 1985, pp. 177-210.

With my project, I have only just begun to investigate the possibilities of applying some of Brown's and Stowell's suggestions in an orchestral context. The picture that emerges from the historical sources presented in their work, however, indicates that nineteenth-century musicians tended to play short notes much more often near the tip or in the upper half of the bow than is common practice in both MPP and HIPP today. This prompted me to ask my string players to avoid playing short notes in the middle of the bow. In the project orchestra, we have experimented with this since the first year, and violinists and violists in particular have gradually felt more at ease with this technique. It is less easy to lift the bow off the string in the upper half of the bow than in the middle or the lower half. This has produced a style of articulation where relatively short notes (particularly sequences of such notes) are generally less short than is often the case elsewhere today.

As a commonly heard complaint about the twentieth-century execution of short notes (with or without dots or daggers) is that they were performed too short, this seems to be a welcome change. In an interview with members of the Schönberg quartet, they told me that Jennö Léner, the founding leader of the Léner quartet, with whom they had worked, repeatedly told them in their discussions about articulation styles that twentieth-century musicians tended to play dotted notes much too short and in far too mechanical a manner. The tendency to play non-legato consecutive notes of the same length short, or *marcato*, is not limited to notes with dots or daggers. As the players and I became increasingly familiar with playing less short and in the upper half of the bow, we learned to look at passages such as the tenth bar of the first movement of the *First Piano Concerto* differently. If we had an opportunity to play this piece again, I would ask for these notes to be played longer than we did in the recording of the first project in 2019.

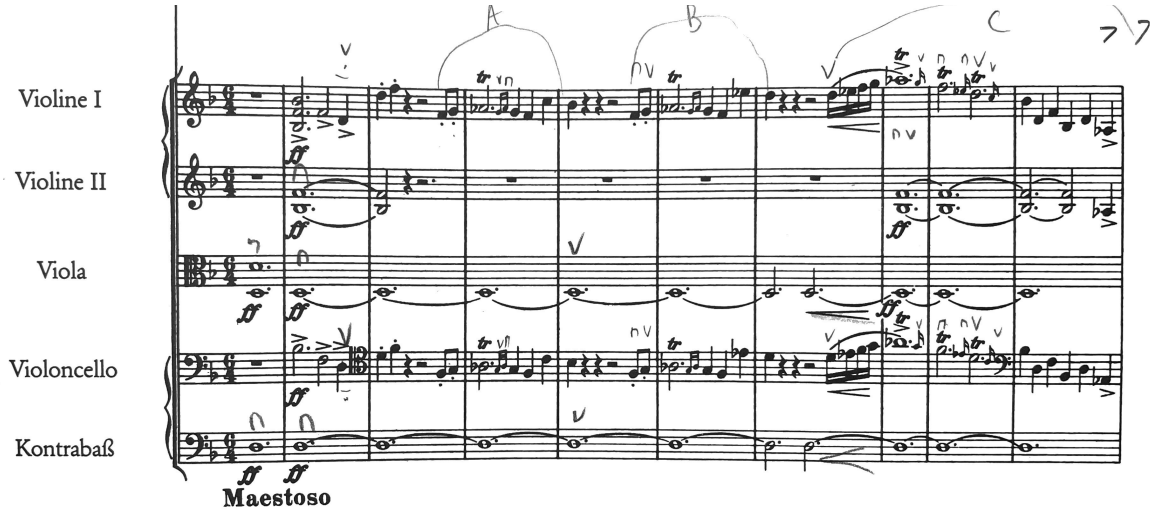


Figure 3.10: Breitkopf & Härtel Urtext Edition First Piano Concerto (Score) page 1 (partially shown).

The sound quality in relatively short notes is a topic that deserves special attention. Violinist and writer Fritz Rau, for instance, writes in 1922 about the character of various bow strokes and the necessity of adding vibrato even to short notes:

> Each type of stroke has a certain character. The jumping stroke types: jumping bow, spiccato, flying (sometimes firm) staccato, thrown bow (arpeggios), characterise gentler moods, elegance and grace; marcato and staccato, on the other hand, strength and determination. Legato characterises softness, which can still be supported by changing the contact point of the bow on the string from the bridge to the fingerboard as well as by different tonal strengths. Nevertheless, an artist is not able to succeed fully even with the most perfect bowing alone. One can enjoy the spray of a rapid sequence of tones executed with the jumping bow, a marcato, staccato, or legato tone in forte or piano can sound with this or that timbre, but almost all bow strokes and the tones produced only by them have something mechanical and rigid. Only when the vibrato is added does the mechanical character disappear, the rigidity of the tone is resolved, and one feels the inner engagement of the artist; the playing begins to warm up, gains liveliness, becomes animated. In addition to the portamento, it is precisely the vibrato that is the factor to which the string instruments owe their high expressiveness.[204]

[204] Rau, F. *Das Vibrato auf der Violine.* Kahnt, Leipzig, 1922, p. 33. *Jeder Strichart haftet ein gewisser Charakter an. Die springenden Stricharten: Springbogen, Spikkato, fliegendes (auch zuweilen festes) Stakkato, geworfener Bogen (Arpeggien), kennzeichnen leichter*

This is a fascinating account in many ways. First of all, it provides some insight into an artistic motivation behind the increase in the use of vibrato in the first decades of the twentieth century, particularly in passages with relatively short notes. This increase could be linked to the tendency to play many more notes short than had been the case in the nineteenth century. Rau claims that it is necessary to add vibrato to take away or soften the otherwise mechanical character of tones produced by jumping bow strokes - staccato, marcato or legato - alone. Because this belief has been the guiding principle in many higher educational institutes for over a century, it is not an easy task to reinvent the emotional impact of various bow strokes applied without vibrato, as I strive to do with the project orchestra. It requires a lot of experimentation, specifically in order to reconnect to and project the kinds of characterisations Rau gives at the beginning of the quote above. We have only just begun to do this in my project, but I do believe that we have made some progress in the past four years. The process of working with these types of bowings is driven by asking the right question about all the tools of articulation, and the question of what expressive purpose they serve in particular? This is the best safeguard against getting stuck in the mechanical execution of especially the relatively shorter notes in the score.

There is one key factor that I did not consider in the first three projects with the orchestra. This is the subject of posture, the way one holds

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*Gemütsbewegungen Zierlichkeit, Anmut; Marcato, Stakkato dagegen Festigkeit, Bestimmtheit. Das Legato charakterisiert Weichheit, was noch durch Strichstellenveränderungen vom Steg nach dem Griffbrett hin sowie durch unterschiedliche Tonstärke unterstützt werden kann. Trotzdem vermag ein Künstler selbst mit der Vollendetsten Bogenführung nicht zu erwerben. Man kann sich an den Sprühregen einer mit springen Bogen ausgeführten raschen Tonfolge erfreuen; es kann ein Markato-, Stakkato-, Legato Ton mehr oder weniger bestimmt, forte oder piano sein, mit dieser oder jener Klangfarbe erklingen, es haftet doch fast allen Bogenstrichen und den nur durch sie erzeugten Tönen etwas Mechanisches, Starres an. Erst wenn das Vibrato hinzutritt, schwindet das mechanische löst sich die Starrheit des Tones, und man empfindet die innere Anteilnahme des Künstlers; das Spiel fängt an zu erwärmen, bekommt lebendige Gestaltung, wird beseelt. Neben dem Portamento ist es gerade das Vibrato derjenige Faktor, dem die Streichinstrumente ihre hohe Ausdrucksfähigkeit verdanken.*

the bow and particularly the position of the upper arm.[205] In his article on the physical parameters of nineteenth- and early twentieth-century violin playing, Brown concludes that:

> German players (especially those trained in the Leipzig Conservatory and the Berlin Hochschule) [ …] inspired by Ferdinand David and Joseph Joachim, adopted the wider range of bow strokes that had been developed in the wake of Paganini's impact, but sought consciously though cautiously to integrate these innovations into the Classical traditions of the early 19th-century Viotti school as it had been codified by Spohr.[206]

As the bowing arm was held close to the body in the German school, it stands to reason that the wide range of bow strokes Brown writes about would have been executed with the upper arm in that position. I experimented with these types of bow strokes in the upper half of the bow with the project orchestra, but we have not experimented with different positions of the bow arm. It is quite possible that such experiments might lead to a different understanding of the nature of those bow strokes. This is a subject that deserves further research and experimentation. For the project in 2022, I have shared Brown's article with the string players of the project orchestra and encouraged the musicians to conduct their own experiments with the position of the upper arm, particularly in combination with short staccato and marcato bow strokes. I hope that this can be the beginning of an investigation into the possibilities of varying the bow arm position with an orchestra.

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[205] As Eberhardt described, for instance: "In all pictures of Spohr and Paganini, we see the upper arm closely connected to the body. The German School has raised this way of holding the bow arm to some extent to a ground rule." Eberhardt, *Wiederaufstieg,* p. 84. *In allen Bildern Spohr's und Paganini's sehen wir den eng an den Körper angeschlossenen Oberarm. Die deutsche Schule hat diese Form der Bogenführung gewissermaßen zum Prinzip erhoben.*

[206] Brown, "*Physical parameters of 19th and early 20th-century violin playing,* " Updated October 2016, https://mhm.hud.ac.uk/chase/article/physical-parameters-of-19th-and-early-20th-century-violin-playing-clive-brown/. (Last accessed November 2022).

## 3.4 Portamento

Portamento was an essential part of expressive sound production on string instruments in the nineteenth century. In his *Violinschule*, Spohr includes portamento as the second point of his list of the technical tools required for beautiful performance:

> The artistic fingerings, which are not used for convenience or easier playability, but for the sake of expression and the tone, including the gliding of one tone to another, and also the finger change on the same note.[207]

Brown also advocates for this expressive tool.

> By the middle years of the [19th] century, as numerous violin and cello treatises, including those of J.J. Friedrich Dotzauer (c.1825), Louis Spohr (1833), Pierre Baillot (1835), Bernhard Romberg (1840), Charles de Bériot (1858), and Ferdinand David (1864) demonstrate, portamento was a fundamental element of artistic performance, which all skilled composers will have taken into account in their writing for string instruments.[208]

Though portamento was considered a fundamental element of artistic performance, many musicians applied it in different ways and portamento, like vibrato, was a hotly contested issue. Köpp, in his article *Die Hohe Schule des Portamento,* in which he investigates the relation between vocal and instrumental portamento technique, points to composer, conductor and teacher Antonio Salieri (1750-1825) who objected not to the use of *portamento di voce* in itself, but to exaggerate the use of this expressive tool in two pamphlets (1810 and 1814). Köpp concludes that Salieri was on the

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[207] Spohr, *Violinschule*, pp. 195-196. *Die künstlichen Applicaturen, die nicht der Bequemlichkeit oder leichteren Spielbarkeit, sondern des Ausdrucks und des Tons wegen angewendet werden, wozu auch das Fortgleiten von einem Ton zum andern, so wie der Fingerwechsel auf demselben Ton gehört.*

[208] Brown, Peres da Costa and Bennett Wadsworth, *Performance Practices in Johannes Brahms's Chamber Music*, p. 12.

losing side of this battle, as the nineteenth century was to become the age of expressive portamento.[209]

The subject of portamento has been investigated by many researchers over the past decades. Examples range from Stowell's *Violin Technique* and Brown's *Classical and Romantic Performance Practice* to Job ter Haar's work on Alfredo Piatti and Kate Bennett Wadsworth's dissertation on Friedrich Grützmacher, to name but a few.[210] Such researchers generally agree that the use of portamento was widespread in the nineteenth century, and then became more or less obsolete after the modernist revolution of the 1920s and 1930s. But there is more to say about the subject of portamento and its expressive nature. In Johannes Gebauer's soon to be published *Der "Klassikervortrag"* he warns against reducing the idea of portamento to the aspect of gliding from note to note:

> The portamenti typical of Joachim were thus a combination of left-hand gliding and a special treatment of the bow, which was probably intentional and an integral part of many of his portamenti. This was independent of the actual fingering. A limitation of the portamento discussion for the "Klassikervortrag" can therefore not be limited to a technique of the left hand. Rather, the expressiveness of the classical portamenti in Joachim's style, resulted from a combination of techniques of the left and right hand, which together made a wide range of nuances possible. Portamenti belonged to a declamatory-speaking performance which demanded an even greater need for articulation and "good pronunciation".[211]

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[209] Köpp, K. *Die Hohe Schule des «Portamento»* Aufsatz entstanden im Rahmen des SNF-Forschungsprojektes «Die Idee des Componisten ins Leben zu rufen» an der Hochschule der Künste Bern, Forschungsschwerpunkt Interpretation, 2015. https://www.dissonance.ch/upload/pdf/132_16_hsm_kk_portamento.pdf. p. 16. (Last accessed November 2022). *Mit seiner Kritik stand der 64-jährige Salieri allerdings auf verlorenem Posten: Das 19. Jahrhundert sollte das Zeitalter des ausdrucksvollen Portamento werden, und die Nachwirkungen sind noch bis weit ins 20. Jahrhundert auf historischen Tondokumenten zu hören.*

[210] Stowell, R. *Violin Technique and Performance Practice in the Late Eighteenth and Early Nineteenth Centuries*; Brown, C. *Classical and Romantic Performing Practice: 1750–1900*; Haar, J. ter, "The Playing Style of Alfredo Piatti: Learning from a Nineteenth-century Virtuoso Cellist" PhD diss., Royal Academy of Music, University of London, 2019; Bennett Wadsworth, K. "Precisely marked in the tradition of the composer': the performing editions of Friedrich Grützmacher" PhD diss., University of Leeds School of Music, October 2017.

[211] Gebauer, J. *Der "Klassikervortrag"* to be published by Beethoven Haus Bonn end 2022. Quoted pre-publication with permission by the author. p. 267. *Die für Joachim typischen Portamenti waren demnach eine Kombination aus dem Gleitvorgang der linken Hand und einer*

The link between a declamatory style and the use of portamenti seems to me of vital importance. Thinking about portamento in terms of declamatory-speaking is an effective way to safeguard against random sliding with the left hand. In his dissertation, the violist and researcher Emlyn Stam describes how his attempts to include elements of what he heard and admired in historical recordings, particularly regarding the use of portamento, were systematically met with scepticism or outright disapproval.[212] There is a clear link between the modernist tradition's growing desire for clarity and exact reproduction of the score and the decline of portamento. If one strives to give each note in the score its exact notated duration, portamento is an unwelcome factor because it softens or compromises the rhythmical contours of a phrase. Portamento makes it more difficult to say where one note stops and the next one begins, and it takes time, it occurs at the expense of the exact duration of the departure note or arrival note.

Portamento appears to have been applied in many different ways. In *Classical and Romantic Performing Practice*, Brown points to the fact that the use of portamento was highly contested throughout the nineteenth century. As he puts it:

> Virtually all authors who discussed portamento in singing and string playing stressed the danger of abusing it; but their notion of abuse is directly dependent on what they considered to be the norm […] but here as elsewhere, ideas of what was tasteful or proportionate will almost certainly have been very different from ours at all stages of the period.[213]

Nonetheless, he concludes that:

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*speziellen Bogenbehandlung, die vermutlich beabsichtigt und ein integraler Bestandteil vieler seiner Portamenti war. Dies war unabhängig vom eigentlichen Fingersatz. Eine Beschränkung der Portamento-Diskussion für den „Klassikervortrag" kann sich daher nicht allein auf einen technischen Vorgang der linken Hand beschränken. Die Ausdrucksfähigkeit der klassischen, Joachim'schen Portamenti resultierte vielmehr aus einer Kombination von Techniken der linken und rechten Hand, die zusammengenommen eine große Bandbreite an Nuancierungen ermöglichten. Portamenti gehörten zu einem deklamatorisch-sprechenden Vortrag, der noch ein höheres Bedürfnis nach Artikulation und „guter Aussprache" hatte.*

[212] Stam, E. "In Search of a Lost Language: Performing in Early-Recorded Style in Viola and String Quartet Repertoires" PhD diss. Leiden University, 2019.

[213] Brown, *Classical and Romantic Performing Practice* p. 587.

> Notwithstanding periodic complaints about the over-use of portamento there can be no doubt that by the middle decades of the 19th century it had become an orthodox and quite freely employed expressive resource, and until well into the 20th century it remained, in its various forms an integral aspect of vocal and instrumental technique.[214]

The fact that portamento remained an integral aspect of vocal and instrumental technique well into the twentieth century, as Brown writes, is confirmed by sources like Rau's book, as quoted in Chapter 3.3. I find it noteworthy that Rau, in the quotation used above, names portamento as the other key factor (with vibrato) that lends the violin its intense expressiveness. This means that its importance was still explicitly acknowledged in the 1920s, at least according to Rau, at a time when vibrato was increasingly seen as a necessary element of all sound production. As one can hear in, for example, the recordings by the violinist Fritz Kreisler (1875-1962), who is well-known for his constant vibrato, vibrato did not immediately replace portamento but rather was, at least for some time, applied in combination with it. In the context of my research, the focus must remain on nineteenth-century practices, and these observations are only helpful when it comes to trying to understand the relationship between what one hears in early recordings of the twentieth century and how that might relate to nineteenth-century practices. One can assume that the portamento one hears in historical recordings, and as described by Brown and Rau, echoes nineteenth-century practices of applying portamento. If so, it stands to reason that the increased use of vibrato also reflects (part of) its use in the last decades of the nineteenth century. As performance practice is a constantly changing art, changes in the use of both these expressive tools were in all likelihood gradual.

The use of portamento in orchestras deserves special attention. There appears to be some discrepancy between what authorities such as Spohr and Gassner wrote in the 1830s and 1840s, about how portamento was not permissible in orchestral playing, and its frequent and prominent use one

[214] Ibid, p. 565.

can hear in early recordings. These recordings likely reflect what had become the practice in the second half of the nineteenth century. In *Dirigent und Ripienist*, Gassner described how "playing flageolets, pulling, and gliding in singing passages can easily result in an unpleasant howling in orchestral settings, whilst it can be used to great effect in solo playing."[215] Spohr, to whom Gassner referred in his book, indicates that:

> Further instructions for the orchestral player are to refrain from the application of all anticipations, ornaments, and trills and such, as well as the artistic application of gliding from one tone to another and changing fingers on the same note, in short to avoid all that which belongs to the special effects and embellishments of the solo player, as it would disturb the unity and coherence of sound in orchestral playing.[216]

As one can see, unity of sound is the primary concern of both authors.

There are reasons - leaving aside what we can assume about nineteenth-century practices based on the abundance of portamento one can hear in recordings from the first decades of the twentieth century - to assume that what one reads in sources such as the writings by Gassner and Spohr is not exactly what happened in practice. Brown gives an example of a discrepancy between what Spohr writes in his *Violinschule* and his marking of his *Fifth Symphony*, where fingerings in the first violin part clearly implicate portamento.[217] This reminds me of the discrepancy between what Spohr writes about tempo rubato in orchestral playing and the account of his performance discussed in Chapter 1.1. I consider it likely that what he wrote

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[215] Gassner, F. S. *Dirigent und Ripeinist, für angehende Musikdirgenten, Musiker und Musikfreunde.* Karlsruhe, Ch. Th. Groos, 1844, p. 53. *Das flageoliren gewisser Töne (namentlich jenes des Oktaven-anschlages der leeren Saiten), Ziehen und Rutschen bei Gesangstellen, artet im Orchester leicht in ein unangenehmes Heulen aus, wärend im Solospiele damit ganz herrliche Wirkungen hervorgebracht werden können.*

[216] Spohr, *Violinschule* p. 249. *Fernere Vorschriften für den Orchesterspieler sind: sich aller Zusätze von Vorschlägen, Doppelschlägen, Trillern und dergleichen zu enthalten, wie auch alle künstlerische Applikaturen, das Fortgleiten von einem Ton zum andern, den Wechsel der Finger auf einem Ton, kurz, alles das zu vermeiden, was nur zur Ausschmückung des Solospiels gehört und in das Orchesterspeil übertragen, den Einklang des Zusammenspiels stören würde.*

[217] Brown, *Classical and Romantic Performing Practice,* p. 564.

was, in general, stricter than what he practised, and I would assume that this could very well also apply to the subject of orchestral portamento.[218]

Having experimented with portamento extensively since the beginning of my research project, I have found an argument against the idea that portamento could be switched on and off by players, depending on the circumstances (solo/chamber music playing versus orchestral playing). The technique of changing position on string instruments involving sliding from one note to another has aesthetic as well as technical dimensions. Some of my orchestra members who were new to the idea of making audible slides described the technique of audible position changes as "playing it by ear." In contrast to the post-war clean style of playing position changes, this gliding allows players to check whether their approach to the goal note is on track, because one can hear that approach by listening to the portamento.

After playing with audible position changes during the relatively short periods of my project weeks, some players indicated that returning to the clean style of inaudible position changes felt like playing Russian roulette, as it required them to land in the exact required spot without any aural information to guide their finger. Regarding the aesthetic component of portamento playing, the experience with my project orchestra has taught me that the perception musicians have of the music changes as a result of their use of this technique. String players and wind players alike confirmed that their experience in the project orchestra led them to hearing and experiencing legato in a different way. To their ears (and mine), portamento contributes to the expressive nature of legato, adding warmth and smoothness to it. After listening to portamento for a week in the project orchestra, musicians felt that clean legato playing, as demanded of them outside the project orchestra, felt colder.

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[218] Robert Philip, for instance, dedicated a separate chapter to orchestral portamento in his book *Early Recordings and Musical Style*. Philip, after giving several examples of the audible use of portamento in historic recordings, concluded that British orchestras did little to coordinate their portamento in the late 1920s. He points out that, "at the opposite extreme, the Concertgebouw [Orchestra] and most American orchestras coordinated at least the most important portamentos; and that most continental orchestras fell somewhere between these two extremes of laissez-faire and discipline." Philip, R. *Early Recordings and Musical Style* pp. 179-204.

From such experiences with portamento, I conclude that the instruction for nineteenth-century players, trained in the portamento techniques and in the tradition of expressive fingering, to refrain from using them in orchestral settings is very unlikely to have meant that they would have had to learn a new and fundamentally different technique, or a new concept of what would constitute expressive legato. This prompts me to believe that portamento must have been part of the orchestral sound in the nineteenth century. The writings of Gassner and Spohr, in my opinion, were intended to instruct musicians to refrain from applying portamento as a special effect in the same manner as they might do when performing solo repertoire or chamber music. Their remarks were not intended to tell musicians that they would have to learn a new technique and acquire a new taste.

I think that what one can hear in recordings of orchestral performances of the first half of the twentieth century fits this idea perfectly. Philip, for instance, writes about this when discussing the different types of portamento being used and applied:

> To put it negatively, what one gets from orchestral recordings is the lowest common denominator of portamento. Orchestras show what everyone does, not what exceptional individuals do. But the positive side of this is that one gains a broader picture of general habits not only of particular orchestras, but also of different countries, and of the way styles change over time.[219]

After offering detailed analyses of the use of portamento in a number of historical recordings by British orchestras, Philip goes on to conclude that:

> Compared with British orchestras continental orchestras do not show quite such an extreme change in the use of portamento between the 1920s and the 1940s but there is nevertheless a clear general trend from quite frequent and prominent portamento in the 1920s to infrequent and discreet portamento by the late 1940s. Fewer recordings of continental orchestras than of British orchestras were made before the late 1920s, but it is clear that prominent portamento was still part of the string style of Berlin and Vienna around 1930.[220]

[219] Ibid, p. 181.
[220] Ibid, p. 191.

Considering Philip's overview of historical recordings, I have come to a simple strategy when it comes to the use of portamento in the project orchestra. First of all, I encouraged all string players to make all their individual position changes audible to some extent in a non-unified way. I asked them to choose their own fingerings, but to change position in the style of Joachim, since he was at the time of Brahms the main representative of what has become known as the German style:

> The finger which stops the lower note just before the change of position takes place must glide up to the string on which the starting note is played until it reaches the position containing the note to be slurred.[221]

Secondly, I instructed sections to apply a unified portamento for special effect in particular places. To be able to develop a style of applying portamento, I shared exercises, annotated parts, and audio examples of historical recordings with the musicians through my website.[222] All string players in the orchestra eagerly participated in this process and the result was that the sound of the string orchestra changed profoundly.

As a consequence of the first part of my strategy, which resulted in an orchestral sound that can be described as somewhat veiled and as having somewhat less clear rhythmic contours, the sound of the project orchestra is significantly different from any other orchestra, MPP or HIPP to date. This distinct sound is often the first thing that people notice when they hear the orchestra for the first time. The second part of my strategy resulted in unmistakable special effects, applied particularly in melodic passages. I strive to apply explicitly organised portamento by whole sections of the orchestra only if it serves a clear expressive purpose. The expressive goals that are being served by the use of portamento can sometimes be difficult to put into words. As Mendelssohn observed, though, "To me the thoughts

[221] Joachim/Moser *Violin school,* p. 92.

[222] Exercises by Spohr and David, an annotated part of Schumann's cello concerto in an arrangement for violin, a demonstration of my application of portamento and vibrato in it, and links to recordings by Marie Soldat-Roeger can be found at: brahms.johannesleertouwer.nl

which are expressed in music that I love are not too indefinite to be put into words, but on the contrary, too definite."[223]

Rather than presenting specific storylines or topics to the orchestra, I often characterise phrases in key words, or I refer to a mood or atmosphere when it comes to working out a particular portamento effect. In her dissertation on the nineteenth-century cellist Friedrich Grützmacher (1832-1903), Bennett Wadsworth lists several characteristic key words that in my opinion can be used for this purpose. She makes a distinction between expressive markings in a soft context, such as amoroso, dolce, grazioso, lamentoso, leggiero, lugubre, misterioso, and semplice, which always occur either together with a piano marking or just after a diminuendo, and markings such as brillante, energico, gioviale, grandioso, imponente, largamente, pesante, and risoluto, appearing only within forte. Characterising phrases with the help of expressive markings such as Grützmacher's can produce several differing kinds of portamento with a specific expressive motivation. This seems to me to be helpful in avoiding portamentos that sound the same and lack in expressive purpose.

Over the past years, I have noticed a growing tendency amongst students who are interested in nineteenth-century HIPP to apply portamento randomly without any specific expressive intention. While I have sympathy for all efforts to bring the valuable expressive tool of portamento to life, hearing these efforts has convinced me even more that connecting the use of portamento to expressive goals is crucial for its effective application (effective in the sense that it enhances a musical narrative that can be recognised by the listener). I feel that, just like the tools of modification of rhythm and tempo, the tool of portamento also needs to be reinvented if one wants to use it in present-day performances in a way that increases the emotional impact of the music on the listener. I am aware of the fact that how one perceives the effect of portamento varies from listener to listener.

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[223] Mendelssohn, F. "Letter to Marc-André Souchay" October 1842, *Briefe aus den Jahren 1830 bis 1847.* Leipzig: Hermann Mendelssohn, 1878, p. 221. *Das, was mir eine Musik ausspricht, die ich liebe, sind mir nicht zu unbestimmte Gedanken, um sie in Worte zu fassen, sondern zu bestimmte.*

What sounds like a random portamento to me may sound convincing and expressive to another listener. Researchers such as Brown, Philip, Köpp and many others have shown that the use and application of different types of portamento varied hugely in the nineteenth century. Re-inventing portamento requires experimenting with what one can learn about the techniques from the historical sources as well as investigating their effects on present-day listeners. Through extensive and prolonged experimentation, one can develop one's intuition to guide the use of the expressive tool of portamento in a way that makes the performance more colourful and more expressive.

Over the course of my project, the use of portamento in the string orchestra has arguably become more sophisticated. In the recordings of the first year (*First Symphony* and *First Piano Concerto)* one can occasionally hear a use of portamento that, in light of what we did in later years, I would now call somewhat unbalanced. These are specifically the instances where string players found it difficult to judge how much bow pressure to apply in combination with portamento. The recordings show that the players became better equipped to find this balance over the years. Another effect that can be heard relates to the occasional imitation of the portamento effects by woodwind players. The wind players indicated that the portamento effects they could hear in the string orchestra inspired them to look for more expressive ways to shape their legato lines. This, in turn, inspired string players to think of portamento as a tool which in some instances could serve to enhance the expressive nature of their legato.

Though there is not much mention of this in historical methods and treatises, this is quite a logical situation, given the fact that portamento relates to the connection between notes, as does legato. I would further argue that, in string playing, the clarity of articulation under legato slurs can undermine the legato in two ways. The first relates to the placing of fingers within a given position of the left hand. If string players place the finger that produces the next note under a legato slur on the string with considerable speed and force, as they would typically have been taught to do in their late twentieth- and early twenty-first century conservatory training, this can

undermine the quality of the legato, as each note gets a very distinct beginning. The second way relates to position changes. If position changes occur within a legato slur, the twentieth-century technique of making them inaudible often causes players to stop temporarily or lift the bow in order to hide the slides. This is very detrimental to a real legato, one which is intended to connect the notes under the slur without interruption of the sound. Experimenting with portamento can inspire string players to use a much softer touch with the fingers of the left hand and expressive slides, resulting in softer beginnings of notes and a smoother legato. This idea translates to the effect of keys on wind instruments; these can contribute to extra clarity in articulation, which does not always enhance the smoothness or expressive quality of legato.

## 3.5 Vibrato

Like portamento, vibrato was an essential part of expressive sound production on string instruments in the nineteenth century. However, it was considered to be an ornament, and not the omnipresent ingredient of musical sound production it is today. Spohr, in his *Violinschule*, refers to it as the third point in his list of the technical tools required for a beautiful performance: "the vibrato in its four stages *(Die Bebungen in ihren vier Abstufungen*)."[224] In his chapter on orchestral performance, he does not list vibrato as something that needs to be banned from orchestral playing specifically, but one can surmise that he thought of it as a tool of expression included in the embellishments *(Ausschmückung)* that were in the domain of solo performance and to be avoided in orchestral playing. As Brown indicates in *Classical and Romantic Performing Practice*:

> There is therefore every reason to think that, unless a composer specifically requested it, orchestral string sections and wind instruments in tutti sections would have been expected not to use any vibrato […] Nevertheless, it seems likely that, particularly where the influence of the Franco-Belgian school of string players was strong, a certain amount of vibrato on the part of individual players, in circumstances where they would have used it as soloists, might have been observed in orchestral string sections during the last decades of the [19th] century. Where the influence of the German school was strongest, however, it seems less probable that this would have been the case. These tendencies will have been particularly strong in the major orchestras, which were increasingly composed of players who had been trained predominantly as soloists rather than orchestral players in the rapidly proliferating music schools and conservatoires of Europe.[225]

The Meiningen Orchestra – which I use as a model for my approach regarding size, proportions, seating arrangements and to some extent rehearsal technique – can be considered a typically German orchestra, in the sense that the majority of the string players had been trained in the German tradition of Spohr and Joachim. Nonetheless, the evidence shows that several influential

[224] The four stages Spohr refers to are described elsewhere in his book. They are 'slow', 'fast', 'becoming slower' and 'becoming faster'.
[225] Brown, *Classical and Romantic Performing Practice*, pp. 553-557.

musicians in the orchestra received (part of) their training in the Franco-Belgian tradition.[226] It is also a fact that a considerable number of the Meiningen musicians performed as soloists and in chamber music concerts, outside the context of their orchestra.[227] Even if one accepts the idea that the Meiningen Orchestra was essentially an orchestra that operated in the German style, closely related to the Joachim style, with some limited influences from musicians trained in different styles such as the Franco-Belgian style, I think it is unlikely that they would have played without any vibrato.

Spohr and Joachim both refer to vibrato as an effect that is within the domain of ornamentation. In his chapter on "Verzierungen und Ausschmückungen" in *Violinschule,* Spohr writes about *Bebung* (tremolo), describing the various speeds of vibrato with wavering lines above the notes in an annotated score.[228] According to Joachim, vibrato represents "the most important means of expression within the power of the left hand" next to portamento.[229] It is unlikely that this tool would have been thrown overboard completely in orchestral playing. Instead, it seems likely that it was used as a special effect, as described in the methods of Spohr and Joachim.

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[226] Examples include the Dutch violinist Bram Eldering (1865-1943), who was invited by Fritz Steinbach and worked in Meiningen as concertmaster from 1894-1899, and the Dutch cellist Joseph Hollman (1852-1926), who is said to have led the section in the 1880s. Joseph Hollman's tenure as solo cellist in Meiningen in the 1880s is confirmed in multiple sources, but his name is missing from Maren Goltz's *Musiker-Lexikon des Herzogtums Sachsen-Meiningen (1680-1918)* (urn:nbn:de:gbv:547-200800339 Meiningen 2008)

[227] Even the short list of musicians active in the Meiningen Orchestra in the days of Bülow, in Chapter 1.2 of this dissertation, makes this clear. More names can be found in *Der Brahms Klarinettist Richard Mühlfeld* (Goltz/Müller, ARTIVO Music Publishing, Balve 2007) or in Goltz's above-mentioned *Musiker-Lexikon.*

[228] Spohr, *Violinschule,* pp. 175-177.

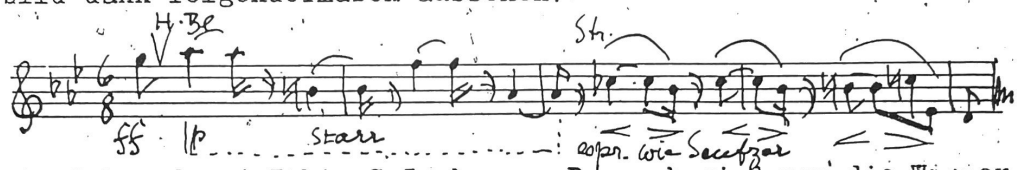
[229] Moser/Joachim, *Violin School* pp. 96-96a Like portamento, vibrato too was a hotly contested subject amongst musicians. Violinist and pedagogue Leopold Auer (1845-1930), for instance, who had studied with Joachim and who taught violinists like Mischa Elman, Jascha Heifetz and Efrem Zimbalist, famously writes: "Excessive vibrato is a habit for which I have no tolerance, and I always fight against it when I observe it in my pupils – though often, I must admit, without success. As a rule, I forbid my students using the vibrato at all on notes which are not sustained, and I earnestly advise them not to abuse it even in the case of sustained notes which succeed each other in a phrase. Auer, L." *Violin Playing as I Teach It.* Stokes, New York, 1921, p. 24.

Sources on the use of vibrato in orchestras are scarce, but Blume specifically asks for "no vibrato" in the first movement of Brahms's *First Symphony,* and in the second movement of the *Third Symphony* (see the music examples below).[230] Clearly there would have been no need for him to do so if no vibrato was ever applied in orchestral playing. One should also consider that continuous vibrato had become the default position by 1933. In her assessment of the use of vibrato by the Meiningen Orchestra, Avins discusses how Blume, in all 88 pages of his document about Steinbach's interpretations of the four symphonies and the Haydn-Variations, only mentions vibrato twice. Since he asks for avoidance of any vibrato in both instances, it follows that vibrato would generally have been applied by the string players of the orchestra elsewhere.[231]

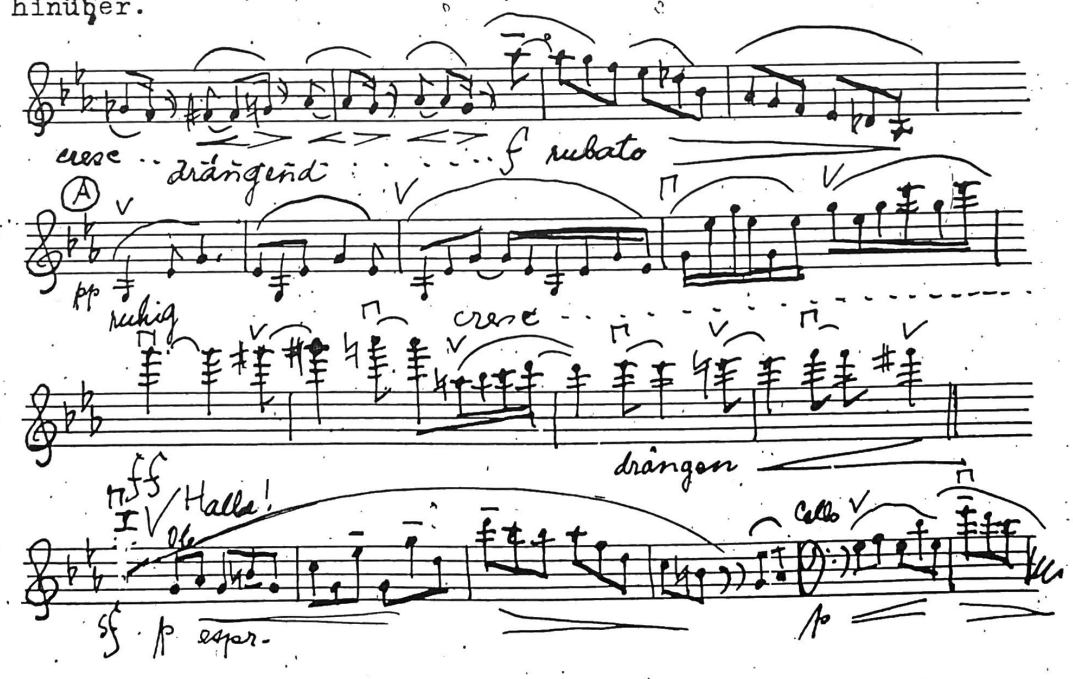
Yet such reasoning is based on a simplified view of the use of vibrato. It does not follow from Blume's recommendation not to use any vibrato in two instances that "it was otherwise normal to use it." As the methods by Spohr and Joachim show, the use of vibrato in the German school was limited and considered a special effect. The use of vibrato often related to accents and hairpins. Blume warned against the use of vibrato in the introduction of the *First Symphony*, at letter A. In the 4 bars before letter A, one finds markings containing hairpins and forte rubato:

[230] Blume, *Brahms in der Meininger Tradition* p. 12 and p. 62.
[231] Avins, "The Excellent people" p. 39.

Die als Seufzer angesprochenen (3.u.4.Takt dieser Periode) Takte, müssen im Gegensatz zu den vorhergehenden recht eindrucksvoll gestaltet werden. Das wird unterstützt, indem man auch hier die Noten nach den Bindebogen als Sechzehntel behandelt und gut absetzen läßt. Geschrieben würde das Notenbild dann folgendermaßen aussehen:




Die folgenden 4 Takte S.5 ebenso. Darnach wird man die Wiederholung der Seufzer drängender gestalten und auch im Tempo steigern. Mit dem ās der Geigen fängt man das Tempo wieder ab und leitet es rubato-mäßig in die Ruhe des Anfangs-Tempo bei (A) hinüber.




Bei A bewahren die Streicher völlige Ruhe. Kein Vibrato und Schleifen der Töne!

Figure 3.11: Blume page 11 (partially shown).

It is entirely plausible that Blume is warning against continuing the special effect of vibrato belonging to the hairpins, or even the “forte rubato” before letter A, in the pianissimo. In the second situation, where Blume asks the strings to refrain from the use of vibrato, the passage is also flanked by music which contains sets of hairpins. He asks for a silvery colour:

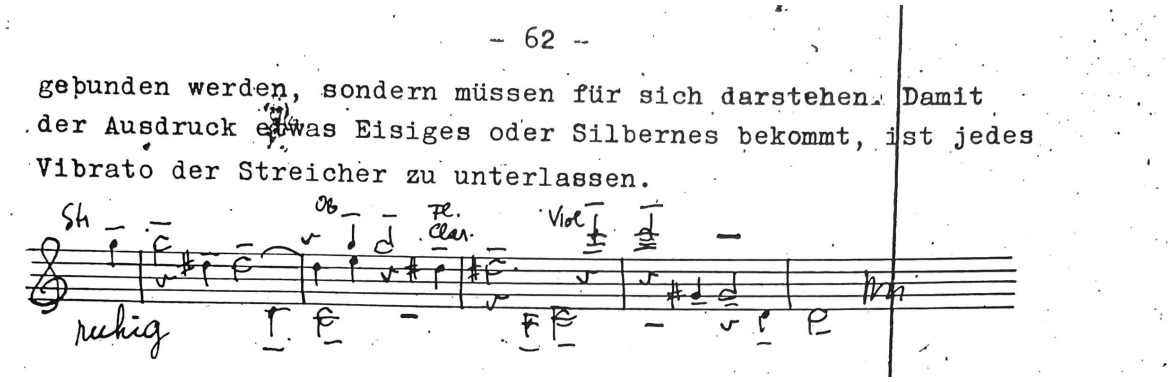



Figure 3.12: Blume page 62 (partially shown).

As can be seen in the score, both before and after these notes, we find sets of hairpins:

Figure 3.13: Breitkopf & Härtel Urtext Edition Third Symphony (Score) page 59.

Just as in the first example, Blume may have suggested players refrain from the use of vibrato in order to create a contrast with the sound produced in these hairpins, which may well have included it.

If one applied Avins's reasoning to other performance issues discussed by Blume, one might say that everything has to be played exactly in tempo, except for those specific instances where Blume suggests deviations from it. Or the opposite, that everything has to be completely free, except for those occasions where Blume suggests a strict tempo. Very few, if any, issues regarding performance practice lend themselves to such black and white interpretations.

In an article dedicated to the use of vibrato in the early twentieth century, music producer Tomoyuki Sawado discusses film footage of orchestras before 1935 in the belief that visual sources provide the most direct and reliable way of determining the level of vibrato used in orchestral performance. Amongst the examples he gives is an extract from an Austrian film titled *Letzte Liebe* (1931), which has a short section of the Vienna Philharmonic playing the overture to *Don Giovanni*. One sees violinist Arnold Joseph Rosé (1863-1946), who was concertmaster of the orchestra, hardly moving his left hand, while the violinists next to him are using substantial vibrato. Sawado rightly concludes that in the Vienna Philharmonic in 1935 some players used vibrato and others did not, and he suggests that further research is needed to look into the question whether the orchestra had been in that state for many years, or was in a state of transition from non-vibrato to continuous vibrato style.[232] Regardless of the conclusions of such further research, my conclusion is that in a top rank orchestra such as the Vienna Philharmonic, at least on this occasion, players who used vibrato and those who refrained from its use were playing side by side. This conclusion suggests to me that one should be extremely careful in drawing any general conclusions about the (unified) use of vibrato in orchestras.

If the extent and character of vibrato in the string sections of orchestras must to some extent remain a subject of speculation, the same is true for vibrato in the wind sections. Philip, for instance, indicates how woodwind vibrato was spread through the French school of playing, but was

[232] Sawado, T. "To vibrate or not to vibrate, that is the question: The evidence of early orchestral performances on film," 09-14-2014 https://www.fugue.us/Vibrato_History_E.html. (Last accessed September 2022).

met with resistance in Germany and Austria.[233] However, the German and French ways of playing, and the instruments that were being used, were not as separated from each other as one might think. Maren Goltz and Herta Müller describe how Duke Georg II allowed the orchestra to adopt the Paris pitch in 1874 (established in 1859 at A=435 at 15 degrees Celsius) and to replace any instruments necessary in order to achieve this purpose. It took the orchestra almost an entire year to adapt to this lower pitch and it involved an order for new instruments; 4 flutes, 2 oboes, 6 clarinets, 2 bassoons, 4 French horns, 2 trumpets, and 2 trombones. Goltz and Müller wrote that the instrument maker Georg Ottensteiner (1815-1879), who received and accepted the order to make most of the new instruments, crafted instruments with distinctly French features. This is not as surprising as it may seem, given the fact that Ottensteiner had lived in Paris from 1838 to 1848, when August Buffet (le jeune) (1789-1864) and Hyacinthe Klosé (1808-1880) were making their new clarinets, before returning to Munich to open a workshop there. While the instruments that were used by the Meiningen musicians showed French features, they were most probably played with little or no vibrato, at least in the nineteenth century.

The style of sound production in the winds was likely to have been closely related to that of the string orchestra, which was dominated by the aesthetics of the Spohr and Joachim traditions. This assumption is in line with general trends in the application of woodwind vibrato as characterised by Philip:

> As with string playing the broad trend in woodwind vibrato over the first half of the 20th century is very clear. In the early years of the century most woodwind players played without vibrato and by the 1940s almost all flautists and oboists, some bassoonists, and a few clarinettists played with vibrato. It was first adopted in France, and by French players in America, was

[233] As Philip notes, "Continuous vibrato may or may not have been a Franco Belgian invention, but it seems very likely that French taste was a significant factor in its development. French influence was certainly by far the most important element in the spread of woodwind vibrato, beginning with Taffanel, Gillet, and their pupils. The comparative reluctance of German and Viennese woodwind-players to adopt vibrato was paralleled by the opposition to violin vibrato of the German school, led by Joachim and his pupils." Philip, *Early Recordings*, pp. 137-138.

> spreading to many British players by the 1930s, and only in the late 1940s became accepted in Berlin and Vienna.[234]

One has every reason to believe that recordings of orchestral music from the first decades of the twentieth century, in which vibrato in the woodwinds is mostly absent, reflect (parts of) the practice of the last decades of the nineteenth century. Philip concludes that the development towards woodwind vibrato in orchestras was rapid and took place after the first two decades of the twentieth century.

Based on my understanding of the sources quoted above, and in line with the sound of the string orchestra, I asked the wind players in the project orchestra to play without vibrato, allowing for some individual variation within the sections, but not in tutti passages or when they were operating as a group. Occasionally, and only in specific cases, I invited players to use vibrato in woodwind solos, as I do in some melodic lines in the strings. Almost without exception, this vibrato connects to sforzato signs, accents, and hairpins. Applying vibrato in these instances turned out to be not very difficult for the wind players. Yet it proved quite difficult to bring out special vibrato effects in the middle of hairpins in the string orchestra, as shown by the recordings of the *First Symphony* and the melodic sections in the violins in the first movement of the *Second Piano Concerto*. The experiments I conducted with the project orchestra seem to suggest that, once habitual vibrato has been banned, it is not easy for players to apply vibrato on particular notes. This requires further experimentation, and for the project week of 2022 I have designed a few specific exercises for the string players.[235]

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[234] Ibid, p. 137.

[235] Exercises for hairpins and accents with vibrato can be found on my website: https://brahms.johannesleertouwer.nl/wp-content/uploads/Scan-Spohr-excercise-.pdf

## 3.6 Tempo

The choice of a tempo remains one of the most important tasks of the conductor, even when one's concept of tempo is flexible, and one allows or stimulates deviations from it in performance. As Richard Wagner writes:

> If one wants to summarise everything that is important for the correct performance of a piece of music on the part of the conductor, this lies in his duty always to indicate the right tempo; for the choice and purpose of it allows us to recognise immediately whether the conductor has understood the piece or not. The right tempo gives good musicians, when they become more familiar with the piece of music, the ability to find the right performance almost automatically, because it already contains the insight therein on the part of the conductor. But how difficult it is to determine the correct tempo becomes clear if we realise that it can only be found through achieving the correct performance in every aspect.[236]

The tempo markings in Brahms's symphonies are as follows:

***First Symphony* in C minor Op. 68**

Un poco sostenuto – Allegro – Meno allegro

Andante sostenuto

Un poco Allegretto e grazioso

Adagio – Allegro non troppo, ma con brio – Più Allegro

***Second Symphony* in D major Op. 73**

Allegro non troppo

Adagio non troppo (l'istesso tempo ma grazioso)

Allegretto grazioso (Quasi Andantino) Presto non assai

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[236] Wagner, *Über das Dirigieren,* p. 15. *Will man alles zusammenfassen, worauf es für die richtige Aufführung eines Tonstückes von Seiten des Dirigenten ankommt, so ist dies darin enthalten, dass er immer das richtige Tempo angebe; denn die Wahl und Bestimmung desselben lässt uns sofort erkennen, ob der Dirigent das Tonstück verstanden hat oder nicht. Das richtige Tempo gibt guten Musikern bei genauerem Bekanntwerden mit dem Tonstück es fast von selbst auch an die Hand, den richtigen Vortrag dafür zu finden, denn jenes schließt bereits die Erkenntnis dieses letzten vonseiten des Dirigenten in sich ein. Wie wenig leicht es aber ist, das richtige Tempo zu bestimmen, erhellt eben hieraus, dass nur aus der Erkenntnis des richtigen Vortrages in jeder Beziehung auch das richtige Zeitmaß gefunden werden kann.*

Allegro con spirito

***Third Symphony* in F major Op. 90**
Allegro con brio
Andante
Poco Allegretto
Allegro

***Fourth Symphony* in E minor Op. 98**
Allegro non troppo
Andante moderato
Allegro giocoso
Allegretto energico e passionate

As discussed in sections 1.6 and 1.7, Brahms refused to give metronome markings for his music and, in the rare cases when friends talked him into providing them, he regretted having done so. He also reportedly said that a sane person would take a different tempo every week. Sherman, for instance, observes that:

> It is evident that Brahms and his contemporaries took varying tempos from performance to performance […] A good case can be made for Brahms's belief that the best clues for performers were not his metronome marks but his verbal tempo markings.[237]

If one accepts the idea, as I do, that the verbal indications contain the most important clues for helping one choose the right tempo, it follows that one needs to study them carefully. Looking at the verbal instructions for the movements of the symphonies, as presented above, the first thing that strikes me is that Brahms only gave a tempo indication without adding Italian qualifiers in two instances, namely in the second and fourth movements of the *Third Symphony,* Andante and Allegro. I discussed the way

[237] Sherman, "Metronome marks," in *Performing Brahms* p. 123.

I interpret these Italian qualifiers, understanding some of them as warnings and some of them as encouragement, in Chapter 1.7. I believe that choosing a tempo that works well for me as a performer – allowing myself an amount of variation in tempo from performance to performance – would not be against Brahms's ideas on the subject of tempo choice.

To me, Brahms's idea that tempo is a living and constantly changing thing is crucial. This concept allows the verbal instructions to lead one to different choices depending on the situation. I am aware of a range of external factors that may influence my choice of tempo, such as the size of the hall, its acoustics, the energy level of the orchestra and of me personally, and the atmosphere in the hall and the audience during a performance. I think that it is more in keeping with what the historical evidence tells us about Brahms's understanding of tempo to vary it under the influence of these factors, rather than to strive for any fixed tempo and adhere to it rigidly. Though my tempos change somewhat from performance to performance, of course, the recordings that I made obviously reflect only the tempo chosen on the occasion of the recorded performance.

I have used Sherman's list and analysis of pre- and post-war recordings of the *First* and *Second Symphony* in order to compare the duration of my performances. Sherman compares his chosen recordings with the reported durations of the premières of these pieces for each movement. He concludes that the pre-war recordings largely sit within a range of one minute from the reported duration of the première in both the *First* and *Second Symphony,* whereas the post-war recordings generally showed an increase in their length – of some 10 to 12% in the case of the *First*, and 6 to 8% in the case of the *Second Symphony*. It is worth investigating the details of Sherman's analysis, as they show interesting deviations for each movement. Put simply, I think it is enough to say that my durations appear to relate more closely to the pre-war recordings than the post-war ones, as well as to the reported timing of the premières of both pieces.[238] As Sherman points out, these figures do not

[238] The duration of the première of the *First Symphony,* conducted by Dessoff in Karlsruhe in 1876, is reported to have been 40:30 (corrected time, without repeat). The mean timing of pre-1946 recordings is 41:26, and my recording is 42:02. The mean timing of the post-1946

provide information about tempo modifications. That is a different subject, which I have covered sufficiently elsewhere in this dissertation. I have made use of Sherman's work here only to compare the durations of my performances with those of some historical examples.

recordings is 45:51. The duration of the première of the *Second Symphony* conducted by Richter in Vienna in 1877, was 38:00 (without repeat); the mean timing of the pre-1946 recordings is 37:23, and my recording is 38:34; the mean timing of the post-1946 recordings is 40:24.