

Rediscovering Franz Schubert Piano Repertoire through the Instruments of his Time.

Context

*In good pianists there is a complete symbiosis between hand and keyboard*¹ (Heinrich Neuhaus, *The Art of Piano Playing*, 1973)

*In the context of artistic performance as research, understanding the affordances of different kinds of musical instruments becomes crucial in exploring the means through which new insights and knowledge might emerge*² (Mine Doğantan-Dack, *The Role of Musical Instrument in Performance as Research*, 2015)

The role of musical instruments in the production of musical meaning has often been underestimated in the Western musicological thought and performing traditions.³ Indeed, the still popular idealistic view of music as an abstract idea in music scholarship continues to diminish the significance of the role that a performer and his/her instrument play in music culture. Nevertheless, music is the art of sound and composers as well as performers are deeply connected with musical instruments. Professional pianists often imagine their instruments as an extension of their bodies during performance, making a piano their artistic collaborator during the music-making process. Considering the performance itself as a work of art⁴, I conclude that the embodied relationship between the instrument and the performer plays a very important role in the creation of an art-work, namely a piano performance.

The piano repertoire, composed before the 1870s, was intended for keyboard instruments which were drastically different from the ones we have now. Only in the second half of the 20th century did numerous musicologists and performers start to consider that difference while working on 19th century repertoire and its performance practice.

In my research I am going to focus on the performance practice of the piano music of Franz Schubert on the pianos of his time. Even though Schubert's keyboard repertoire had been an object of scholarship (as evident from the Bibliography of the Schubert Institute UK⁵), in a context of historical pianos it remains hardly explored. Recent research suggests that performance notation is rather accidental and advisable in Schubert's manuscripts⁶. Therefore, I argue that original Viennese instruments play a crucial role in understanding Schubert's musical text, his compositional decisions and performance practice. Through my experimentation with practising and performing on fortepianos I expect to reveal interpretational solutions and musical meanings only possible with the authentic acoustical and technical affordances of these instruments. A musical instrument with its unique timbre, sound world, registers, and tactile qualities inspires the artist during performance, revealing musical

¹ Heinrich Neuhaus, *The Art of Piano Playing*, Praeger Publishers, 1973, p.7

² Mine Doğantan-Dack, *The Role of Musical Instrument in Performance as Research: The Piano as a Research Tool*, in Mine Doğantan-Dack (ed.) *Artistic Practice as Research in Music*, Routledge, 2015, p.173

³ 'In promoting a textualist, work-centric and disembodied view of music, traditional musicology in fact eliminated from its purview not only the instrument but also the performer as irrelevant to the generation of musical meaning', Mine Doğantan-Dack, *The Piano As Artistic Collaborator*, Cambridge Scholars Publishing, 2022, p.3

⁴ Peter Johnson, *Musical Works. Musical Performances*, *The Musical Times*, Aug. 1997, pp. 4-11

⁵ <https://www.schubertinstituteuk.com/schubert-bibliography>

⁶ Walther Durr names it 'second stratum', meaning questions of scoring, tempo, dynamics and articulation, Walther Durr, *Notation and Performance: Dynamic Marks in Schubert's Manuscripts*, in Brian Newbould (ed.) *Schubert The Progressive*, Routledge, 2003, p.40

meanings and expressions hidden behind the musical text. Moreover, I intend to reflect on my artistic practice on fortepianos and find adequate solutions in Schubert's repertoire on a modern grand piano.

In the course of the research I am going to combine my artistic practice with a modern scientific investigational tool of spectral analysis. It is an approach rarely executed in piano performance scholarship, let alone in the study of Schubert's piano music. This method will enable us to perceive the sound of Schubert's piano music free from the subjectiveness of the human ear. Spectrograms will present a detailed acoustic picture of the given musical excerpt on a given instrument. By comparing the spectrograms of historical and modern pianos, we will be able to objectively analyse crucial acoustic differences between these two instrument groups (Viennese fortepiano and modern Steinway). The acquired data will help heighten my aural awareness in my artistic practice by acknowledging the acoustic characteristics of a given instrument and the way Schubert had dealt with them in his compositions.

The purpose of my research is to revisit Schubert's piano repertoire and create convincing and informed performance interpretations through the prism of Viennese fortepianos by the implementation of a range of artistic, academic and scientific methods.

Background and history

The historically informed practice movement, originated in the early 20th century, is well known for its successful attempts to revive the performance practices of the past. N. Harnoncourt, J.E. Gardiner, R. Norrington are among those who revitalised the performance of the orchestral music from Baroque and Classical periods. However, the piano performance turned out to be rather stagnant to the changes despite the work of protagonists such as Malcolm Bilson, David Breitman and numerous harpsichordists who laid out the ground on which fortepiano research could have taken place.

In a contemporary conservatoire – if at all existant – a historical piano performance curriculum and a modern piano performance curriculum are separated into different departments, even though they work on the same baroque-classical-romantic repertoire. As a result, contemporary piano students do not have access to period instruments, deprived of the informative, inspirational and decisive experience. Numerous international piano competitions (a showcase of current piano playing trends) demonstrate a certain uniformity of approaches to both performance and programming. Having been taught in a conventional way, I first encountered fortepianos during my Master studies in London. I was amazed by their unique timber, clarity and softness of tone. But only during my time at the University of Music and Performing Arts in Graz I had a chance to study fortepiano as a second subject under the guidance of professor Katharina Brand. Since then its gentle sound is always in the back of my mind when I play the music by Schubert, Mendelssohn or Schumann.

However, there have been notable voices in the recent past, such as of Sir Andras Schiff, Malcolm Bilson and David Breitman who pointed out the importance of the engagement with historical instruments for pianists⁷⁸⁹.

Recently the performance practice of Mozart, Beethoven and Chopin has come into focus of musicologists and researchers. However, Schubert's piano music in a context of the period instruments remains underexplored. One of the few really prominent discussions on Schubert's performance practice leads back to the year 1997, when the question of supplemental ornamentation and the use of rubato had

⁷ 'Getting to know them [historical keyboards] is essential for the student, the scholar, the musician []. Playing fortepianos - and clavichords - should be compulsory for all pianists', Andras Schiff, *'Confessions of a Convert. Schubert on the Fortepiano'*, Franz Schubert, 2-CD, ECM 2425/26, Release date: 27.03.2015

⁸ Malcolm Bilson, *Of Pianos and Fortepianos*, International Piano magazine, Nov/Dec 2013

⁹ David Breitman, *Time-Travel For Pianists: How Today's Players Can Learn From Yesterday's Instruments*, Keyboard Perspectives III, 2010

been strongly discussed¹⁰¹¹. The original sources for Schubert scholarship are indeed scarce since he was neither a famous virtuoso nor a well-known piano teacher, and he died at a very young age, never having left his hometown Vienna.

Only in 2021 David Breitman has brought to our attention few performance aspects of Schubert's piano music in his book 'Piano-Playing Revisited'¹², namely the use of pedals, tempo and texture. He also elaborates on the performance practice of Schubert's Impromptu op. 90 no.1. Furthermore, David Montgomery in his chapter to *The Cambridge Companion to Schubert* raises questions about certain performance aspects, namely style, structure, notation and tempo, concluding: "These are only the most pressing issues that await closer attention by those who take Schubert's music as serious art"¹³. Given the above, I believe that my performance practice on historical pianos along with the spectral analysis of their sound will significantly contribute to Schubert's scholarship and understanding of the aesthetics of his music.

Viennese fortepiano vs. Steinway type modern grand piano

It is known that Schubert never moved from his hometown Vienna, therefore, it is most likely that he was using a Viennese type of piano for his compositions and performances, and consequently, was a representative of the Viennese piano school. This school featured fortepianos with Viennese action, 'speaking' quality of performance, mild sensitive tone with rich overtone range and rapid decay; they are small in size, wooden framed and equipped with little hammers covered with leather. In my research I intend to focus on the Viennese fortepiano and its modern Steinway type counterpart. The modern grand piano, a descendant of the English piano building tradition, is equipped with English action, a soundboard with crossed strings, an iron frame under enormous tension, big hammers and dampers covered with felt; it has a slow developing tone with rich fundamental and long decay. These characteristics make it perfect for cantabile legato playing, rich harmonies and big volume. Given the above descriptions, it is evident that Viennese fortepianos and Steinway grand pianos are very divergent in the sound production, mechanics, and, therefore, aesthetics.

Spectral analysis

*'Acoustic analysis is a powerful medium for the education of the ear and as a diagnostic tool for the conscientious performer, the didactic possibilities of which have barely begun to be exploited.'*¹⁴

Peter Johnson, *'Performance and the listening experience: Bach's 'Erbarme dich', 1999*

Spectral analysis is a method that enriches and sharpens aural perception of music.¹⁵ It will reveal a detailed picture of a sound, reflecting on which can lead a musical ear during artistic practice. This reflection can explain and substantiate Schubert's compositional decisions and performance practice; for example, how the technical and acoustic affordances of a fortepiano led to a certain choice of texture,

¹⁰ A controversy between M. Bilson, D. Montgomery and R. Levin about a recording of Robert Levin, *Sonatas in A minor, D537, and in D major, D850*, Sony Vivarte SK 53364, released in 1995

¹¹ David Montgomery, *Modern Schubert Interpretation in the Light of the Pedagogical Sources of His Day*, Early Music, Feb 1997

Malcolm Bilson, *The Future of Schubert Interpretation: What is Really Needed?* Early Music, Nov. 1997

Robert D Levin, *Performance Prerogatives in Schubert*, Early Music, Nov. 1997

¹² David Breitman, *Piano Playing Revisited*, University of Rochester Press, 2021, p. 117

¹³ David Montgomery, *Franz Schubert's music in performance: a brief history of people, events, and issues*, in Christopher H. Gibbs (ed.) *The Cambridge Companion to Schubert*, Cambridge University Press, 1997, p. 283

¹⁴ Peter Johnson, *'Performance and the listening experience: Bach's 'Erbarme dich', Theory Into Practice*, Collected Writings of Orpheus Institute, Leuven University Press, 1999, pp.74-84

¹⁵ Ibidem, p.83

pedalling, dynamics or tempo. Moreover, there are physical characteristics of the instruments such as decay of tone and overtone range that are accurately designed in workshops and, therefore, can be technically measured. These measurements will help better judge the sound of Schubert's compositions on original instruments.

The sound spectrogram represents the spectrum of frequencies (Y axis), their intensity (colour) in time (X axis). Therefore, we will be able to see all components of the sounding music while it is being performed. The timbral qualities of the period pianos (predominable frequencies that constitute a particular colour of tone), time of tone development and decay, and the effect with the damper pedal 'on' and 'off' are particularly interesting. I am going to compare and analyse the spectrograms of the same excerpts on period and modern pianos, experimenting with diverse performance aspects such as pedalling, balance, voicing, dynamics and tempo. This spectral data will visually demonstrate the acoustic deviation between the historical and modern instruments and give unconventional yet experimentally proven interpretational options.

One of the few examples of spectral analysis of the recordings can be found in the book by Robert Cogan *New Images Of Musical Sound*. The author presents two spectrograms of the Beethoven Piano sonata op. 109 performed by J. Demus (a fortepiano Conrad Graf, Vienna, 1825) and A. Schnabel (a modern grand piano). The analysis of spectrograms shows that '[...] the fortepiano is consistently richer and more complex in spectrum than the modern grand piano. [] The modern piano is generally louder and its notes more efficiently damped. Compared to the sonic complexity of the fortepiano, the modern grand piano aims at the stronger projection of the simpler sonic image - a sonic simplification.'¹⁶

Framework for acoustic analysis

All material has been recorded on Steinway and Viennese fortepiano (Hafner 1830) in the same room, same equipment. The experiment has been thoroughly documented and described.

- Analysis of individual notes (different dynamics, articulation, pedalling)
- Analysis of selected chords (different dynamics, articulation, pedalling)
- Analysis of selected musical excerpts (different dynamics, articulation, pedalling)

Questions to address in my artistic research

Choice of tempo

A choice of tempo is crucial in shaping a convincing interpretation. Sonata D 960 by Schubert recorded by S. Richter sounds as if it is a different piece compared to the recording made by P. Badura-Skoda on a fortepiano. Light Viennese mechanics, quick attack and rapid decay induce a faster performance on period instruments. But how do we deal with the tempo issue on a Steinway with its large hammers, thick strings, deep key-dip and slow developing tone? Should we play slower and how much slower? Since there are only a few metronome markings to be found in Schubert's music, tempo issues in his piano repertoire are still to be addressed.

¹⁶ Robert Cogan, *New Images Of Musical Sound*, Cambridge, MA: Harvard University Press, 1984, p.52

Slow vs fast developing tone

One of the acoustic features that intrigues me as a researcher and a performer - time of the tone development, viz. How much time it takes from the key strike to its overtone peak.

The action of Steinway is drastically more massive and therefore, logically, it takes more time for the tone to reach its flourishing peak. So what happens acoustically when we perform Schubert's piano music at a too fast tempo on a Steinway compared to a Viennese fortepiano? Might we deprive our listening experience of something important?

Pedalling

Mario Aschauer, a renowned researcher in the field, writes about pedalling in Schubert's piano music:

'From a historical vantage point, normal legato should thus be produced mainly with the fingers in Schubert's piano music, with the pedal being assigned the role of a special effect'.¹⁷

Another evidence of the attitude towards the damper pedal in the 19th century can be found in Friedrich Wieck's writings: *'Cruel fate that invented the pedal! I mean the pedal which raises the dampers of the piano'.¹⁸*

Nowadays, however, one can hardly find a recording or a performance of any Schubert's work without the constant damper pedalling. Is this discrepancy a result of modern aesthetics or affordances of modern pianos? My hypothesis is that a fortepiano with wooden frame and less strained strings produced enough resonance and overtones to avoid the dryness of the music without the damper pedal. Moreover, the pianos of Schubert's time had several pedals with different sound effects: damper pedal, una corda, bassoon pedal, moderator, Turkish etc. (up to 6 pedals).

The performer's ear and imagination are not free from the previous listening experiences and performance tradition due to numerous recordings and concerts. Spectral analysis will demonstrate the actual sound picture and support even unconventional pedalling decisions.

Research aims and questions

My research aims at developing and observing historically informed interpretations of piano works of Franz Schubert through my artistic practice on the original instruments (fortepianos by A. Walter, Stein, A. Streicher, C. Graf or their replicas), studying the academic sources of the 19th century scholarship and spectrogram analysis of historical and modern pianos. In the course of research the following questions will be answered:

1. How physically different is the sound of a modern piano from the sound of Viennese fortepiano? What frequencies give the instrument a particular timbre?
2. What musical meanings and expressions emerge in Schubert's piano music when it is performed on period instruments? How do the spectrograms lead the musical ear when playing on historical fortepianos? And on modern grand pianos?
3. How do we shape the interpretations of Schubert's piano music according to that knowledge?
4. How can this experience and knowledge facilitate pianists on modern pianos in modern concert halls?

¹⁷ Mario Aschauer, *Notes on Performance Practice*, Klaviersonaten III Urtext of the New Schubert (Edition, XXIV)

¹⁸ Friedrich Wieck, *Clavier und Gesang* (Leipzig 1853; Eng. trans. Boston 1872), trans., pp. 59-60

Methodology & Implementation

1. Artistic research is a way to find solutions for problems in performance practice that cannot be solved solely through the study of treatises and other academic or scientific sources. Tacit knowledge hidden in the works of art can be revealed through the artistic practice and performance.¹⁹ Therefore, the main methodology is my artistic practice on both period and modern pianos and my reflection on it.
2. Recording the spectrograms of historical and modern pianos.
3. Comparing and analysing the data with the help of acoustic specialists.
4. Studying the original manuscripts, early editions, performance notes and documents on Viennese performance practice and pedagogy in the 19th century²⁰
5. Make interpretational decisions for Schubert's piano repertoire (different genres) based on scientific (spectral analysis), practical (practice on period instruments) and academic (performance practice studies) knowledge.
6. Notating, explaining and recording these final interpretational decisions.
7. Artistic collaboration with singers and string players in order to reflect on artistic practice in a chamber music setting.

¹⁹ 'Artistic research does not have any one distinct, exclusive methodology. [[Practising the arts (creating, designing, performing) is intrinsic to the research process. And artworks and art practices are partly the material outcomes of the research.], Henk Borgdorff, *The Conflict of the Faculties*, Leiden University Press, 2012, p. 123

²⁰ A list of treatises published before and during Schubert's formative years can be found in the '*Modern Schubert interpretation in the light of the pedagogical sources of his day*' by D. Montgomery, *Early Music*, Feb 1997

Viennese fortepianos available for the artistic research and proposed repertoire

Original Hafner fortepiano 1830, Wien. (private possession of prof. Torleif Torgersen)

April 2024

Programm:

Fr. Schubert. Fantasia f - minor for 4 hands

Fr. Schubert. Sonata G major D 894

Fr. Schubert. Lied 'Der Hirt auf dem Felsen'. Collaboration with Hilde Haraldsen Sveen and Christian Stene.

December 2024

Programm:

Fr. Schubert. Six moments musicaux op.94

Fr. Schubert. Mignon lieder. Collaboration with Ingrid Sagabraaten

Outcomes and plan

1. Rediscover performance practice of selected piano works by F. Schubert.
2. Formulate artistic reflection on research questions. For example, how does the sound, size, shape, touch of an instrument influence the performance? What does it bring to the interpretation and perception of Schubert's works?
3. Obtain a clear sound picture of pianos from different epochs with full analysis and description of the speed of decay, overtone range and predominant frequencies.
4. Help performers and students listen to Schubert's piano music from a different perspective, and, perhaps, inspire them to search further for creative and historically informed interpretations of the early romantic music.
5. Set up a series of recorded lecture-recitals (ideally one block of repertoire each semester) representing new knowledge.
6. Make studio recordings of selected works by Schubert on both types of pianos.

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