The Impact of Live-streamed and Recorded Live Performance on the International Classical Music Environment

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To my son Eric

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Abstract

Before the Covid-19 pandemic shuttered concert halls around the world in early 2020, live-streaming of real-time artistic performances tended to be the preserve of prestigious venues aiming to engage a remote audience alongside their in-house audience. With the onset of the pandemic emerged a new variation of live-streamed performance: live-streamed concerts *without* an in-house audience. From a performer's point of view, producing live-streamed and pre-recorded online performances without an in-person audience resembled the recording process far more than a live concert performance; however, musicians were still expected to deliver convincingly 'live' performances. Without an in-person audience, the borders between live and recorded performances became increasingly blurred.

The main aim of this research project is to investigate musicians' perceptions of live-streaming, which—though of course possible before the pandemic—has been put to unprecedented use since the beginning of 2020. To achieve this goal, I have used primarily practice-based and sociological methodologies: interviews, surveys, and questionnaires. I conducted interviews in 2021, when many performers were experiencing live-streaming amongst various pandemic-related restrictions for the first time; timed thus, these interviews document performers' real-time thoughts and reactions rather than memories and reflections (in contrast to the survey I conducted in 2022, after performers had begun to adjust to live-streaming without in-person audiences). Using video logs and reflective writing I have also observed my own reactions to performing via live-streaming technologies and compared them to previous experiences I have had in concert halls and in recording studios.

One of the most important conclusions I came to while conducting this project was that performers' perceptions of their own performances have changed profoundly as a direct result of participating in live-streaming without an in-person audience. My research suggests that performers today are more self-sufficient and more reliant on their internal artistic compasses than external validation and have learned to appreciate their audiences—both online and in-person—as equally important parts of every performance.

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Introduction

When Covid-19 forced concert halls around the world to close their doors, many musicians—myself included—turned to live-streaming technologies as a means of making our art accessible to audiences at home. The primary purpose of this project is to investigate musicians' perceptions of live-streaming, which—though of course possible before the pandemic—has been put to unprecedented use since the beginning of 2020. How do musicians' perspectives on live-streaming relate to other kinds of performing experiences, including those in the concert hall—in which they receive real-time feedback from audiences—and those in the recording studio? How do musicians react to the feedback from the part of the audience that remains invisible, which often comes days after the actual performance in the form of social media posts and comments? How has live-streaming changed over the past few years, and how do performers feel about it now? Has the experience of performing 'live'—or, rather, in real time—taken on new meaning alongside the use of live-streaming technologies?

These questions are closely connected to what we perceive as 'liveness' now, and especially how it differs from older notions of 'liveness', which I will explore in more depth in the following chapters. I have been interested in these questions for some time, in part because of my personal experience on stage and in the recording studio. In fact, in 2013,[1] I ran a pilot project intended to find out if listeners perceive recorded music differently from real-time performance. I invited a small group of listeners to compare three performances of the same piece,[2] which I performed, recorded (during the same performance), and recorded in the studio. What I discovered was that listeners noticed—and sometimes even intentionally focused on—technical details of the performance in the recorded versions, especially in the audio recording of the concert performance. What this experiment went some way towards proving was something that musicians have often felt since the advent of sound recording: that witnessing a performance in the concert hall is an extraordinarily strong experience, so much so that many technical mistakes may go unnoticed. (Of course, this may only apply to a certain part of the audience, since people have different expectations of what they perceive as a ‘live’ experience, as I discuss in the chapter on ‘Live-streaming and Liveness: Performers’ Perspectives’).

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[1] Tatjana Ostrovska, 'Mūzika ierakstā. Daži uztveres problēmjautājumi,' in *Mūzikas akadēmijas raksti, 10.,* ed. Baiba Jaunslaviete (Riga, Jāzepa Vītola Latvijas Mūzikas akadēmija*,* 2013), 131–49.

[2] The excerpts with which I conducted this experiment were the 'Lullaby' and 'Waltz' from Benjamin Britten's Suite for Violin and Piano, op. 6.

The Covid-19 pandemic changed what ‘live’ performance and ‘liveness’ in performance meant. When performing ‘live’ suddenly meant performing ‘alone’—without an in-person audience—performers were forced to rethink what we perceived as ‘live’ and how and whether we could or should bring the element of ‘liveness’ into the live-streamed yet/and recorded performance (which at the same time is ‘live’ for the online audience and for performers).

Apart from my personal interest in the topic, the need for this research arises from a gap in related academic research: since the beginning of the pandemic, many articles have analysed live-streamed events from the listener’s perspective, but few have investigated the situation from the performer’s point of view, especially in classical music. Filling this gap is all the more urgent because, although all forms of streamed and recorded performance existed before the pandemic, live-streamed performance without an in-person audience has been normalised to an unprecedented degree in the past three years. Live-streamed events without the audience resemble recording sessions more than live concerts, yet performers are still expected to deliver all the qualities listeners are looking for in a live concert: a sense of occasion, risky and exciting performance, engagement with the non-existent (or, rather, unseen audience), all while knowing that any technical mistakes made during the performance will not vanish with the final notes of the concert.

I began this project with the hunch that many musicians might have misgivings about live-streamed concerts (as well as live concert recordings) as a result of the fundamental tension between the various risks associated with the live concert experience and the realities of recording culture. I also suspected that these misgivings might be well placed because my previous research revealed that when listeners watch or listen to the same performance using any kind of technology, their attention shifts to the technical details of the performance more than it would during a live performance, which they are witnessing in person. It is not yet truly clear why that happens: is it due to the lack of visual representation of the performer (if it is an audio recording) or to the surroundings of the listener (being in the comfort of one's own home instead of a concert hall, where some people might feel exposed and therefore distracted, could have a certain effect on how the audience perceives the performance)? Whatever these reasons may be—and more research is undoubtedly required to establish this—the current project explores performers' perceptions of this attention shift, with a particular view to establishing how it affects the quality of performance and the overall emotional state of the performer.

Another hunch with which I began this project was that online performance might need to somehow surpass in-person performance, particularly in terms of visual engagement, whatever that might mean (and however it might be measured). Throughout this project, I have observed that other performers are similarly concerned about this set of questions stemming from their own experience with live-streamed performances: does online performance have to be more visually engaging to capture the attention of the audience behind the screen, and what does the term 'visually engaging' even mean in the context of live *or* recorded performance? Such questions call to mind still more (and more complex) issues, including audiences' evolving expectations of their online entertainment, how (and whether) they can distinguish between 'human' and artificially generated performance now that AI has become both so sophisticated and so prevalent, and how their understanding of the 'work itself' relates to its instantiation in performance. For the purposes of this study, I have kept my focus trained on performers and their attitudes towards the live-streaming process, in which the audience (or lack thereof) is just one aspect—if an especially important one during the pandemic (when we performers suddenly, if temporarily, lost our audiences as we knew them before). How has this unprecedented change affected us? How has it altered our perspective? Has it perhaps even helped us appreciate our audiences more, especially our online audiences, which many of us had previously largely ignored? My research suggests that many performers have re-evaluated their relationship with the audience (especially the 'invisible audience' on the other side of the camera), as well as their attitudes towards recording and dissemination technologies as part of the seemingly 'live' performance. From my perspective, this shift seems important in terms of continuity of performer-audience relationships.

Although the future of online events is still uncertain at this point, many performers and event organisers have realised the advantages of this performance format.

Already we can observe collective and individual long-term effects of the online events on performers and the classical music environment. The situation is constantly evolving, and thus the questions I was concerned with at the beginning of the pandemic and even before cannot be exhaustively answered. However, I most definitely have gained some very valuable insights during this journey, and I am ready to continue my investigation in the future, this time from the audience's point of view. I am very interested to learn more about what the audience expects from an online performance and how we, performers, can meet these expectations.

I built this project both as a historical reflection and a much more personal reflection on my own journey through performing during the Covid-19 pandemic. To situate the effects recording and streaming technologies have had on performers historically, I begin by exploring how they have shaped musical performance over the past century. The 'The History of the Sound Recording Industry: A Few Personal Reflections' chapter explores the technologies as well as the personalities—inventors, recording artists, and composers—who have had an impact on the evolution of the complicated and fragile relationships between technologies and performers, especially in classical music. This chapter is shaped as a reflective overview of the history of recording technologies, blended here and there with my own experience where I felt it mirrored certain moments in the recording history in some shape or form, but mainly focusing on particular historical moments that changed performers' attitudes and perceptions of 'live' and recorded music. It lays the foundation for the body of my project, which considers the effect of live-streaming technologies on performers since the start of the pandemic. Drawing on my background as a professional performer—and as one who has first-hand experience of performing via live-streaming technologies—I take a practice-based approach to investigating these questions by documenting my own experience (by way of video, audio, and written diaries and analyses of my performances) with live-streamed concerts as well as other forms of real-time performances. Alongside my own experience, I have also conducted in-depth interviews with other musicians to find out more about their experiences with live-streamed and recorded performances.

In the following chapters I discuss the findings and insights I gained in the process of performing and interviewing my peers during the pandemic. Most of the interview questions were drawn from my own experience as a performer; however, during my conversations with performers, some new aspects emerged—most of them audience-related, which is not surprising since the audience is a crucial player in determining the success of the performance. The fundamental question—what the audience wants—is without a doubt a very complex question. A thorough investigation would be required to fully understand the expectations of audience members, even to the extent they themselves knew them, especially under the unprecedented circumstances we experienced during the pandemic. Although scholars have pursued this question throughout the past few decades, most of the existing research concentrates on the interaction between the audience and performers in in-person concert settings. Few investigate online performances and the attendant expectations of the invisible audience. Still fewer investigate these issues from the performer's point of view, especially in classical music. It is challenging to pinpoint precisely why performers have not been as involved in such research. According to John Sloboda and Biranda Ford, classical musicians have been trained to build a relationship with the musical score rather than the audience. As they write, 'since the 19th century, performers' attention has commonly focused on the musical score and the faithful transmission of the composer's intentions, rather than a charismatic rendition which draws authority from the performer or is tailored to suit a particular audience.'[3] Elsewhere, Sloboda suggests that 'many classical musicians may have been encouraged to believe that, in some rather important sense, audience response is not the key issue for their artistry, and so understanding that response and taking it into account when performing is not a high priority, and might even be seen, in extreme situations, as'selling out on one's art'.[4] Throughout the Covid-19 pandemic, this notion changed for many performers, as the only audience we had was invisible and therefore seemed more unpredictable. Without being able to see the audience's immediate involvement and emotional feedback, not knowing what the audience sees and hears made it impossible to predict the reaction of the audience.

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[3] Biranda Ford and John Sloboda, 'Learning from Artistic and Pedagogical Differences between Musicians' and Actors' Traditions through Collaborative Processes', in *Collaborative Learning in Higher Music Education: Why, What, and How?* ed. Helena Gaunt and Heidi Westerlund (Aldershot, UK: Ashgate, 2012), 32.

[4] John Sloboda et al, 'The Reciprocal Relationship between Jazz Musicians and Audiences in Live Performances: A Pilot Qualitative Study', *Psychology of Music* 40, no. 2 (2021): 635.

In the process of analysing the data from the interviews, video diaries and reflective writing, three main issues emerged: performers' perceptions of 'liveness' in a live-streamed performance, the feeling of isolation performers experienced while performing without the in-person audience, and the 'invisible audience' factor and how performers reacted to it. As I have reflected on these issues, I have begun to see similarities between the present and the past: at least from my vantage point, the pandemic in some ways appears to resemble certain periods of recording history—perhaps because performers have reported very similar feelings of uncertainty, unpredictability and sometimes even helplessness to those experienced by the performers who first encountered the complicated world of recording technologies. Just like the performers who have come before us, I hope that we have learned and discovered new ways of connecting with our audiences, all of which I explore more in the following chapters.

Methodology

From the very early stages it was clear that this research project was going to be very personal and for the most part based on my own experience as a performer as well as the experience of my immediate peers. Therefore, I mostly used practice-based methodologies—creative practice and autoethnography—and sociological methodologies—interviews, surveys and questionnaires—to investigate musicians' perspectives on live-streamed performance. Using video logs and reflective writing I observed my own reactions to performing via live-streaming technologies and compared them to previous experiences I have had in concert halls and in recording studios.

Creative practice/video diaries

Since my research project focuses on performers' attitudes towards live-streamed concerts, the performance part of my project is essential from the perspective of both musicians and researchers. The results of the project were greatly influenced by my own creative practice and observations I made in the process of performing. My experience not only made this project unique but also provided me with the opportunity to share my authentic thoughts and feelings, which I could later compare with the experiences of my peers gathered through interviews and surveys. In my opinion, authenticity is one of the most important aspects in a practice-based project. However, measuring authenticity can be challenging, particularly when the research project relies heavily on the opinions and experiences of others. In this project, I attempted to document all of my thoughts, i.e. without choosing only the most interesting (or socially acceptable). This approach was intended to ensure the genuineness of the project, which took place under circumstances that were genuinely extraordinary, even if as a result it occasionally leaned towards the negative or pessimistic side. Throughout the pandemic, I collected various examples of my own reflections in the form of a video diary, parts of which are now included in my performance video portfolio. The events I chose to include in the final submission were important turning points—performances that changed my perspective and attitude towards live-streaming and the audience—in my journey through the various stages of performing amid the pandemic restrictions. I believe these videos are an essential part of my research for many reasons, but mostly because they document my maturing as a performer—the strange kind of growing up I experienced over the course of the research, despite my age and significant experience as a performer before the pandemic.

The submitted video material consists of:

- Fragments of rehearsal and the live-streamed concert which took place on 2 April 2021, at the St. Peter's Cathedral, Riga, Latvia.
- Recording of the live-streamed concert which took place on 20 December 2021, at the National Library of Latvia (with video commentaries).
- Recording of the live-streamed concert which took place on 13 April 2023, at Great Guild Hall, Riga, Latvia.
- Recording of the live-streamed concert (Doctoral Recital) which took place on 20 May 2024, at the First Studio of Latvian Radio, Riga, Latvia.

Reflective writing

The aim of my diary/blog entries and video commentaries alike was to illustrate the preparation process, the performance, and after-concert reflections from a musician's point of view. The diary entries were usually written a day after the event, which did not capture my most immediate feelings and thoughts, but served instead as a personal summary of the event. I am certain that my involvement as a practitioner in my own research project provided a valuable and honest insight into the thought process of a performer and therefore substantially contributed to the research project (and probably to my own mental wellbeing). These entries have also helped me to formulate the questions I wanted to answer, and subsequently served as a reference point for interviews.

Interviews and surveys

I complemented my own observations with those of other musicians, which I collected using interviews, questionnaires and surveys. The questions I asked them aimed to uncover how performers thought about the challenges—and advantages—of the following performance situations (or what we might think of as ‘modalities’):[5]

1. Real-time performance with an audience in the room.
2. Real-time performance with an audience in the room + recording technologies (in other words, a ‘live recording’).
3. Real-time performance with an audience in the room and live-streaming technologies connecting the performer(s) to an audience remotely.
4. Real-time performance with no audience in the room but with live-streaming technologies connecting the performer(s) to an audience remotely.
5. Real-time performance in a recording studio.

The remaining questions were constructed around these five different performance situations, which helped me to maintain a clear structure and direction during interviews yet allowed respondents to answer freely, without feeling overly restricted. The interviews took place March 2020–May 2021, the period when lockdowns and cancellations of live events were enforced almost all over the world and musicians were faced with the new reality of performing online. I chose to hold the interviews in the native language of the participants where possible, and I intend to maintain this approach in the future because it allows participants to express their thoughts in a more elaborate way. I have learned from my own experience that using a second language to express my thoughts sometimes causes delays and blocks, which affect the way I am able to convey my ideas. I wanted to avoid that in my interviews. All translations in English are my own; although it may not have been possible to completely avoid the alteration of the original thoughts and ideas throughout the translation process, I sincerely hope it is a minor loss and does not affect the authenticity of the results. I conducted 15 interviews, each of which lasted 1.5–2 hours. The interviews were recorded and transcribed. Although anonymity was offered to the participants, some of them expressed a wish to be acknowledged as contributors to this research project, which allowed me to name certain participants when I cited their responses in the dissertation.

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[5] Please see the full list of questions in Appendix A.

To validate statements and ideas that crystallised in the interview process, I conducted a survey in October 2022 in which I invited performers from various areas of the performing arts to answer questions that mirrored the statements of the interviews. This survey allowed me to explore their prevalence among a larger number of respondents.[6]

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[6] The survey—which I created using Google Forms—may be accessed via the following link: https://docs.google.com/forms/d/e/1FAIpQLSe7rX0qMSYVWIZMK3wanHJygxTo8N0jJztdv9MYqjd5q4dAxA/viewform?usp=sf_link

The History of the Sound Recording Industry: A Few Personal Reflections

Musicians have had a complicated relationship with recording and dissemination technologies stretching back all the way to the beginning of the recording industry, and it has only become more complicated throughout the twentieth and twenty-first centuries. As Amy Blier-Carruthers states, ‘even after over a century of commercial classical recordings, many of the same issues are still in evidence in performers’ attitudes—distrust of the technology, dislike of the process, doubts about the captured result, disillusionment with the editing process, disagreement with the level of perfection expected of a recording, the notion that a performance exists apart from the performer and outside her control, the thought of a disembodied performance existing at all’.[7] Performances in the recording studio and performances in front of audiences are understood—at least by performers—as entirely distinct from one another, not as extensions of one another. ‘Recording is not the same as concert-giving. They are separate media and have their own disciplines and objectives,’ writes John Rushby-Smith.[8]

However, the beginning of the Covid-19 pandemic prompted an unprecedented shift in performers’ relationship with technology. Live-streamed performances without the presence of the audience took centre stage. As with any development in the history of recording and dissemination technologies, this situation has changed the way performers perceive their own performance. Live-streamed and pre-recorded online performances without any audience physically present resembled the recording process more than a live concert performance, but musicians were still expected to deliver a convincing live performance. I am certain this was an important shift for musicians worldwide, mainly because it broke down the notion of recording and live concerts being two separate entities, requiring different approaches and having different goals. By ‘removing’ the audience, the borders between live and recorded performances are getting less and less clear, which in the future might have significant long-term effects on musicians' attitudes towards live concerts and recorded performances alike.

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[7] Amy Blier-Carruthers, ‘The Problem of Perfection in Classical Recording: The Performer’s Perspective’, *The Musical Quarterly* 103, no. 1–2, (Spring–Summer 2020), 185.

[8] John Rushby-Smith, ‘Recording the Orchestra’, in *The Cambridge Companion to the Orchestra*, ed. Colin Lawson (Cambridge: Cambridge University Press, 2003), 177.

In order to understand the impact of sound recording and dissemination technologies on the performing arts—and especially the classical music—scene today, it is important to be aware of how technological developments have shaped the relationships between musicians and audiences over the past century. As I have explored this historical background more, I have observed affinities between my own experiences as a twenty-first-century performer and those of past performers. While writing this chapter, it was especially important to me to find ways how we can learn from the past instead of assuming our generation's experience is unique.

The invention of the first recording technologies marked a major turning point in the way musicians perceived their own musical performance. Firstly, recorded music became a product of its own and performers realised very quickly that they had little to no control over who would listen to their playing, how their performance would sound and how it would be perceived.[9] Before the invention of recording technologies, listening to music had almost always been a group activity—people rarely listened to music alone, because it usually accompanied social events and performers were of course present and even central at those events. Solitary listening was a new practice; however, it was accepted very quickly. In 1931, the magazine *Disques* stated some of the advantages of listening to music outside of the concert hall or any social event: 'Alone with the phonograph, all the unpleasant externals are removed: the interpreter has been disposed of, the audience has been disposed of, the uncomfortable concert hall has been disposed of. You are alone with the composer and his music. Surely no more ideal circumstances can be imagined.'[10] Changing norms around sociability is a very interesting development in itself, but I am interested in how this impinged on the performer—I suspect this unprecedented situation and especially the ease with which many listeners welcomed the new reality may have been difficult for many performers to accept. The fact that the music could be perceived and consumed separately or independently, without the direct presence and involvement of performers and therefore often without recognition, may have been the root of the feelings of resentment many performers feel towards recording technologies to this day. In my own experience, the Covid-19 pandemic heightened this sense of not being entirely involved, as performing and listening alike became much more solitary than ever before—at least, than ever before in a real-time performance. The online audience became the only witness and therefore the only judge of a performance, which in a way mirrors the early days of solitary listening.

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[9] Mark Katz, *Capturing Sound: How Technology Has Changed Music* (Berkeley: University of California Press, 2004), 10–17.

[10] Quoted in Katz, *Capturing Sound*, 21.

The second aspect that played a significant role in shaping performers' attitudes towards recording technologies was the difficult and physically demanding process of recording music. The sound quality was extremely poor—many instruments with lower pitch, such as cellos and double-basses, and larger ensembles and orchestras, could not be recorded at all. On numerous occasions musicians were forced to change their performing style to match the requirements of the recording process and had to comply with many restrictions caused by the imperfections of the early recording technology.[11] There is still an ongoing debate among scholars about how significant these alterations were in comparison to the live performances of the same artists at the time, and whether they had a permanent impact on future performance styles. For example, Daniel Leech Wilkinson argues that the stylistic changes of performing cannot be attributed to the limitations of the early recording process alone—the musical taste of the time, personal taste and the technical abilities of each individual performer undoubtedly played a significant role as well.[12] On the other hand, Mark Katz argues that the almost constant use of the violin technique *vibrato* (also described as the 'new vibrato')—first used by the violinist Fritz Kreisler—was most likely the result of the development of recording technologies.[13] This argument, although open to debate, seems plausible because the early sound recording technologies required a highly creative approach from musicians due to the technical constraints. For example, singers were forced constantly to change their location in front of the phonograph horn—the higher the sound, the further from the horn it had to be—to allow the phonograph to capture it. Sometimes lines were drawn on the floor of the recording studio for musicians to know how far to retreat.[14] For example, German soprano Lotte Lehmann described her early recording sessions as singing and dancing acts because she had to constantly move back and forth while recording.[15] Performers were also often forced to shorten pieces before they could be recorded. For example, in 1919, Italian pianist Ferrucio Busoni was asked to shorten Franz Liszt's famous Mephisto waltz from 10 to 4 minutes. After an exhausting day in the recording studio in 1919, the pianist complained to his wife: 'They wanted Faust's waltz played in four minutes! That means I had to improvise quickly in the studio, so it would make any sense at all!'[16] Although in the context of studio recordings, we have come a long way and do not have to endure what our predecessors had to cope with, in the context of live-streaming during the pandemic, I feel in some aspects I can relate to the pioneers of the recording industry. I will talk more about this in the following chapters; however, I want to mention that the process of preparing for a live-streamed concert during Covid-19 resembled the early recording process in many ways. For example, I was often asked to adjust the length of the pieces to fit into the timeslot allowed for the concert (like Busoni!), and almost every time we had to adjust our performance to various technical demands—the placement of the microphones, lights, even the instruments—all in the name of a good visual (rather than *audio*) result. Although I was (and still am) grateful for the opportunity to share my performances with larger audiences (as, no doubt, were my predecessors), every time I have had to alter my playing to suit the demands or shortcomings of the recording technologies, it has felt like my professional autonomy, my free will to make my own artistic choices, was being taken away from me. No matter how insignificant or minimal these changes were, I am sure they still affected the mindset of historical performers—and along with it, their attitudes towards the recording process.

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[11] Amy Blier-Carruthers, Aleksander Kolkowski, and Duncan Miller, 'The Art and Science of Acoustic Recording: Re-enacting Arthur Nikisch and the Berlin Philharmonic Orchestra's landmark 1913 recording of Beethoven's Fifth Symphony', In *The Science Museum Group Journal*, 2015, Vol. Spring 2015, No. 3.

[12] Daniel Leech-Wilkinson, *The Changing Sound of Music: Approaches to Studying Recorded Musical Performance* (London: CHARM, 2009), chapter 7, www.charm.kcl.ac.uk/studies/chapters/chap1.html

[13] Katz, *Capturing Sound*, 94–108.

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[14] Timothy Day, A *Century of Recorded Music: Listening to Musical History* (New Haven: Yale University Press, 2000), 10.

[15] Lotte Lehmann, interview with John Harvith and Susan Edwards Harvith, 2 January 1975, in Harvith and Harvith, *Edison, Musicians and the Phonograph* (Michigan: Bloomsbury Music, 1987), 71.

[16] Quoted in Day, *A Century of Recorded Music*, 8.

Despite these difficulties, then as now, many classical music performers and composers received the latest recording technologies with significant enthusiasm. In 1900, French composer and pianist Camille Saint-Saëns reported that ‘while the phonograph was repeating what I had played, I listened with much curiosity and interest. I at once saw, or rather heard, two grave mistakes that I had made. In one part the music was quicker than I had intended, and in another the rhythm was faulty. These mistakes I subsequently corrected.’[17] Here, I cannot help but think how we now use recordings to correct our own mistakes in the process of preparing for concerts and how ‘normal’ it feels to us now.

Ongoing technological developments of recording technologies of the 20th century—microphones, tape recording, digital technologies—led to a situation where recorded performance was observably better, from a ‘technical’ point of view, than live performance: more accurate, with predictable phrasing, with no accidents. The invention of tape recordings and therefore the editing of recorded material opened new possibilities for performing artists: studio recording could now reach a level of perfection that could not be achieved in the live performance. This meant that the musicians no longer needed to repeat the piece several times from the first to the final ‘take’. This innovation, of course, affected performers’ attitudes towards recording technologies. The most known and probably extreme example illustrating the effect of recording technologies on the musicians of the time is pianist Glenn Gould, who refused to perform live any longer at the age of 31 and focused only on making recordings because he believed that the recording studio atmosphere enabled him to achieve a result that was impossible in a concert hall. That applies not only to technically perfect performance, but also to the special sound that Gould achieved by experimenting with microphone placement in the studio. Only in the recording studio he could achieve the real interpretation of music: ‘My idea of happiness is two hundred and fifty days a year in a recording studio’.[18]

Not all musicians agreed with this approach. In the second half of the 20th century, many musicians found that recording music in small fragments was more harmful than helpful. For example, Russian cellist Grigory Piatigorsky said: ‘I don't like any perfection...If the spirit is there, it is good enough for me.’[19] Pianist Vladimir Ashkenazi even tried to record some of Beethoven's piano pieces in one take to avoid editing. Unfortunately, Ashkenazi rarely managed to avoid making mistakes, so he had to repeat the piece several times in succession to achieve the desired result. The German violinist Anne-Sophie Mutter was also against the editing of recordings and often preferred to leave a non-resonating sound on a recording rather than break the overall flow of the piece by repeating a phrase out of context. Pianist Douglas McLennan says: ‘The culture of perfectly edited recordings has had a negative impact on concerts. From an audience perspective, listeners used to technically perfect recordings come to performances with an expectation of every note in place. Performers who understand that the bar is set at technical perfection work with that goal in mind. Perhaps artificially achieved perfection has become a baseline that has led to a homogenization of musical approach.’[20] The striving for artificial perfection created a wall between musicians and listeners. The prioritization of perfection (achieved through repeated takes and editing), many musicians began to feel, was at odds with the expression and excitement they aimed for in a live concert and relegated musical expression to second place.

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[17] Quoted in Katz, *Capturing Sound*, 33.

[18] Kevin Bazzana, *Wondrous Strange: The Life and Art of Glenn Gould* (Oxford: Oxford University Press, 2004), 241.

Once again, as I reflect on the past, I feel a strange sense of déjà vu—that same fifty-year-old dilemma (to edit or not to edit) re-appeared in an only slightly new form during the pandemic. How many times did we perform in front of cameras without any chance of repeating or editing the performance, basically making a live recording on the spot, hoping the technologies would not fail us? No wonder, after the first year of Covid-19, that many performances offered to the audience as live-streamed were actually pre-recorded, because actual, real-time ‘live-streams’ were simply too risky. Many performers saw it as a deception of the audience—how can we ‘sell’ a recorded performance as ‘live’? In my experience, even if the recording was made a day before the ‘live-stream’, many elements of a live concert were still present: the performance was recorded from start to finish, without any editing, I was wearing a concert dress, there was the same feeling of unpredictability a live concert has—all of it made it as 'live' as it could get. The fact that it was not in real time did not take anything away from the 'live' concert experience for me as a performer. I could not help but think about Ashkenazi, Mutter, and many other performers of previous generations who chose to record without editing (when it was already possible, that is) to keep the natural flow of music and the continuity of phrasing. Of course, in my case, it was not my deliberate, conscious choice to record a concert in one take, but it definitely helped to make a recorded performance as close to the 'live' one as possible.

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[19] Day, *A Century of Recorded Music*, 26.

[20] Douglas McLennan, ‘Is Perfection Killing the Classical Music’, *Diacritical* (blog), 3 May 2009, https://www.artsjournal.com/diacritical/2009/05/how_perfection_killed_classica.html?subscribe=success#blog_subscription-3

I suspect that—for the most part, anyway—the audience did not notice that the concert was not happening in real time either, and thus I am left wondering which of the many components that make up a supposedly 'live' performance are imperative and which ones are 'optional' for the audience (and also performers) to perceive a performance as 'live'? I attempt to find answers to these questions in the following chapters, in which I talk more about historic debates around 'liveness' and more recent discussions of liveness in online settings.

I want to take a step back and briefly mention another important technological development, which happened alongside that of audio recording technologies: audio-*visual* recording technologies. Concert films and television broadcasts of concerts (initially pre-recorded, later broadcast simultaneously) emerged around the middle of the twentieth century, followed in the final years of the twentieth century by live-streamed performances.[21] The latter, of course, was made possible by the introduction of the World Wide Web. The Internet allowed performances to be shared—first in recorded formats and eventually via live-streaming[22]—all over the world and to reach more people than ever, especially once the devices to access online performances, such as computers and cell phones, became more affordable and therefore accessible to larger audiences. The Internet has changed the way we perceive and use music: it is not (or at least not just) an elite form of art for a small group of people anymore, and it is not restricted by geographical and financial concerns as much as before. As Eric F. Clarke states: ‘Never before have people had access to so much music and in so many different ways and with so many different patterns of use’.[23]

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[21] The very first Hollywood-produced concert movie was the 1948 concert film *Concert Magic*. This movie featured virtuoso violinist Yehudi Menuhin performing at the Charlie Chaplin Studios the previous year. Together with various artists he performed the works of famous composers such as Ludwig van Beethoven, Henryk Wieniawski, Johann Sebastian Bach, Nicolo Paganini and others. For more details, see the documentary *Behind the Concert Magic*, which features Yehudi Menuhin in conversation with Humphrey Burton, available with a subscription on Medici TV, https://www.medici.tv/en/documentaries/the-story-behind-concert-magic/. On televised concerts, see Christina Baade and James Deaville, *Music and the Broadcast Experience: Performance, Production, and Audiences* (Oxford: Oxford University Press, 2016).

[22] Live-streaming refers to broadcast video streaming service provided by web-based platforms and mobile applications that feature synchronous and cross-modal (video, text, and image) interactivity.

Live-streamed classical music events before the pandemic mostly consisted of selected concerts and performances by prestigious venues such as the Berlin Philharmonic designed to engage larger numbers of listeners. In 2006 the New York Metropolitan Opera began what has become a successful series of live-streamed staged performances, ‘New York Met Live in HD’. The National Theatre in London provides another example, live-streaming selected productions since 2009, and several theatres and concert halls have begun offering this mode of encounter to audiences, typically in cinemas, but increasingly online. These live-streamed events, although significant in terms of offering a new experience to listeners, rarely happened without an actual audience and served as a digital extension to a real-time performance.

This situation has led to an unprecedented power shift: alongside the audience in the concert hall, the ‘invisible audience’ online has become an undeniable force in determining the success or failure of an artist. The term ‘invisible audience’ is used mostly in the field of sociology to discuss the realm of social media, where the invisible audience represents anyone who sees or interacts with one’s social media posts.[24] A broader understanding of this phenomenon could encompass any situation where one loses control over their creations and how they will be perceived or used as soon as larger audiences are allowed access to them online. Several problems have emerged alongside this otherwise positive shift towards making musical performances more accessible to larger audiences—firstly, musicians have almost completely lost control over who is listening to their music, what technology they use, and what physical environment surrounds the listener. Secondly, with the development of mobile phones, performers can never be sure which parts of their performances—including the unsuccessful ones—will be recorded and emerge somewhere on the internet. Although bootleg recordings existed long before the rise of the Internet, the Internet has made the distribution of unapproved and illegal recordings much easier and faster. This situation has created additional anxiety for musicians during their performances. If I look back over my own career as a performer, I clearly remember this shift—suddenly everyone had some sort of recording device, and it was a very significant change. Once, a very low-quality recording of my performance was posted on Facebook by a person who had attended a concert and secretly recorded the performance. That made me feel like I suddenly had no control over who was listening to my performance and what technology was used, not to mention the fact I had not consented to the recording and posting of it on social media. In a way, I relived this situation during my many live-streams during Covid-19 pandemic, which I will discuss more in the following chapters.

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[23] Eric F. Clarke, ‘The impact of recording on listening,’ *Twentieth-Century Music* 4, no. 1 (2007): 47.

[24] Ariane Ollier-Malaterre and Nancy P. Rothbard, ‘Social Media or Social Minefield? Surviving in the New Cyberspace Era’, *Organizational Dynamics: A Quarterly Review of Organizational Behaviour for Professional Managers* 44, no.1 (2005).

Throughout the Covid-19 pandemic, live-streaming has become common practice for many musicians. The cancellations of live performances have led to an inevitable shift from offline live music performances to online music live-streams, trying to reconnect isolated listeners with equally isolated performers. Scholars and researchers around the world have already begun to turn their attention to this unprecedented situation, but so far, they have focused more on the listener than the performer. Grégoire Bienvenu states that the most important goal of live-streamed events is to recreate social experience—in uncertain times, listening to music plays an important psychological role in people's lives. Music is a very intense and emotional experience. 'In this time emotions cannot be expressed on stage nor in the audience, online platforms open a space where artists and music lovers can meet and support each other'.[25]

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[25] Grégoire Bienvenu, 'Is Livestreaming the Post-Covid-19 Future for Live Music?', unpublished paper, accessed December 12, 2020, 2. https://www.researchgate.net/publication/342360942_Is_livestreaming_the_post-Covid-19_future_for_live_music

In her article on the live-streaming of the Seattle Symphony, Brooke Jarvis testifies how the beauty of such a moment helped her to cope with a mental breakdown: 'I almost cried'.[26]

Among other forms of online performances, we could also witness the rebirth of home concerts—various kinds of performances which were live-streamed from artist's homes. For example, German pianist Igor Levit gave 52 home concerts via Twitter (now X) and gathered thousands of listeners. In a way it brought us back to the late 19th and early 20th century, when home concerts or parlour concerts were the most common form of concert giving and performing.[27] Igor Levit, in his book *House Concert*,[28] speaks about the performer's need to play in front of audience, how it is a necessity to share one's art and be connected to listeners. He also speaks about how his social media concerts, in their simplicity, proved that audience and performers can find each other without the complicated PR and management techniques, which in a way serves as a statement of authenticity by the performer. It is a very interesting argument, though it is impossible to know if his home concerts would have reached as many people as they did had it not been for his previously gained recognition on the concert-hall stage. However, this statement itself is a testament to the uncertainty many performers experienced during the pandemic. I would also like to mention another home concert series I witnessed during the pandemic—#UriPosteJukeBox, 'the self-isolation brainchild' of Elena Urioste and Tom Poster—which the performers described as 'a way to keep their minds sharp, fingers busy, and community smiling during the first Covid-19 pandemic lockdown'.[29] I believe these series were even more important than other, similar home concerts, because both artists not only offered high quality performances, but also introduced people to classical music in humorous and exciting ways. Not only was this crucial during the various lockdowns, during which many more people experienced unprecedented levels of anxiety and stress, but it also explored new strategies for the presentation of classical music post-Covid.

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[26] Brooke Jarvis, 'Livestreaming the Seattle Symphony Became a Source of Connection in Dark Times', *New York Times* (March 2020), https://www.nytimes.com/2020/03/24/magazine/coronavirus-music-live-stream-concert.html

[28] Igor Levit and Florian Zinnecker, *House Concert* (Cambridge: Polity Press, 2022).

[29] Elena Urioste and Tom Poster, homepage, *#UriPosteJukeBox* (blog), accessed 8 May 2024, https://www.elenaurioste.com/jukebox

While writing this chapter, my intention was never simply to re-tell the familiar history of recording technologies. Throughout my project I noticed many parallels between Covid-19 pandemic experiences and previous moments in history, which seemed worth mentioning in the context of my research. The fact that in many ways I felt connected to the past was intriguing to me. I am still not quite sure why performing during the pandemic highlighted these connections: perhaps it was the novelty of the situation or maybe the fact that we as performers suddenly felt more restricted for various reasons and thus could not use our previous experience to navigate through this unprecedented situation. In a way, the realisation that the Covid-19 pandemic performances mirrored moments in history served as a roadmap for the present, and made me more confident in my ability to find the most effective ways to cope and even thrive during those stressful times.

Live-streaming and Liveness: Performers' Perspectives

We tend to think we know what live-streaming is, but what is 'liveness'? As I have already hinted, the definition of 'liveness' has been much discussed over the past two decades—and, indeed, continues to be debated. In this chapter I examine some of the most significant scholarly perspectives on 'liveness', which have helped to lay the groundwork for my own thinking about live-streaming.

For most of the twentieth century, 'liveness' tended to be thought of as something that could only happen during an in-person performance. Put another way, we might say that the co-presence of performers and spectators has long defined whether or not an event could be described as 'live'. Such perspectives persist in the digital age; indeed, it would seem that the turn towards digital has only heightened the rhetoric around 'co-presence' as a condition of 'liveness'. Suk-Young Kim has observed that 'liveness' and its etymological relatives, such as 'live', 'alive', and 'life', have been (and sometimes still are) pitted against 'digital', 'mediatized', 'recorded', 'second hand'.[30] Enduring though these binaries have proven themselves to be, they are often artificial—or so Kim suggests. As she notes, the first term, 'digital', tends to refer to a performance situation orientated around a lack of co-presence (or lack of fully human co-presence, a crucial distinction in the AI age): for example, when live performers are replaced by their digital or holographic projections or when digitised performers coexist with live performers on stage. Kim notes that the word 'mediatized' is often used interchangeably with 'digital' to suggest that what the audience members see and hear on stage is a more intimate presentation without any mediation, whereas what they see and hear on screen are mediatized events in which the closeness of interactions between live performers and spectators has been diluted. Kim's third oppositional term, 'recorded', relies on the idea of a live performance that took place in the studio or on stage in the past, which means that live performance can only exist in the present, whereas recorded performance is nothing more than the revived live performance of the past. The related concept of 'second hand' is often used to refer to the infinite reproducibility of recorded performance, which is therefore not the original as it was presented live on stage, or in the studio at the time of recording. In other words, what consumers get out of a recorded performance is a cast-off, something that has been consumed already. According to Kim, these polarised positions subtly underpin how performers and listener-consumers perceive most (if not all) performance situations today.

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[30] Suk-Young Kim, 'Liveness: Performance of Ideology and Technology in the Changing Media Environment,' In *Oxford Research Encyclopaedia of Literature* (2017).

Debating liveness

These positions—and their polarised nature—emerged from the field of performance studies, particularly from the work of prominent performance studies scholars Peggy Phelan and Philip Auslander (which has in turn generated much discussion among scholars including Steve Dixon, Martin Baker, Eddie Paterson, Lara Stevens and many others).[31] Peggy Phelan, in her 1993 book *Unmarked: The Politics of Performance*, argued that 'Performance's only life is in the present. Performance cannot be saved, recorded, documented, or otherwise participate in the circulation of representation of representations.[32] Phelan proposed that 'performance is an art form which most fully understands the generative possibilities of disappearance'.[33] This notion of 'liveness' is what Auslander criticises as 'classic liveness' or 'the default definition of liveness'.[34] In his 1999 study *Liveness: Performance in a Mediatized Culture*, Auslander argued that before the possibility of sound recording and film, audiences only ever encountered performance in the mode that we now call 'live'.[35] However, that term was not yet relevant then, because it makes sense only in relation to an opposite (e.g. 'live' vs. 'mediatized'). In this sense, live does not precede mediatized and thus cannot claim superiority on the basis of its supposed fundamental status. Auslander similarly debunks the notion that the ‘live’ is real and that the ‘mediatized’ is unreal, observing that the ‘mediatized’ is just as much a human experience as the ‘live’.

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[31] See in particular Peggy Phelan, *Unmarked: The Politics of Performance,* (London: Routledge, 1993), Philip Auslander, *Liveness: Performance in a Mediatized Culture*, 2d ed. (London: Routledge, 2008), Steve Dixon, *Digital Performance* (Cambridge, Mass.: MIT Press, 2007), Eddie Paterson and Lara Stevens, 'From Shakespeare to the Super Bowl: Theatre and Global Liveness,' *Australasian Drama Studies*, no. 62 (2013): 147–62, Martin Barker, 'Crash, Theatre Audiences, and the Idea of "Liveness"', *Studies in Theatre and Performance* 23, no. 1 (2003): 21–39.

[32] Phelan, *Unmarked*, 46.

[33] Phelan, *Unmarked,* 27.

[34] Auslander, *Liveness*, 62.

[35] Auslander, *Liveness*, 56.

Auslander’s position was in turn met with criticism from media studies and arts scholar Steve Dixon, who suggested that Auslander neglected ‘key phenomenological perceptions about presence and plenitude, and related differences in our reception of live and mediatized performance forms.’[36] For Dixon, ‘liveness’ is not just about being there, as the phenomenological experience for the audience tends to differ depending on the medium and the mode of performance. Dixon concludes that spectators experience a qualitatively different perception of performance depending on the presence and absence of live corporeal bodies: ‘Watching film, video, and digital media is a more *voyeuristic* experience than watching live performance, since in the literal sense of the word, the onlooker is looking from a position without fear of being seen by the watched’.[37]

Another critique focuses on Auslander’s apparent overlooking of what some feel is a key component of ‘liveness’: uniqueness. In an article reflecting on the first edition of Auslander’s book, for example, Martin Barker argued that audiences experience live performance ‘as if it had elements of uniqueness’ (this argument was also further developed by Phelan).[38] In the second edition of his book, Auslander responded to Barker, suggesting that the audience’s hope that a live performance is unique is an illusion. In order for a live performance of a theatre production to be successful, Auslander observes, a performance needs to be such that the ‘actual variations are probably minimal and insignificant’.[39]

Liveness in live-streamed concerts

Although Auslander was (and is) writing in the digital age, his arguments do not fully address issues inherent to live-streaming, as becomes clear in his attempt to deconstruct the supposed hierarchy of live recordings over studio recordings. Auslander takes issue with the language itself (as well as the ideas behind it): ‘This expression is an oxymoron (how can something be both recorded and live?) but is another concept we now accept without question'.[40] During the pandemic, however, live-streamed concerts made this oxymoron possible. Although live-streaming remained much the same from a technical point of view as it had before the pandemic, the lack of any component of co-presence between performer and audience during pandemic-era live-streaming has contributed to a radical shift in the very definition of 'liveness' for both audiences and performers. When the live-streamed version of a performance became the *only* performance seen and heard by an audience, notions of 'liveness' shifted for performers as well. For us, 'recorded' and 'live' swiftly became synonymous, whether we liked it or not (as I discuss more in 'The Isolated Performer' chapter, many performers struggled to accept this new situation).

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[36] Steve Dixon, *Digital Performance*, 129.

[37] Dixon, *Digital Performance,* 130.

[38] Barker, ‘Crash, Theatre Audiences, and the Idea of ‘Liveness’, 28.

[39] Auslander, *Liveness*, 64.

The Covid-19 pandemic has only accelerated a process of re-thinking that had been underway for several years already, since at least the beginning of live-streaming. In the meantime, performing artists have been forced to re-evaluate their notions of 'liveness' now that co-presence does not—or at least does not entirely—define 'liveness' anymore. In their exploration of theatrical simulcasts, Eddie Paterson and Lara Stevens suggest that the theatrical performance that serves as the basis of a 'simulcast' has been created for the purposes of that media transfer and thus is not the same performance as other live performances of the same production.[41] Given that the filming on simulcast nights prioritizes the simulcast performances over the live experience of the audience, with cameras obstructing the live spectators' views and actors performing as much to camera as to the live spectators, the experience of the live audience is also different from a conventional experience in the theatre. My own experience suggests that the same can be applied to musical performances. As soon as the real-time performance from a concert hall is live-streamed, the technology becomes predominant and overshadows, literally and figuratively, the experience of the in-person audience. Since live-streaming without an in-person audience has become widespread, however, I have had to reconsider this binary.

These and other such discussions of live-streaming have paved the way to a broader understanding of liveness, which has now moved far away from the initial definition of liveness. As Andy Lavender puts it, liveness in the age of live-streaming no longer requires physical co-presence, but rather a sense of *presentness*. He writes: '[live-streaming] is on the one hand a straightforward model of broadcast, but it strikes me as important because it has become part of a cultural milieu that continues to privilege presentness (liveness) over presence (being there)'.[42]

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[40] Auslander, *Liveness,* 60.

[41] Paterson and Stevens, 'From Shakespeare to the Super Bowl', 155.

Performers' perspectives on live-streaming

While gathering data for my own research project, I thought a lot about how the notion of presentness relates to live-streamed events without an in-person audience. How did performers feel about incorporating such presentness into something that resembled a recording more than a live performance? Was the concept 'liveness' even relevant anymore? Can we speak about a universal definition of 'liveness' in the very specific context of performances without an in-person audience? In the interviews I conducted in 2020 and 2021, many musicians confirmed that liveness is indeed a subjective matter: whether something broadcasted online can be perceived as live largely depends on the individual outlook of each audience member and—most important for my purposes—of each performer. My own experience aligns with these statements: I could not explain why under seemingly identical circumstances and in similar settings I sometimes perceived the live-stream as a recording and sometimes as a live concert. Unfortunately, there was no way of telling if performers' subjective feelings correlated with those of the audience.

The statements made in the interviews were later turned into a survey in order to reach more performers. Although the subject of liveness is far too complex to be resolved in a single survey with a necessarily limited number of respondents, I still decided to ask if performers agreed with the statement that online performance ideally should offer at least a fraction of liveness. I deliberately did not offer any explanations of what I meant by 'liveness' in the hope that the respondents would offer their own subjective opinions. The results demonstrated that the respondents generally agreed with the statement, but, sure enough, their commentaries revealed their very different perceptions of liveness. One survey participant stated that 'Online performance experiences are mediated by technology (a 'middleman'). This interference takes away from the human elements that would be present in an in-person experience.’ Another participant said that ‘in order to offer something unique to the digital medium, liveness is then more of an artistic tool or choice than a necessity’. Yet another wrote ‘I think communication is the important aspect. The audience must feel as if they are in the loop, so to speak, whether this is achieved by it 'feeling' live or speaking to them in some other way.’

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[42] Andy Lavender, 'The Internet, Theatre, and Time: Transmediating the *Theatron,' Contemporary Theatre Review* 27, no. 3 (2017), 350.

All these experiences and opinions have led me to the conclusion that establishing whether or not a performance can be considered live if any kind of technology is involved is a deeply subjective and personal matter. This is all the more the case if the performer is not physically present, because liveness in these instances depends on how believable or realistic the presence of the mediatized performer is or appears to be. But perhaps the most interesting thing to come out of this work is the realisation that my and my peers’ perspectives on liveness have been shaped and re-shaped simply by holding it up for closer examination, both individually and in conversation. As a result, we have become more self-sufficient and more reliant on our internal artistic compasses rather than external validation, while at the same time learning to appreciate our audience in a different way and realising that an element of liveness is present in all modes of performance.

The Isolated Performer: Creative Practice during the Pandemic

Throughout this research project I have documented my live-streamed performances in the form of video diaries as well as journal/blog entries. I wanted to include my personal experience as a performer in this project in order to gain a more nuanced and perhaps more direct insight into the process of performing live-streamed events without an in-person audience. Using my own experience required me to capture my thought-process before and after live-streamed events. It was important to video-record my immediate thoughts to avoid any interpretations, which would inevitably happen should I give myself time to process. The value of the video diaries lies in their spontaneity, their of-the-momentness.

From 2020 to 2022 I participated in many live-streamed events. Each brought new perspectives and new experiences, but one thing remained the same throughout all of these events: being separated from the audience created a strong sense of isolation. What I found especially interesting was that the feeling of being isolated from the audience was still there in the last concert of my Covid-era performances, i.e. while government restrictions were still to a greater or lesser extent in place, despite the fact that it was a concert with an in-person audience as well as an invisible audience. It made me realise my relationship with the audience had fundamentally changed over the course of the pandemic: in a strange way I no longer perceive the audience as active participants in my concerts. While I acknowledge their presence and respect their right to experience a ‘live’, real-time performance (whatever ‘live’ means to them), at the same time I now also realise that I have a right to my own, solitary performing experience, where I concentrate more on the music I create. I will elaborate on this thought more in the following chapters. To illustrate the process of performing during pandemic, I would like to highlight three events that made the biggest impact on me and significantly shifted my perspective and attitude towards performing in front of—or rather *for*—an audience.

Concert 1: Where is the audience?

The first concert (https://youtu.be/J__qtt4wEIo) took place on 2 April 2021, and it was a significant experience for me, mainly because it was my first live-streamed concert without an in-person audience and the ‘rules of engagement’ were still unclear. For example, it is common knowledge that a huge part of being a musician is being aware of the acoustics of each venue and being able to adjust—with minimal losses to the intended sound—if the acoustics turn out to be challenging. Having spent more than twenty years on stage, I was (perhaps arrogantly) sure that I knew what I had to do. I decided to record the rehearsal out of curiosity—my goal was to compare the sound from the rehearsal and the performance—but since it was my first live-streamed performance without an in-person audience, I made a crucial, 'rookie' mistake. It did not occur to me to check the sound samples before the live-stream. The lack of experience on both my part and that of the sound technician (this concert was his first time working with classical musicians) left me blissfully unaware that the sound might be altered in unexpected ways.

As the accompanying video material clearly demonstrates,[43] the sound in the video footage from the rehearsal is much more natural, by which I mean that our sound resonates with the acoustics of the cathedral—the long reverberation gives a specific rich depth to the sound of instruments. In the second part of the video material—which is the footage from the concert as it was live-streamed—the sound is completely different. The sound engineer had clearly tried to 'fix' or improve the echo and natural reverberation of the sound in the cathedral, but unfortunately it resulted in dry, studio-like sound, completely mis-matched with the venue (see the video of Concert 1 at 1:13). Since I was not aware of the alterations the sound engineer had made, I was unable to adjust the sound I was creating. As a result, I was adjusting to the echoing acoustics of the cathedral, but to the people who watched the live-stream I sounded like I was performing in a small room full of carpets and curtains. Had I known the sound would be altered in such a way, I would have adjusted my technique accordingly as I usually do in live concerts—if the acoustic is dry, I use longer bow strokes to make the instrument resonate more, perhaps use more vibrato and create dynamic contrasts on the soft side, since forcing the sound out of the instrument will not improve the performance. The fact that the sound that I heard, created, and thought that I controlled was completely different from what the audience heard was a new and unexpected experience for me. Of course, the acoustics in every concert hall can change slightly once the audience is there, but the difference usually is not very dramatic and therefore manageable. Usually, the reverberation time of the sound lessens with the audience present, which means adjusting one’s playing in a certain way. However, many modern concert halls are designed with this aspect in mind and the changes in acoustics (with or without an audience) are minimal. This experience made me reflect on how exactly I had become so confident that I could—and should—control what my audience heard. I knew what to expect in the recording studio, my skills and experience for the most part providing a predictable recording process and resulting in more or less perfectly manufactured and—most importantly—pre-approved recordings. The sound engineers and producers with whom I had worked knew exactly how they wanted my recordings to sound and how to achieve the best result. A situation in which the audience would hear something not carefully chosen and approved by the team of recording technicians, producers and performers seemed unthinkable until the pandemic. My peers and I have spent decades living with the ‘live versus recorded’ debates touched on in the preceding section. We have experienced endless questioning of quality standards in live performances, which has sparked all kinds of performance anxiety, and yet somehow, we have managed to maintain clear understandings of what recording technologies can and should represent in the twenty-first century—for myself, at any rate, it is a separate medium with completely different goals, not a rival of live performances. However, during the pandemic, it felt like we as a collective had returned to the origins of recording technologies in so many ways.

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[43] https://youtu.be/J__qtt4wElo - YouTube link to the Concert 1, April 2021.

When the very first commercial recordings were produced, and even before that, recorded sound was in no way a reflection of reality—due to various factors, but mostly because of the poor quality of recording equipment. This caused mixed feelings amongst performers, some of which I have already discussed in my chapter on ‘The History of the Sound Recording Industry: A Few Personal Reflections’: apart from the obvious fact that the recordings were simply not good, many performers were not comfortable sharing their work with the ‘invisible’ audience, people who would listen to them and inevitably form an opinion about the performer based on what they had heard, for better or worse. Aware that the recording did not reflect one’s true abilities, a certain degree of anxiety on the part of performers since then could surely be expected. I was not prepared to relate to these feelings in 2021, however. This experience made me aware of the fact we performers are still (slowly) learning new things, still navigating aspects of performing that had seemed settled before the pandemic.

Another interesting historical parallel I noticed after this performance was that the online audience appeared not to be listening, at least not as fully or predictably as I might have expected in an in-person performance. The predictability of the in-person audience became irrelevant when online audience came into play. We realised how unpredictable this audience could be, mostly because these people were not constricted by the social norms existing in the real world—they had no obligation to stay until the end of the online concert as they would have if it had been an in-person event; they were not expected to listen quietly or even to *listen* at all, because they were not in the concert hall. The virtual attendance was not an indicator that they were listening: our performance might just as easily have served as a background noise to them. This situation resonated weirdly with what I know about concert and opera listening habits in the eighteenth and nineteenth centuries, when music was just a part of the cultural menu and often served as an amusing background rather than the central event of the evening.[44] My own experience watching online events at home proved to be not so different those of eighteenth- and nineteenth-century audiences: online performances rarely had my undivided attention, simply because there were too many distractions—and I did not feel restricted by any social rules. This meant I was only listening and watching to the parts of the performance that truly captured my attention, which would be unacceptable in the concert hall (it was, I have to admit, a more honest approach to the whole listening experience). Based on my own experience and that of others with whom I have discussed this, it appears that this ‘not listening’ and ‘not hearing’, as Cormac Newark has categorised it[45]—or even ‘not listening but having an opinion’—approach was widespread among online audiences during the pandemic (and perhaps ever since).

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[44] Cormac Newark, ‘Not Listening in Paris: Critical and Fictional Lapses of Attention at the Opera’, in *Words and Notes in the Long Nineteenth Century,* ed. Phyllis Weliver and Katharine Ellis (Woodbridge: Boydell and Brewer, 2013), 35–53.

[45] Newark, ‘Not Listening in Paris’, 38 and 42.

Concert 2: New rules, new priorities

The second event (https://youtu.be/DbHLNJnGhRw) I would like to discuss took place at the end of 2021.[46] This event holds double importance in terms of my research because it was originally planned as an experimental live-streamed event—part of a live-streamed concert series with the goal of keeping online events going even after live concerts resume. The main reason for this initiative was that many people—mostly those living in rural areas, with small children or financially challenged—had found online events more accessible and affordable. This is a topic I am personally very interested in, and not just in relation to my research project—how to preserve the live-streamed concerts in the future, what actions should be taken by both musicians and concert organizers to create an engaging online event, how important these events are to the audience and how they could potentially serve as a tool to expand classical music audiences in the future. This particular event was planned from the very beginning with this goal in mind—we (my chamber ensemble Nyx Trio) wanted to offer something that would capture the attention of the audience, not just serve as a replacement to a live concert, as many live-streamed events put on during the pandemic did. It was important to create a captivating event and therefore we wanted to tick all the right boxes. Based on our previous experience, we were aware that the sound quality of the live-stream was crucial if we wanted to keep the audience for more than a couple of minutes. We also wanted to create a captivating yet not overwhelming visual presentation—we even discussed the colour palette of the event beforehand. The event itself was the launch of the CD I recorded during the pandemic with my chamber ensemble Nyx Trio, featuring the music of contemporary Latvian composers.[47] The choice of the repertoire for this concert and for our CD was carefully considered: the pieces selected all held special meaning for us as musicians and as Latvians. As a relatively rare musical ensemble of violin, flute, and piano, we discovered very quickly how limited the repertoire is for this particular combination of instruments. After discovering trios by Nino Rota, Philippe Gaubert, and Bohuslav Martinů, we realised that the only way forward was to expand the repertoire by commissioning new pieces. It felt especially important to inspire the creation of new pieces by Latvian contemporary composers, which will hopefully outlive the on-stage career of our trio and will be included in the repertoire of our successors in the future, in the same way we have included pieces from the repertoire of our predecessors. In 1987, Latvian violinist Janis Bulavs, flautist Juris Abols and pianist Edmunds Goldsteins formed a trio, exclusively performing music by Latvian composers written for their trio. Some pieces were recorded on a vinyl issue, which I bought in 1989 when I was nine. Unfortunately, the trio disbanded after a few years due to health issues, changes in the political system and the Soviet Union's collapse, impacting cultural processes in Latvia. However, their musical legacy continues to inspire our trio. We included some of the music intended for the Bulavs-Abols-Goldsteins trio in my doctoral recital in May 2024, alongside pieces written specifically for our trio, including a composition by a composer of the next generation—24-year-old Aleksandrs Avramecs. This programme, as well as the concert described in this chapter—the launch of our album ’10 Dedications’—reflected the sense of continuity we were aiming for; our album was recorded almost 30 years after the first album ‘Smilšu laiks’ featuring the same combination of instruments and music by Latvian composers. The fact that both concerts were livestreamed and therefore preserved in the form of recordings and are still available for the audience to see adds to the musical legacy we would like to leave. This is undoubtedly one of the most valuable and long-term advantages of live-streaming—many live performances can be preserved for a longer period of time, which is especially important in the ephemeral world of live performances. We hope future generations will be inspired by our recordings to continue commissioning music and build relationships with Latvian composers of their own generation.

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[46] https://youtu.be/DbHLNJnGhRw - YouTube link to Concert 2, December 2021.

[47] The digital version of the album '10 Dedications' can be accessed via this link: https://youtube.com/playlist?list=OLAK5uy_nLu__8I9IDBCNLVTE7oMv1V6WRMB8jPKc&si=42SaNqTsdUK64Iut.

Since our debut concert in 2011, we have helped increase the popularity of this particular combination of instruments in Latvia. Music schools now include our trio’s pieces in their repertoire. A few years ago, I served as a jury member for a local chamber music competition, where I was pleased to see two ensembles featuring violin, flute, and piano performing some very familiar pieces. Now we are working in close collaboration with the publishing house Musica Baltica in the hope of publishing this music. After the release of our CD, we were happy to learn that many radio stations in Europe had decided to feature our album, which served as confirmation that Latvian music can spark interest in listeners outside our country. One of the many things that made this album and the concert very special to us was the fact we worked in close collaboration with our composers all the way from the first idea of a musical piece to the concert premiere. This ensured that each composer's musical ideas were conveyed in the way they intended. It also allowed us to contribute our knowledge as instrumentalists to the process of creating the music, resulting in a final product that was beautifully written, musically and technically playable—that is to say, together with the composers, we were able to find the sound they were looking for in the most effective way possible for each instrument. This is especially important in contemporary music, where a broad spectrum of sounds is usually used to achieve the intended goal. Many of the composers featured in this concert have become our close friends in the process, and we hope to work with them again in the future.

The event was live-streamed and recorded without an audience present. The decision to have this performance format was made by us—me and my colleagues, taking into consideration the unstable epidemiological situation in Latvia at the time. I also recorded some video diaries and wrote a diary entry on the day of the event and on the next day to capture my immediate feelings and reactions to various expected as well as unexpected situations before, during and after the concert. I would like to point out that I usually recorded my video diaries and wrote my research diary in my native Latvian language and only shared a translated version as a reference point if necessary, however this time I wanted to integrate my thoughts into the performance video to better illustrate the musician’s journey through the various stages of preparation for the live-streamed event (see the video of Concert 2 at 0:07 and 34:29).

Accordingly, it seems useful to share a fragment of the diary entry I wrote the day after this event. I believe its slightly sarcastic undertone perfectly illustrates the state of mind we as performers had towards the end of pandemic—the shift in our perception and in a way the process of stepping down from our pre-pandemic imaginary pedestals into the uncertain and unpredictable reality, where we can no longer control everything and perceive the audience in the same way we did before:

> It is a typical Friday afternoon—practicing for a couple of hours, then rehearsing with my trio for our upcoming concert on Monday which eventually morphs into a much-needed creative discussion about our future projects, unpredictable Covid

> restrictions and—most importantly—if we should wear matching outfits for the performance. All of us are blissfully unaware of what is to come although it is not our first live-streamed concert. We soon receive an unexpected call from the manager of the event and that is where the fun begins—he wants us to visit the venue, meet with the sound engineers and decide on the scenario for the event. This itself is not an unexpected request—after some very unfortunate experiences in the past, we very much prefer to have a clear plan of the event beforehand. The fact he wants us to meet three days prior to the event is a bit unusual. I wonder if the sound engineers and camera crew will also be there, and I suspect they will not. Once we arrive at the venue, we meet the event manager—a very energetic man in his early twenties, clearly very serious and with zero experience. We decide to give him the benefit of the doubt and follow his lead to the stage. He wants to know how we want the stage to be set up, what microphones we want to use, the scenario of the event up to the millisecond and many other things which, although important, could be discussed over the phone. We give him all the information we possibly can, but when it is our time to ask questions—about the sound, lights and other factors that could influence the quality of the performance—as I predicted, he announces that sound and light people will be here on Monday before our concert and then we can discuss everything with them. So basically, at this point the only aspect we have agreed on is that the piano should be in the centre of the stage and preferably tuned.

Here I feel I should pause for a moment to reflect on this part of my diary. I think what is the most interesting about it is how I already expected many things to go wrong based of my previous experience in similar situations. The fact that I already know what will go wrong means that there was a similar pattern of how organisers and managers approached live-streams towards the end of pandemic. A lot of technical issues were left to younger, inexperienced members of staff and therefore many mistakes were repeated. Sometimes it took a lot of energy to convince organisers that there are certain rules and traditions in classical concerts which cannot be changed just for the sake of a better visual presentation, as the next excerpt amply illustrates:

Monday comes and we are back at the venue for the sound and light check. As I already predicted, piano is still in the corner of the stage (the manager insists on keeping it there because it will look ‘interesting’ on the camera). After a long discussion, the piano travels to its rightful place in the centre of the stage and then the real ‘fun’ begins. I notice that there are no microphone stands anywhere and the sound check should start in 5 minutes. I find the sound engineer and very carefully ask about the microphones. He seems offended by my lack of trust in his professional abilities, which is probably justified, so I return to the stage and hope for the microphones to appear. Next surprise comes when the member of the filming crew announces that our music stands should be no higher than our waists. We try to explain that we would be very happy if we could actually see the music, if we want this concert to happen, so the stands will have to be as high as it is comfortable for us. I understand that we all have different priorities here – we, musicians, are more concerned about the quality of the performance which means we need to be comfortable – we have to see the score, each other, not to be blinded by the lights, or put in the awkward places for the benefit of the good camera view. The camera crews’ and sound engineers’ main concerns are obviously the visual and audial part of the event, which is important, I agree, so we have to find the middle ground, because we cannot exist without each other in this situation.

One of the biggest and most concerning issues in all live-streamed concerts during the Covid-19 pandemic was the quality of sound. Learning the hard way what it means not to have a good communication with the sound engineers, this time I tried my best to eliminate any possible issues. Although I had no control over what technology the audience would use, I could try to have some control over the sound we produced—and by ‘we’ I mean not just the musicians but the whole team. It turned out to be a challenging task because everyone had different priorities and expectations:

The sound engineer finally makes his entrance holding two little microphone-like objects and happily approaches me and the flautist. I am still hoping to see a microphone stand, but apparently the sound god of this venue has different idea in mind. He very enthusiastically tries to attach the microphone to my violin, telling me that it will look so much better without the stands in the picture. I have to admit, I could never imagine a professional sound engineer would suggest something like this and try to decline as politely as I can. Thankfully, he does not seem to care enough to argue, and we finally get our stands. However, he insists on placing it behind me despite my warning that I will most likely hit the microphone with my bow. After all this hopefully intelligent exchange of words, we can finally begin our sound check. Thankfully, the sound samples they play back to us are surprisingly good, so we feel like everything is sorted. There are still slight issues with the light – we get shadows from our instruments on the score and some lights are still a bit too bright and therefore uncomfortable, but we decide to leave it as it is and get ready for the performance.

As I mention in my video diaries, the preparation process for the live-streamed concert without the in-person audience was very different from what we knew before the pandemic. We had to prepare for the unexpected situations—such as awkward questions from the presenter—and wear appropriate make-up to look good on camera. It was something we never did before the pandemic, because of the significant distance between the audience and the performers on stage. Another thing what was suddenly completely different was the lack of the going on stage ritual—no applause, no audience, no bowing. Instead, we had to take our places in complete silence five minutes before the live-stream, wait for the countdown and then instantly switch on our ‘performance mode’. I assume that is the reason why many live-streamed concerts seemed awkward at the beginning and made us more self-conscious on stage:

The presenter of the event arrives, and we go through the questions and answers quickly. Since it is a live-streamed event, we would really like to avoid any awkwardness in the interviews, because it is hard enough to alternate between playing and talking, at least for me. We still need to put on a ton of make-up—the

> last couple of live-streamed concerts and not very flattering close-ups have finally convinced us that professional make-up is an absolute necessity.
>
> The concert begins and we try our best to think about the audience behind the camera, because we know it is there, although all we see are three cameras and a couple of sleepy camera operators. I feel a bit uncomfortable because I have to stand behind the pianist, much further than I usually stand, and I do not hear her very well. That causes me to almost miss my entrance, but I manage to catch her. The flautist seems as uncomfortable as me, but I know it will pass after a little while and we will get used to the stage set up. Of course, I hit the microphone at least three times with my bow and I see the sound engineers wincing every time, but I warned him this will happen, so I do not feel very guilty about it. As we go through the concert, the nerves settles, and we even manage to have fun. Of course, nothing goes as planned and the presenter asks us completely different questions, but at this point we actually use the moments we are not being filmed to laugh about all the mishaps. The only concern that still lingers is the fact we do not know what the audience hears and sees on the other side of the screen.
>
> After the live stream was done, I immediately turn on my phone and find a dozen messages, all saying it sounded good and my dress was amazing. What more can I wish for? I immediately try to catch some moments of the concert on Facebook just to make sure the sound quality is decent. I notice that the sound is not perfectly synchronised, but otherwise it all looks and sounds well. Now is the time to let out the breath I was holding.'[48]

This last paragraph perfectly illustrates the lack of immediate audience feedback we experienced during pandemic. Instead of applause at the end of the concert, we had to wait for the phone calls and comments on social media, watch our performance on the internet—only then would we have some feedback. Luckily, this time everything went well, and the version presented to the audience was very close to our expectations.

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[48] The diary entry was written a day after the live-streamed concert at The Latvian National Library, in Riga, Latvia on December 20th, 2021. Performers – Nyx Trio (Tatjana Ostrovska – violin, Ieva Sarja – piano, Anete Toca – flute).

Concert 3: Less is more

The third event I would like to discuss as part of my research project is a chamber music concert which took place on 13 April 2023, in Riga.[49] The event was initially planned as a radio broadcast and Facebook live-stream with an in-person audience. Since all Covid-related restrictions had long since been lifted, the main focus was on the in-person audience and the radio broadcast was just an additional feature, mostly because of a world premiere in our programme—a piece by Latvian composer Krists Auznieks. The event was intended as a multimedia project where music would interact with live Ebru art[50]—the Ebru artist would create her paintings while we perform. The idea was to emphasise the element of liveness because art, as opposed to music, is typically not created in front of the audience. I admit I had some concerns regarding how we would synchronise the process of painting with the music—the idea of painting by the clock seemed almost as uncomfortable as painting by numbers. However, I was interested to learn how the online audience would perceive this multimedia performance and whether the staged illusion of uniqueness would be enough to create an atmosphere of an artist's studio. Unfortunately, the live-stream was cancelled due to technical issues with the projector and other technical equipment of the hall. The only audience we were able to 'test' our theory on now was the in-person audience. When I read my preconcert diary later, I noticed that due to my previous experience, I (once again) already expected these issues to happen:

> Today is the day we finally met the technical director of the concert hall. Six months ago, we had a brief conversation where I explained the general idea of the concert—we wanted the ebru art to be projected on the back wall of the stage, since the hall is quite large and one screen, no matter how big, would not create the right

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[49] https://youtu.be/3XuWo4El1Dc -YouTube link to the Concert 3 (April 2023).

[50] Ebru, also known as paper marbling, is a Turkish art from Central Asia that dates to the Ottoman empire at the beginning of the 16th century. It is an art form where you paint directly on the surface of water in a shallow tray. Once you have finished your design, you place a sheet of paper on the surface to transfer the design from the water onto the paper. During the performance, the artist created the paintings in the real time and the process was transferred to the screen behind the musicians.

atmosphere. We were assured that all technical equipment was available in the hall. So, after today's technical rehearsal we were all confused, because apparently what we will have at the concert is a tiny screen above our heads on which the projections of Ebru art will be showed. Besides that, the Ebru artist's camera distorts colours, and the projected image looks completely different from the actual painting. To enhance the colours, the stage has to be almost completely dark, which means we will have some lights on our stands and that is all. This all means that we have to cancel our Facebook live-stream, because the visual quality of the event will not be good enough for the live-stream. We decide that radio broadcast will be good enough, and collectively sigh that once again the shortcomings of technology stand in the way of our creative ideas—this time not just in the online setting. Apparently, to successfully coexist and even complement each other, performers and technology have to be very sensitive to each other and, perhaps, not to expect too much...

During the concert, I caught myself thinking that our well-intentioned idea to introduce two art forms in order to create a slightly different, perhaps less formal atmosphere, has turned the concert into a confusing performance, where nobody understands why the Ebru art is there in the first place. If it complements the music or emphasises the character of musical pieces, then why are we musicians almost invisible because of the darkness? If the live performance of the Ebru artist is in the centre of performance and the music is simply the background, the recording of any more or less suitable music would suffice. The end result of this performance was very far from our expectations—mostly because of the technical execution, which was far from perfect. For a project like this to work, the technical side—the equipment, the technicians, video, and sound engineers have to be at the highest level. As soon as one or two links do not comply with the technical standards, the whole performance crumbles. My experience with performing during the pandemic has taught me to collaborate with everyone involved in the preparation of performance to achieve the best result and also it has made me realise how things can go wrong in so many ways, if one of the links is weak or non-existent. Another thing I learned is that the audience does not respond well to too many visual and audial stimuli—their attention gets lost in the many details of performance and it often leads to confusion. As it turned out after the concert, the majority of the audience and even some music critics shared our feelings: we received reviews praising our choice of repertoire (Latvian contemporary music written especially for our trio) and our performance, however the choice to add the Ebru art to the performance was questioned. Interestingly, one of the composers during the preconcert rehearsal expressed the wish not to include ebru art in the performance of his piece (see the video of Concert 3 at 10:22). He argued that he wrote the piece without any other additional art forms in mind, and he expected it to be performed that way. When I watch the video from the concert, I have to admit that I think he made the right decision, because his piece is the only one in which I can concentrate on the music without any distractions—this unexpected revelation came when I was listening to the radio broadcast:[51]

> 'Just listened to our concert on the radio. Twice. Why? Because I could not believe how 'clean' it felt. Free from all the problems we encountered during the preparation process, free from confusing little screen, visibly upset Ebru artist (understandably), dark stage, perplexed audience. Just beautiful, pure music. In high quality, thanks to the amazing sound engineers of Latvian Radio. What can we learn from this experience? Not to plan technically advanced performances without being sure we will have the resources to execute them? Maybe. Stop trying to complicate simple things that have worked for centuries? Certainly. Finally realise that it is close to impossible to please everyone in the audience—be it the in-person or online one? Most definitely. I assume this could be the most liberating thought I have had since the beginning of Covid...'

This revelation served as a turning point in my attitude towards live performances—after spending many years trying to decipher and understand the audience, the overwhelming challenges of the pandemic—temporary isolation, loss of connection with the audience, leaving our 'comfort zone' in attempts to create a performance that would work in an online setting—I felt the need to step back and return to simpler performance formats. Performing during Covid-19 without the in-person audience proved to be a stressful task for many musicians; that much was revealed in the interviews I conducted in 2021. At this point, I really must emphasise the fact that the unpredictability of the online audience created new kind of pressure for performers, which was not always easy to solve with the familiar practice and preparation techniques used before the pandemic.

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[51] An audio recording of Concert 3 (Latvian Radio broadcast) may be accessed via the following YouTube link: https://youtu.be/J1Go6ByF_oI.

In addition to the unpredictable nature of the performance, I discovered that thinking about the online audience often required me to focus more on the technical aspects of the performance than I would typically do during a live concert with an in-person audience; this time, I also had to consider the technology involved. This attention shift once again resembled the recording process more than a live concert, and sometimes caused situations where I did not have enough mental capacity to prioritise my artistic goals. In a sense, this placed me in a transitional state between the recording studio and the concert hall, and I was intrigued to explore the potential consequences of 'breaking the spell' and performing in a recording studio. Would the change of venue impact the way I perceived my own performance? What would happen if the two seemingly 'opposite' modalities—a recording studio and a stage of a concert hall—finally met? Which performance format—recording or live concert performance—would take over? The answers to these complex—and perhaps provocative—questions were what I tried to find in my last live-streamed concert.

Concert 4. Testing the 'opposites': a live concert in the recording studio

The final concert I would like to discuss happened on May 20, 2024. From the very early stages of my research, I hoped my version of the 'Doctoral Recital' would be able to merge the live concert experience with the one in the recording studio. Throughout the present document, I talk a lot about how musicians felt like they have been stuck between the live concert and the studio recording while performing without the in-person audience during Covid-19; I was curious to find out what would happen if the concert was actually held in the real recording studio *with the audience present*. The more I think about the experience of performing without an in-person audience, the more I am sure the distress (and sometimes outright panic) performers have experienced over the years might be in part due to the unbalancing of the factors that make up the act of communication that is the performance of Western art music. Or rather, of the factors we have come to expect in a live performance: an appropriate concert venue—or rather, what we have come to perceive as appropriate, such as a public hall which is designed acoustically and aesthetically for the performance of concerts—the audience, certain pre-concert and post-concert rituals, and so on. I wanted to find out if this concert would feel more like a recording than a live concert because of the venue—in so many ways *in*appropriate to acoustic performance—and how the resulting 'imbalance' would impact my experience.

When planning this final test-performance, I knew it would be a live-streamed event and the choice of the venue—a recording studio—seemed both personally symbolic and methodologically intriguing. Although I had performed there a couple times before (in 2009 and 2016), I was curious to know whether the experience would be different post-Covid. Before Covid-19 those concerts were broadcast on Latvian Radio, the video live-streaming began in 2020, as a result of Covid related restrictions. I still remember both concerts, because the venue made me very aware of the fact that my performance would be recorded, even more so than in many previous broadcast and live-streamed concerts in the 'actual' concert halls. The studio where the concerts happen is mostly used for classical music recordings and I have recorded there many times over my career, so when we—my chamber ensemble Nyx Trio—met for the first rehearsal, I immediately felt my mind preparing for a recording—the venue simply suggested it. All the recording equipment, the sound engineers' booth and 'recording' warning lights on the walls: everything pointed towards recording more than a live concert. This was the first time I had ever thought about the balance between the live performances and studio recordings, and the specific attributes of each situation. As I had hypothesised, the venue was indeed an important aspect in determining which performance mode would prevail, at least for me. If I remember correctly, in both pre-Covid performances my main concern had been about the quality of my own playing; since I had worked with the sound engineers of Latvian Radio before, I was sure the mediated quality of the sound will be excellent. Now, post-Covid, I am more aware of many other important aspects of a live-streamed concert—sound quality, video quality, position of microphones and cameras, lights, filming plan, the invisible audience behind the screen and many more. Another aspect I now always keep in mind is that the in-person audience and the online one might have completely different opinions about our performance, and I would only find out about the latter in the days after the concert.

This concert was different from the previous live-streamed concerts for several reasons. First and foremost, I was perceiving it somewhat as an experiment—I wanted to test my own theories about the impact of live-streaming, which I have discussed at length in this project. Also, as explained immediately above, I was interested in how this very specific venue would affect our perception of 'live' versus 'recorded'. My assumptions turned out to be correct—the venue indeed amplified the feeling of a recording, especially during the rehearsals. I remember thinking that the rehearsal resembled our very recent experience in the same studio, when we recorded our CD. I was almost expecting to hear the voice of the sound engineer through the speakers.

The repertoire we had chosen for this concert was very technically and mentally demanding. As outlined in an earlier section, due to the relatively rare combination of instruments—violin, flute and piano—our repertoire mostly consists of music by Latvian contemporary composers, which is often commissioned by, dedicated to our trio or written with us as potential performers in mind. This time we chose to expand our repertoire and alongside some freshly created pieces ('Delta' by Aleksandrs Avramecs and 'Flight' by Lolita Ritmanis) we included some earlier works (written between 1987 and 1989), also by Latvian composers, which represented different composition techniques and therefore kept us on our toes the whole concert. We later agreed that there had been no moment in this performance when we could rest and relax. I assume that the complexity of the repertoire was one of the reasons that, in the event, I found it difficult to concentrate on the in-person audience and spent most of the concert in my own world. I found it striking, though, how aware of the *invisible* audience I was: this was one of the rare occasions when I knew who was listening, and I had different (hopefully understandable!) reasons for wanting everything to go well.

As soon as I watched the concert, I realised that I was not very happy with the camera angles and closeups, although I should have been expecting that, having seen the position of the cameras before the concert. Unfortunately, the camera crew had arrived very late; there had been some misunderstanding about their schedule, and we did not have time to discuss the filming plan. At this point I already knew that a successful collaboration between camera crew and performers very often means making compromises, therefore we decided to concentrate on our performance instead. This time, my main concern was that there was no camera in the back of the studio, which meant that we rarely or never had a front view of the stage, instead mostly closeups or side angles; I was worried it would be distracting for the audience. As it turned out, it helped to create a special atmosphere, completely different from the one in the studio. If the in-person audience witnessed a hybrid performance, which resembled a recording more than a live concert due to the venue, recording equipment and presenter (who constantly reminded the audience that the concert was being live-streamed); the online audience saw a much more intimate type of performance which almost resembled a house-concert because of frequent closeups and conversations between pieces. Apparently, I was not the only one who felt this difference. A week later, I read two separate reviews, one written by a person who attended the concert in the studio and the other written by someone who saw the concert online. Both reviews were positive, although completely different.[52] The person who attended the concert in person focused mostly on the technical aspects of the programme, praised our bravery in choosing and delivering such a complex constellation of musical pieces, but also mentioned the fact that the concert was almost two hours long, which seemed excessive, and the audience was visibly tired at the end. The person who watched the concert online, by contrast, focused on the friendly atmosphere of the concert and praised our decision to invite the composers and let them introduce the audience to their music themselves, even though this format necessarily added to the unpredictability and length of the concert. According to this music critic, this was not an issue for the online audience, which supports my theory that the online audience feels more comfortable watching concerts in the comfort of their home. This means that they do not have to follow the norms of concertgoing.[53] While the etiquette of classical concerts has become less strict now, the main rule remains the same: do not disturb those around you. It is still strongly encouraged to remain quiet, clap at appropriate times, and preferably stay until the end of the concert if attending in person. If the concert is over an hour-and-a-half long without an intermission, these rules may become difficult to adhere to. In this situation, the online audience would have an advantage, being able to focus better on the performance. It seems reasonable to assume that this can ultimately only benefit the performer.

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[52] Both reviews were featured on the programme ‘Post Factum’ (Latvian Radio)—a weekly review of selected concerts in Latvia: https://klasika.lsm.lv/lv/raksts/post-factum/lnso-un-lso-sezonas-noslegums-kamer...-uzvedums-stihija-un-trio-.a192405/?highlight=nyx%20trio

[53] This issue is discussed more on page 31 of this document.

Another interesting and—to me—unexpected aspect of this concert had to do with an interview I gave on Latvian Radio a couple of days prior. The idea of having my final recital remotely and the choice of repertoire were the most discussed topics. I described this concert as our personal Everest because of the complexity of the programme, the venue and the element of live-streaming/recording. When asked about the newly written piece 'Delta' by young composer Aleksandrs Avramecs, I commented that he likes to play with the technical limits of each instrument and how, in his case, this risk-taking is justified, because it adds to the colour and atmosphere of the piece. As one of the examples I mentioned a passage of double harmonics with a trill—a violin technique which borders on impossible and took me hours to master. The presenter of the concert had heard the interview and told the story to the audience right before we had to perform this piece. At that moment I was understandably terrified, because now the attention of the whole audience was drawn to this passage. I realised that after four years of talking about risk-reducing in online performances, I had unintentionally turned the page and now actually applied a risk-taking approach to make my performance more intriguing to the audience. This approach is not the most common among classical performers, with a few exceptions, however several scholars have turned their attention to the effect that can be achieved this way and whether it is justified or not.[54] In this day and age, where it is becoming increasingly more difficult to capture the attention of the audience due to the overflow of information we are exposed to every day, I understand the necessity of taking risks in classical music. If done tastefully, it can be justified.

Overall, this concert made me realise once again that online concerts and in-person concerts are two completely different modes of performance, with different goals, and should be treated as such. Even the same performance can be perceived differently by viewers attending in person or watching online. This makes one wonder if, aside from the obvious fact that it happens in real time for everyone, it is truly the same performance. As a performer, I am now aware of this phenomenon, and it inevitably makes me wonder if the performance can ever be discussed without the involvement of the individual perception, biases, preferences, even physical surroundings of each listener. Does the performance even exist outside of our perception or ‘is it really only in the eye/ear of the beholder/listener’? And finally, do online viewers—our invisible audience—even perceive the live-stream concerts as an online extension of ‘the real thing’, an in-person concert? These questions have been on my mind for some time and I am curious to see how the online relationships between the listeners and the performers will unfold in the future.

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[54] David Clowney and Robert Rawlins, 'Pushing the Limits: Risk and Accomplishment in Musical Performance', *Contemporary Aesthetics,* Volume 12 (2014), http://hdl.handle.net/2027/spo.7523862.0012.015

The Invisible Audience

With the beginning of concerts without the in-person audience, many performers realised that, even though they had participated in live-streamed events before the pandemic, they had been concentrating mostly on the in-person audience, sometimes even forgetting about the ‘other’ audience behind the screen. When the ‘invisible audience’ became the only audience, many musicians struggled to connect with it—or even comprehend that there were people listening (or maybe not listening) about whom there was no way of knowing anything. Suddenly the only feedback musicians could get was delayed comments on social media or a call from someone who watched the live stream (or did they?). This kind of uncertainty was unprecedented, and musicians had to find a way to cope with the lack of immediate feedback.

The unpredictable listener

Everything posted on social media is seen by four times more people than we expect, and we can never be sure who will see or hear what we have posted. Michael Bernstein writes that ‘posting to a social network site is like speaking to an audience from behind a curtain. The audience remains invisible to the user. While the invitation list is known, the final attendance is not’.[55] More broadly, we might use the term ‘invisible audience’ to describe any situation in which one loses control over their creations and how they will be perceived or used as soon as a wider audience is allowed access to them online or via any form of technology. For example, the interests and expectations of an in-person audience can be predicted to a certain extent: we can assume that someone who committed the time, effort, and money to attend an in-person concert is interested in the music performed or performers themselves. They have made a conscious decision to attend and will most likely play by the ‘rules’. Also, the performers can be sure the audience will hear and see their performance as it was intended—that is to say, in the appropriate acoustic environment and without any distractions—and that they most likely will stay until the end of the performance and reward the artists with applause. When it comes to an online concert, especially those live-streamed via social media, we can only assume what the behaviour of the online audience might be based on our previous experience, however at the moment of performance we do not even know how many people are actually watching. We do not know what technology they are using, what they hear, or even whether they are paying attention or whether they have decided to disconnect to do other things. The only form of audience recognition in such concerts is ‘likes’ and comments, which of course can be contributed whether or not someone has listened carefully (or at all) to the entire performance (I know from personal experience how easy it is to be distracted from listening to and watching online performances).

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[55] Michael S. Bernstein, Eytan Bakshy, Moira Burke, and Brian Karrer, ‘Quantifying the Invisible Audience in Social Networks,’ in *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems* (New York: Association for Computing Machinery, 2013), 21, https://doi.org/10.1145/2470654.2470658

As musicians pointed out during the interviews, not having an actual audience in the concert venue had a significant effect on them. Many admitted it was the first time they even paid any attention to the audience behind the screen. They were suddenly very aware of the fact there was the audience watching behind the screen, but they could not interact with it in any way and that made them feel more exposed, mainly because they were unable to fully control how they sounded and looked. The fact that they had no idea what the audience was actually seeing and hearing, what technology they were using, and what their surroundings were like while they were listening made the musicians I interviewed more anxious during their live-streamed performances. It felt like a recording without being able to listen to the takes and choose the ones they preferred. The feeling was even more amplified by the fact that there was no audience present, and thus the only version of performance that would ever reach the listeners was the one created by the sound and video engineers, not by performers themselves and the natural acoustics of the venue.

Many musicians stated that they had never experienced this feeling during live-streamed concerts with audience present before the pandemic, which led me to the conclusion that the lack of emotional interaction and the immediate response of the audience might intensify performance anxiety. Musicians often name performing in front of an audience as one of the main factors causing performance anxiety,[56] of course, but simply removing the audience from view does not solve the problem of being nervous—to the contrary, the invisible audience can be even more intimidating.

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[56] Raluca Matei and Jane Ginsborg, ‘Music Performance Anxiety in Classical Musicians: What We Know about What Works’, *BJPsych International* 14, no. 2 (2017): 33–5.

Interviews confirmed that musicians often suffered from a sense of isolation and experienced higher levels of anxiety when they were separated from the audience and put in an unfamiliar place somewhere between the recording studio and live performance. Performing to the 'invisible audience' turned out to be more stressful and caused even stronger performance anxiety than an actual live concert in front of the audience.

Some of the performance anxiety performers felt must surely have been more generalized: after all, the pandemic—and especially the various lockdowns we experienced—provoked unprecedented levels of anxiety in the population as a whole.[57] The strangeness of this new disease, the lack of trustworthy information in many parts of the world, all the uncertainty and unpredictability of this unprecedented situation—lockdown and everything that came with it, including the sudden shift to home-schooling, close quarters, illness at home, and more—increased stress and anxiety levels for everyone. Performers no doubt felt many of these same anxieties alongside others more specific to their profession—and some of these, my research suggests, had to do with more or less unprecedented performance situations.

One of the possible reasons performers experienced so much anxiety when performing for 'invisible audiences' might stem from one of the main theories about social anxiety which asserts that social anxiety is related to overestimating the negative aspects of social interactions and underestimating the positive aspects. In other words, if we assume the cognitive models of social anxiety can be applied to the on-stage performance situation,[58] that could mean that the situation where performers are separated from the audience and find themselves in the rather confusing hybrid of live performance and recording could amplify the overestimation of negative aspects, because there are more factors outside musicians' control, and therefore increase the performance anxiety. I suspect that by not being physically in the same space and not being able to experience the moment of performance together, the connection between performer and listener is lost or—at best—transformed. In other words, the feeling of isolation during performance affects performers as much as listeners. Communication with the audience via any form of technology turns into a telephone game where the original message—the performance—often becomes unrecognisable until it reaches the listener.

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[57] Abi Adams-Prassl, Teodora Boneva, Marta Golin, Christopher Rauh, 'The Impact of the Coronavirus Lockdown on Mental Health: Evidence from the United States', *Economic Policy* 37, no. 109 (January 2022): 139–55.

[58] David M. Clark and Adrian Wells, 'A cognitive model of social phobia', in *Social phobia: Diagnosis, assessment and treatment*, edited by Richard Heimberg, 69-93. New York: The Guilford Press, 1995.

Pressure, control, feedback—the stressful trifecta of live-streamed performances

Although the initial set of questions (Appendix A) was partly inspired by my own experience, it was very clearly structured around different performance situations without any indications of my personal preferences or opinions. However, while analysing the interviews and during the interviewing process itself, I noticed that my peers reported many of the same strong emotions I had experienced while performing during the pandemic. I have thus tried to take into consideration the emotional state of the performers I interviewed, many of whom displayed anxiety, stress, uncertainty. Their answers were often very emotional, which serves as an indication of the real impact of this unprecedented situation on the performers. Alongside this wider observation, three main themes or categories stood out in the process of transcribing and analysing the interviews:

- The pressure to deliver the perfect performance without being able to control many important aspects of performance and without any immediate feedback.
- Not knowing what the audience expects from the online performance and if what has been offered is what the audience wants to hear and see.
- Not being able to relate to the feedback that comes later in form of texts, calls, social media comments.

The shift to online events also shifted the perspective of many performers—once the natural bond between the listener and the performer was so abruptly broken, many musicians struggled to find the immediate replacement to it. What they felt instead was often unexplainable anxiety and ‘feeling of emptiness’. The word that stood out the most in almost every interview was ‘pressure’, which is used now to describe more than just the usual pressure to deliver the best possible performance. In addition to this familiar type of pressure we as musicians have learned to deal with, the word now seemed to be linked a lot to another idea: ‘control’, and especially ‘lack of control’. Considering the fact that live-streamed concerts existed before the pandemic, I was interested to pinpoint the reason why these concerts suddenly felt so awkward for many performers. The most obvious explanation was the lack of audience: the lack of an audience performers could interact with. There was more to it, though: many performers suddenly realised they had been ignoring the invisible audience in the live-streamed concerts before the pandemic and concentrating only on the audience in the concert hall. Now, when the audience had been ‘removed’, many performers felt the pressure to connect with the audience behind the screen and they struggled to find the ways how to effectively accomplish that.

The link between the words ‘pressure’ and ‘control’ seemed very interesting to me and I tried to trace the words musicians used to describe both of these concepts and find the connection (if any) between them. A shared set of technical and emotional aspects—such as sound quality, technical precision, phrasing, interpretation, and visual presentation—undoubtedly determines the quality of every performance. The pressure to deliver the ‘perfect’ performance is by no means a new feeling for professional performers, and the most effective way to ensure the best result is to have complete control over all aspects of performance—to practice enough, to have as much information as possible about the background of the musical piece and composer, to familiarize themselves with the acoustics of the concert venue, to make sure the intended concert outfit is comfortable and aesthetically appropriate. Every performer has his or her own individual list of actions to follow. The feedback of the audience in the form of applause, flowers and requested encores serves as confirmation that the preparation process and the performance had been successful. So confirmed the conductor Guntis Kuzma, one of my interviewees, who said: ‘To ensure the performance goes smoothly, all the necessary ‘homework’ has to be done. That is the only way to be prepared for the expected and the unexpected’.

Up to this point, this equation was working for most performers: ‘pressure’ was effectively replaced with ‘control’. What happened when live-streamed events without in-person audiences took over the music world? Why did so many musicians suddenly struggle to apply ‘control’ to deal with the ‘pressure’? The musicians I spoke with pointed out that it felt like they could not control many important aspects of their performance, including the sound quality via the live-stream, the technology people are using to watch the live-stream, and the visual presentation of performance. As I described in more detail in the previous section, although each of the many live-streamed performances I participated in throughout the pandemic came with its own anxieties, the absence of an audience in the concert venue had the most significant effect on the way I perceived the whole performing process. During the interviews, many musicians confessed that they too were all too aware of the invisible audience watching behind the screen and that made them feel more exposed for the reasons already listed, mainly to do with not being able to control their sound and image. As performers, we usually assume that to a certain point we have at least some control over the sound we produce. We can always get an immediate report from someone about the sound in the hall during a rehearsal. In theory, the same applies to the live-streamed performance—we can ask to hear the sound samples and even ask for a filming plan before performance. What we cannot predict is the devices people will watch the live-stream on and their surroundings, which means that our listeners will not have the unified sound of the concert hall and we ultimately have no control over the quality of sound they will hear. This anxiety emerged in many of the interviews I conducted, including one with the violinist Georgy Sarkisyan, who said: ‘A live-stream is something which is out of your control and might make you sound bad because of the unprofessional work of the sound crew. This makes you think about that fact and even correct your performance to suit it well for streaming problems, pay more attention to sound clarity, intonation’.

For my part, I noticed that not being able to control the end result of my playing made me more anxious during the performance. It felt like a recording without being able to listen to the takes and choose the ones I prefer. I had never experienced this feeling during live-streamed concerts with an in-person audience before the pandemic, which led me to the conclusion that the lack of emotional interaction and the immediate response of the audience—at least in my case—intensifies performance anxiety. As I discussed in the previous chapters, musicians often refer to performing in front of an audience as one of the main factors causing performance anxiety; however, by ‘removing’ the audience, the problem of being nervous apparently is not necessarily solved; indeed, the invisible audience can be even more intimidating.

While analysing the interview answers, I was very aware that the final statements, on which I was planning to base my survey, would turn out to be very personal, emotional, and—under the circumstances—often negative. As I mentioned before, the interviews were held at the very epicentre of the Covid-19 pandemic, which inevitably affected the results. Should the interviews be repeated in any period after the pandemic, the results might well be different. However, I believe that the value of the interviews lies in their specificity: at the moment of the interviews, the performers actually lived the life they talked about; they shared their reality; it was not a reflection or rationalisation of some period in the past. Even if the answers might sometimes feel too personal, biased, subjective, or even negative, therefore, they nevertheless tell a story of performing during the Covid-19 pandemic that I recognise as true.

A Look in the Rear-view Mirror: Surveying Performers

Eighteen months after my last interview, in October 2022, I conducted a survey targeting professional performers from various backgrounds, including instrumentalists, singers, conductors, actors, dancers, and other performing arts professionals who had significant experience with live-streamed events during the Covid-19 pandemic. The primary objective of this survey was to disseminate the results to a larger group of performers, extending far beyond my personal network. Consequently, I constructed it as a compilation of statements I collected throughout the interview process. This might at first seem like an unconventional approach to surveying; however, it was my deliberate choice. More and more researchers in the arts, especially in practice-based research, prefer to think of surveying as much more a qualitative, rather than quantitative, research method. Researchers are increasingly turning to this kind of survey as a tool to collect more insightful and therefore more valuable data.[59] In my case, I opted to adopt an emic or 'insider' perspective, tailoring the interview questions and survey to a specific group of respondents, drawing from my own artistic practice. To achieve this goal, I had to think creatively: a neutral gathering of information would not suffice, because what I was looking for was specific, knowledge-based information that only a certain group of people could provide. I chose to approach this survey from an 'insider' perspective, formulating the questions with the target audience in mind—professional performers, a group I myself belong to. I immediately realised the challenge of balancing out some of the seemingly negative statements, which might have seemed too leading for a survey; however, these statements were a direct reflection of how the performers felt during the Covid-19 and therefore this apparent negative bias is justified. Of course, I could have attempted to balance it out by asking more neutral or positive questions during the survey's construction, but doing so would not have accurately represented the authentic, objective results of the interviews.

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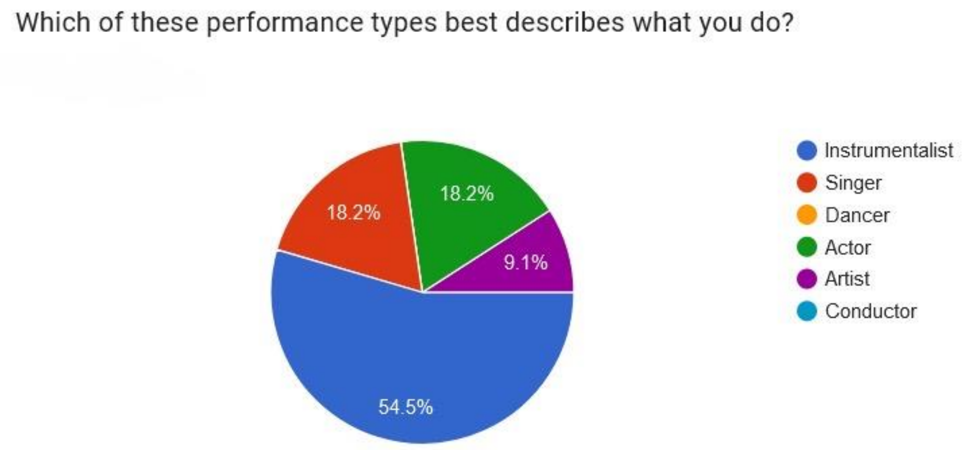
[59] Virginia Braun, Victoria Clarke, Elicia Boulton, Louise Davey, and Charlotte McEvoy, 2020, "The Online Survey as a *Qualitative* Research Tool," *International Journal of Social Research Methodology* 24 (6): 641–54.

With this approach, I was able to incorporate more complex questions, confident that the potential participants' professional knowledge and background would enable them to understand the questions as intended and provide continuity with the interview statements. In some ways, my intention was to compress the interview format into a survey and make this experience as personal as possible. Therefore, each question offered a chance for the participants to provide their own answer alongside the detailed options already provided in the survey. I also included many open-ended questions and optional questions, which required longer, more in-depth answers. This survey showed me (both in its design and in its results) that there is a way to survey a group of people with a specific body of knowledge in a way that allows them to speak freely and ensures the authenticity of the results.

The survey was circulated on social media and among several professional orchestras in two languages, English and Latvian. The survey was active for 30 days and 60 respondents took part in it. As expected, most respondents were instrumentalists and singers, but I was very happy to see that 27.3% (or 16 people) represented other fields of performing arts (see Fig.1 for a complete breakdown of how performers described themselves).

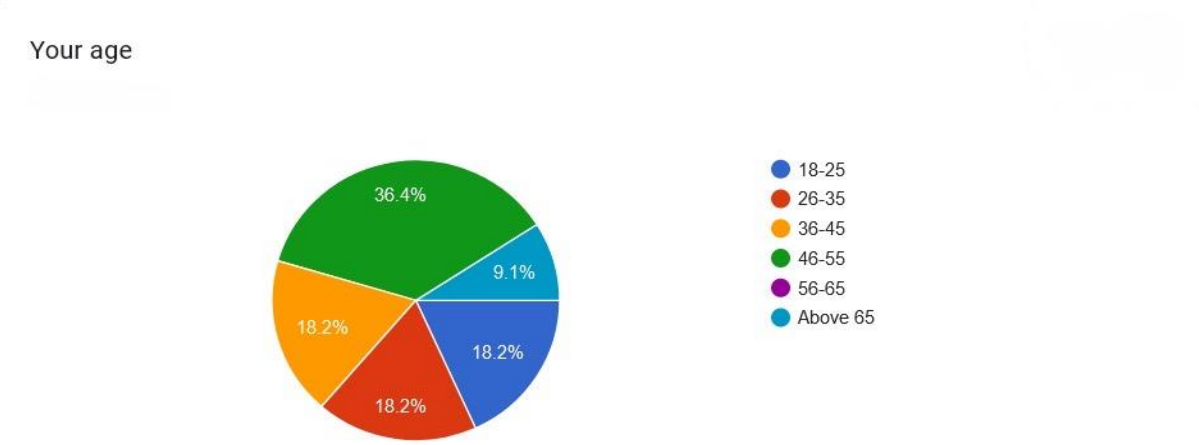
Figure 1: Breakdown of Performance Professions Chosen by Survey Respondents



Since the survey was specifically designed for performers, the response rate was understandably lower than if it had been open to all members of public. Therefore, I believe 60 respondents (which is four times more than the number of performers participating in the interview process, where every participant spent 60 to 90 minutes speaking with me about their experiences with live-streaming technologies) is sufficient to gain a wider understanding of the thought processes of performers when it comes to live-streamed events.

The first part of the survey was designed to collect general information about the respondents such as their age, gender, occupation (which area of performing arts the respondents most associate themselves with), and previous experience with live-streamed performances. In terms of age, almost all demographic groups were represented in this survey (see. Fig.2), which indicates performance activities happened in all age groups, despite Covid-19 restrictions.

Figure 2: Breakdown of Age Groups of the Survey Respondents



Before the main part of the survey, which concentrated mostly on performers' experience during the Covid-19 pandemic, I decided to include a question about pre-pandemic experience because it would help me to determine how many of the respondents only turned to live-streaming during the pandemic and how many performed in some sort of online or remote setting before. More than 80% of all respondents revealed they had participated in broadcasted or live-streamed performances before the pandemic and only 12% stated they had never participated in any form of online performance, which meant that most of the respondents were well able to compare the two forms of live-streamed performances—with and without an in-person audience.

The main part of the survey was constructed as a combination of questions with multiple answers, open-ended questions, and scaled response questions to give the respondents choice about how they would prefer to answer the questions and how much they want to reveal. Most of the questions with multiple answers were constructed from the statements that crystallised during my analysis of the interviews, but participants were encouraged to provide their own answer if they could not relate to any of the given answers. This approach helped to increase the objectivity of the results and avoid performance-related biases.[60]

One of the main themes that emerged during my interviews was the concept of short-term and long-term feedback after the performance. In the in-person concert setting the feedback usually comes immediately after the performance. The emotional synergy between the performer and the audience is often palpable and every experienced performer can ‘read’ the mood of the audience during and especially after the performance. In online concert settings, the situation changes—the immediate audience feedback is non-existent, and thus performers have to wait until their ‘invisible’ audience lets them know their verdict via reviews and interactions on social media. Interviews revealed that the lack of immediate feedback was one of the main stress factors for performers, because this part of the performance had previously served as an indicator of the quality of the performance. For example, one musician I interviewed said: ‘I perform in front of a live audience because I need the audience’s feedback in the moment to help me understand if what I'm doing is understandable and capturing’.[61] The survey confirmed that although both types of feedback were extremely important for performers, immediate feedback was the most crucial part of the performing experience, because it typically provided encouragement and affirmation. One survey respondent wrote, for example: 'Though we are required to have the basic, internal confidence in our work, the audience feedback is what justifies and actualises our own feelings towards our work and makes real our impact on the people or the world.'[62]

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[60] The full list of questions can be found in Appendix B.

[61] Interview with soprano Anta Jankovska, conducted by Tatjana Ostrovska, 13 April 2021.

One striking thing that emerged in the interviews was that most performers had only finally noticed the online audience in the live-streamed performances they gave during the Covid-19 pandemic. At some point in almost every interview, performers admitted that they had not paid much attention to the recording equipment in the concert hall before the pandemic: although they acknowledged its presence, it was the in-person audience who received their undivided attention. Such views resonated with my own pre-pandemic experience, though I suspected that interviewees' answers could have been affected by the fact that our interviews only took place *after* performers had already been separated from the audience (in other words, performers—myself included—were looking back on pre-pandemic performance environments through slightly rose-tinged glasses). I was curious if the survey would confirm that, in the presence of the audience, performers did indeed devote their full attention to the people in the concert hall, often without realising that the recording equipment represents an invisible audience—people, who will see and hear the performance on the other side of the screen.

The survey revealed that most respondents had always been aware of the recording equipment despite the in-person audience and, indeed, that the sheer presence of the recording equipment had always made them feel more self-conscious. The survey further confirmed that although most performers had been aware of the recording equipment in their in-person events with a live-streamed component before the start of the pandemic, they became even more aware of it throughout the pandemic. I interpret this shift as a result of the pandemic experience for many performers: the microphones in the concert hall took on a new meaning as silent representations of the invisible part of the audience. In the consciousness of performers, the microphones and cameras transformed from meaningless objects to important instruments in expanding the performance beyond the walls of the concert hall. Taken together, such responses confirmed my assumption that my interviewees' perspectives were conditioned by their early pandemic experiences: the interviews were conducted at a moment when Covid-19 restrictions were at their most severe, and when live-streamed performances, especially without the in-person audience, were still relatively new and were seen as a temporary solution, not as a major, transformational experience. The survey happened almost eighteen months later, when in-person events had resumed, and the experiences of the pandemic time seemed to be the thing of the past.

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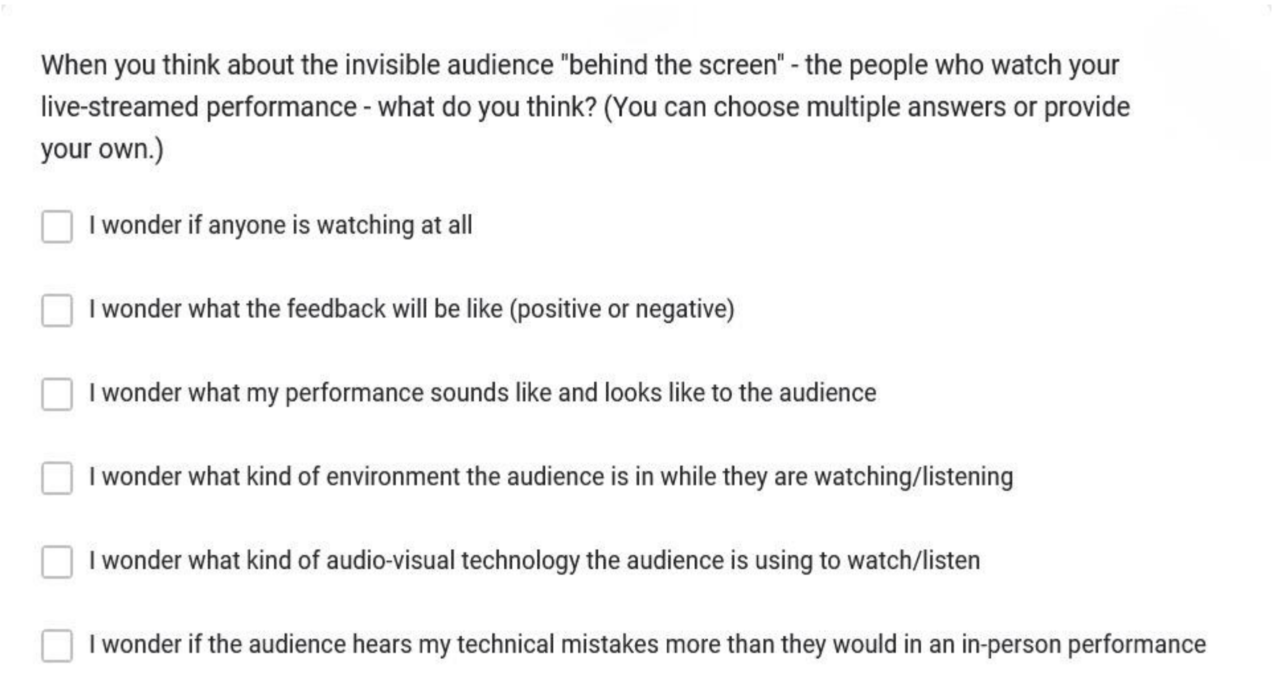
[62] Survey respondent no. 7.

The invisible audience and its new status in the classical music field has been one of the most *visible* effects of the pandemic. It is not yet known if the online audience will retain its newfound power, but it has certainly announced itself loudly and performers have been forced to accept that the almost exclusively in-person events of the pre-pandemic era were a choice or tradition rather than the only ‘real’ way to perform. As interviews revealed, the ‘first date’ with the invisible audience, especially without the buffer provided by familiar in-person audiences, was not always the best experience for many performers. It was completely unfamiliar territory and performers were often confused and unsure of how to connect with the audience.

In the survey, I represented the experiences performers described during their interviews with four multiple choice questions. Although these questions were based on the interview responses, it was important to me to create open-ended questions, so the survey participants could choose the one that described their experience the best. Alternatively, they could provide their own answer, which many of them did. The first question aimed to find out how the respondents imagined their online audiences (see Fig. 3).

Figure 3: Survey Question no. 12



When you think about the invisible audience "behind the screen" - the people who watch your live-streamed performance - what do you think? (You can choose multiple answers or provide your own.)

☐ I wonder if anyone is watching at all

☐ I wonder what the feedback will be like (positive or negative)

☐ I wonder what my performance sounds like and looks like to the audience

☐ I wonder what kind of environment the audience is in while they are watching/listening

☐ I wonder what kind of audio-visual technology the audience is using to watch/listen

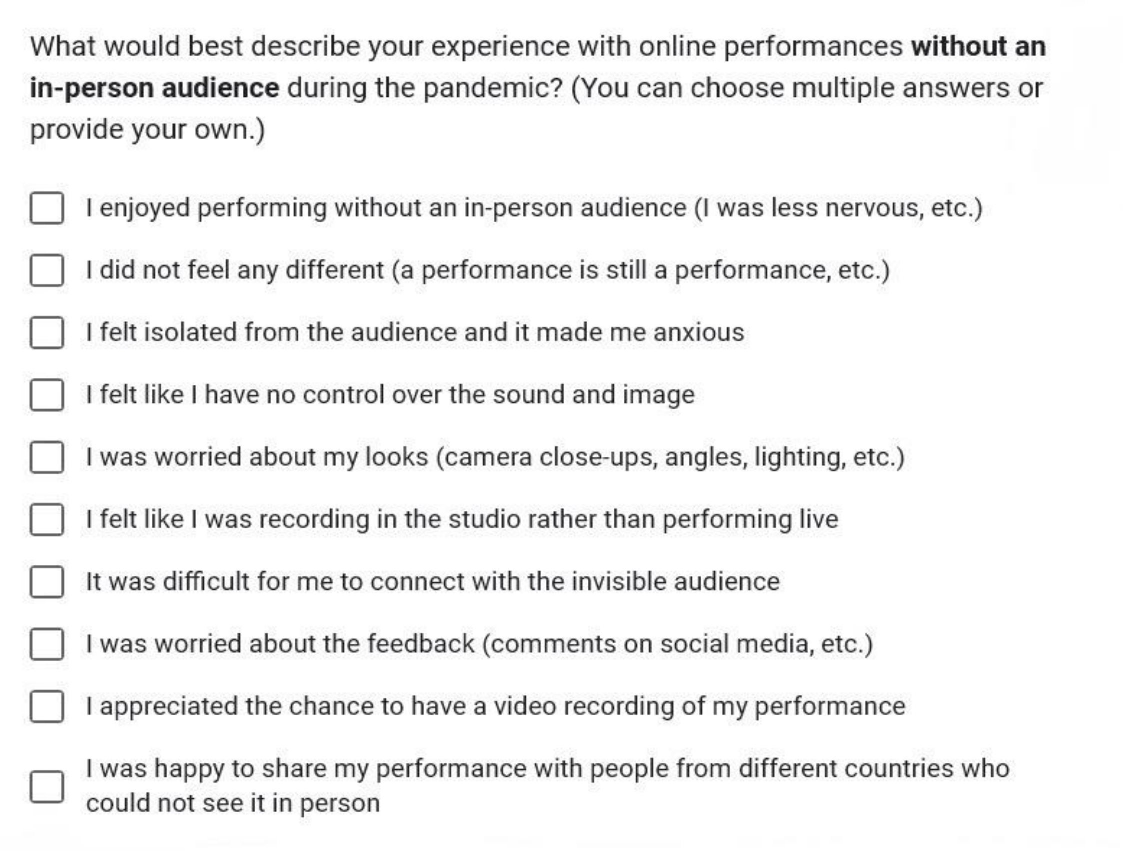
☐ I wonder if the audience hears my technical mistakes more than they would in an in-person performance

The answers to this question and the fact that this question even had to be asked marks a very important turning point in performers' perception—before the pandemic performers concentrated mostly on the in-person audience and even if the event was live-streamed or broadcasted, it was perceived as a live event with microphones. The invisible audience and its expectations were undefined and, for the most part, unimportant, because the main vote was reserved for the in-person audience. However, as noted above, when the online audience suddenly became the only audience, performers were not ready. As the answers to this question were formed from the interview statements, we can clearly see how uninformed many performers were at the beginning of pandemic. The answers revealed that performers were most concerned about how their performance looked and sounded to the audience, which once again indicates how severely performers were affected by the limited control they had over their performance. 36% admitted they wonder if anyone is watching at all, which shows how uncomfortable the absence of an in-person audience or rather the inability to connect with the invisible audience was. I personally was most concerned about what technology the listeners used, mostly because it affects the sound quality of performance. The speakers of phones and even laptops distort the sound, and it can turn the live-stream into an unpleasant experience for listeners, which can result in bad reviews. The environment of the listener at the time of performance also plays a significant role and is another aspect of online performances we, performers (not to mention the listeners themselves, sometimes) have no control over. The survey revealed 27% of respondents admitted this was an issue they think about when it comes to the online audience.

During the interviews, performers shared their experiences with live-streamed events without the in-person audience during the pandemic. The responses were very diverse—performing without the in-person audience caused a lot of stress, but there were also positive aspects. The uncertainty and feeling of isolation were among the most popular answers, along with the lack of immediate feedback and inability to form an emotional bond with the invisible audience. However, I was happy to learn many performers saw online events as an opportunity to connect with wider audiences and share their work with people who would not be able to attend the event in person. Another positive aspect was that performances without the in-person audience usually turned into decent recordings—many performers indicated that they now have a richer collection of high-quality video recordings of their performances. Many performers, to their own surprise, realised that performing in a concert setting without the in-person audience freed them from the performance anxiety, but at the same time did not take anything away from the excitement of performing live. My experience was a bit different—the lack of in-person audience prompted me to concentrate on myself and my colleagues on stage. As it turned out, narrowing my focus from the whole concert hall to the stage was a positive shift for me and helped me minimize performance anxiety.

Under the regular circumstances, it most likely would not occur to me that not concentrating on the audience can be a liberating experience, considering the fact most performers are ‘trained’ to rely on the external validation. I distilled all these statements and revelations down in another survey question (see Fig.4).

Figure 4: Survey Question no. 16



What would best describe your experience with online performances **without an in-person audience** during the pandemic? (You can choose multiple answers or provide your own.)

☐ I enjoyed performing without an in-person audience (I was less nervous, etc.)

☐ I did not feel any different (a performance is still a performance, etc.)

☐ I felt isolated from the audience and it made me anxious

☐ I felt like I have no control over the sound and image

☐ I was worried about my looks (camera close-ups, angles, lighting, etc.)

☐ I felt like I was recording in the studio rather than performing live

☐ It was difficult for me to connect with the invisible audience

☐ I was worried about the feedback (comments on social media, etc.)

☐ I appreciated the chance to have a video recording of my performance

☐ I was happy to share my performance with people from different countries who could not see it in person

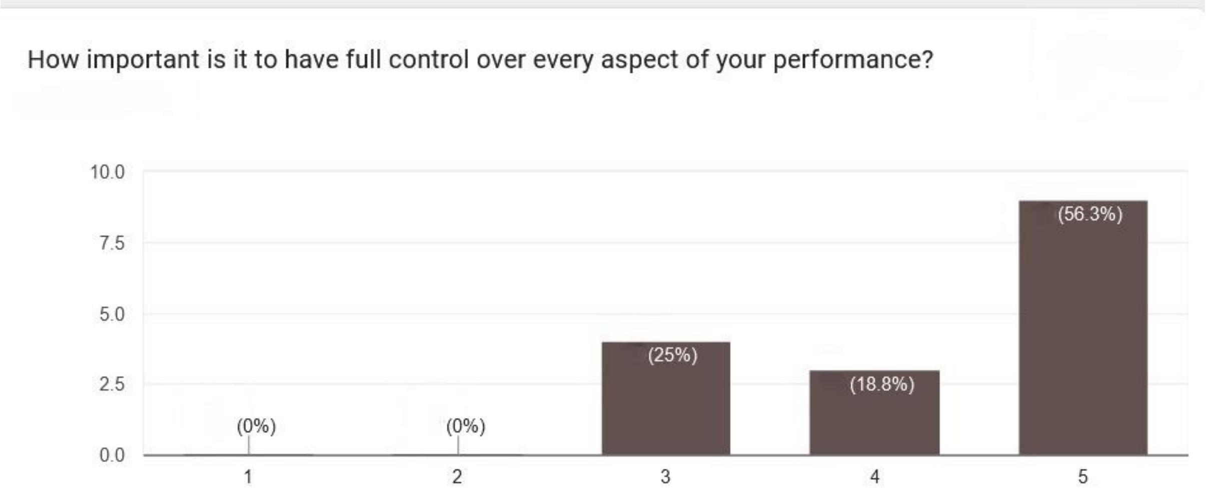
I was very interested in what the answers would reveal, because this was one of the most diverse questions, mostly because of its very personal nature. The results revealed that most respondents recognised live-streamed events as an opportunity to share their work with the audiences at home, to be able to stay connected and involved, especially during a time when social interactions of any kind suddenly became a rarity. Online events, especially the ones live-streamed in real time, offered a sense of community to the isolated listeners. I believe live-streamed events were especially important during the pandemic—it was an opportunity for our audience to experience art in a virtually shared space with other people.

When it comes to live-streams, one of my biggest fears is how close the camera will be to my face both physically and in terms of close-ups that will be seen on the screen. The results revealed I am not alone—a relatively large part of respondents (27.3%) indicated they were concerned about how they look on camera. At first, this revelation might seem unexpected, however it has a perfectly good explanation—classical performers are generally not used to camera close-ups, different angles, and everything else what comes with the process of filming—we can safely ‘hide’ behind the distance from stage to first row and the audience usually cannot concentrate on the details of our appearance (and even if they try, the stage lights protect us from noticing). In my experience, the close-ups seemed almost like an intrusion into my personal space, I was not ready to be on full screen display during my performance. However, with time I realised close-ups helped me to convey my musical ideas, which was especially important in online settings, due to the lack of interaction with the audience. I think it was important for the audience to see my emotions up close, because in a way it filled the gap created by them not being physically in the same place as me.

I was intrigued to learn that a significant percentage of respondents enjoyed performing without the in-person audience, because it reduced performance anxiety levels. Some indicated they did not feel any different without the in-person audience—they perceived this experience as any live performance. In my personal experience, as I mentioned in the previous chapters, the absence of the in-person audience put me in the strange, almost ‘limbo-like’ place between the studio recording and concert performance, which was a completely new feeling that required some time to adjust to.

One of the most significant and intriguing themes for me was the relation between the pressure performers experience and the control they usually exert to deliver high-quality performances. Under regular circumstances this principle—to replace the pressure with control and eliminate any performance anxiety by being prepared technically and mentally—worked well for most performers. However, not being able to control many other important aspects of performance during live-streams destroyed this formula and, in a way, disarmed the performers. It was a challenge to incorporate such a complex theme into a survey without sounding provocative or misleading. I decided to approach this via a relatively straightforward question (see Fig. 5).

Figure 5: Survey Question no. 13



Respondents stated that it was indeed important to them to control every aspect of performance, which was the answer I expected professional performers would most likely give without hesitation. Performing at the highest level undoubtedly is a goal of every performer; every unsuccessful performance can be a step back career-wise. As one of the respondents stated: 'It is important in terms of reputation.'[63] Reputation is everything in the world of performing arts, alongside reliability, stamina and emotional maturity. The Covid-19 pandemic shook the confidence of performers, especially those who were relying solely on their ability to control every aspect of their performance. It became a challenge to deliver a 'perfect' performance without being able to control their sound and image.

Interviews revealed that musicians have a set of rules they follow in preparation for any live performance (see Fig. 6).

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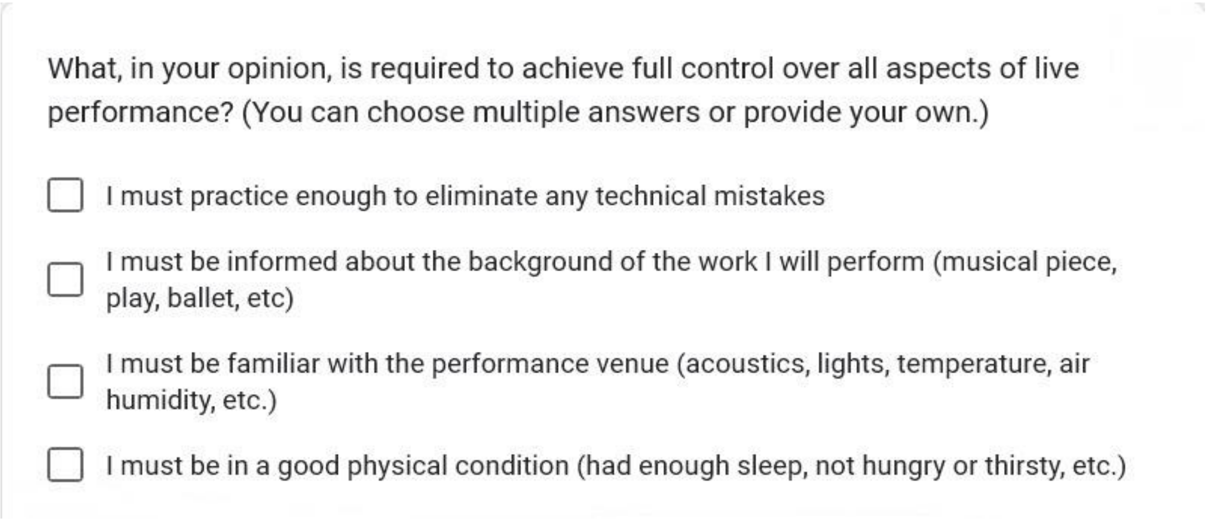
[63] Survey respondent no. 15.

Figure 6: Survey Question no. 13



What, in your opinion, is required to achieve full control over all aspects of live performance? (You can choose multiple answers or provide your own.)

☐ I must practice enough to eliminate any technical mistakes

☐ I must be informed about the background of the work I will perform (musical piece, play, ballet, etc)

☐ I must be familiar with the performance venue (acoustics, lights, temperature, air humidity, etc.)

☐ I must be in a good physical condition (had enough sleep, not hungry or thirsty, etc.)

As I was expecting, respondents named daily practicing as the most important factor in achieving the full control during performance. In my opinion, all statements are almost equally important, but obviously there are more factors which could potentially lead to this goal. One of the most crucial skills for performers is flexibility—no matter what the circumstances are, we are expected to adapt and deliver our best. Therefore, being emotionally and mentally ready for any unexpected situation that might occur during the performance is equally important as being technically prepared. One respondent put it this way: 'I must have the skills and preparation to deal with any situation I find myself in. It's less about the perfection and more about flexibility.'[64]

The next question (see Fig. 7) was constructed with the specific goal in mind. By asking about respondents' overall attitude towards the concept of control in performance, I was hoping to pave the way for the more specific question about online events, which might look straightforward at first, but is very complex. If we assume that control can be achieved through preparation and flexibility, the strong implication is that live-streamed performances are impossible to control, mostly because there is a middleman between the performer and the audience—sound engineer and the technology itself, which by default makes it impossible to be fully in charge.

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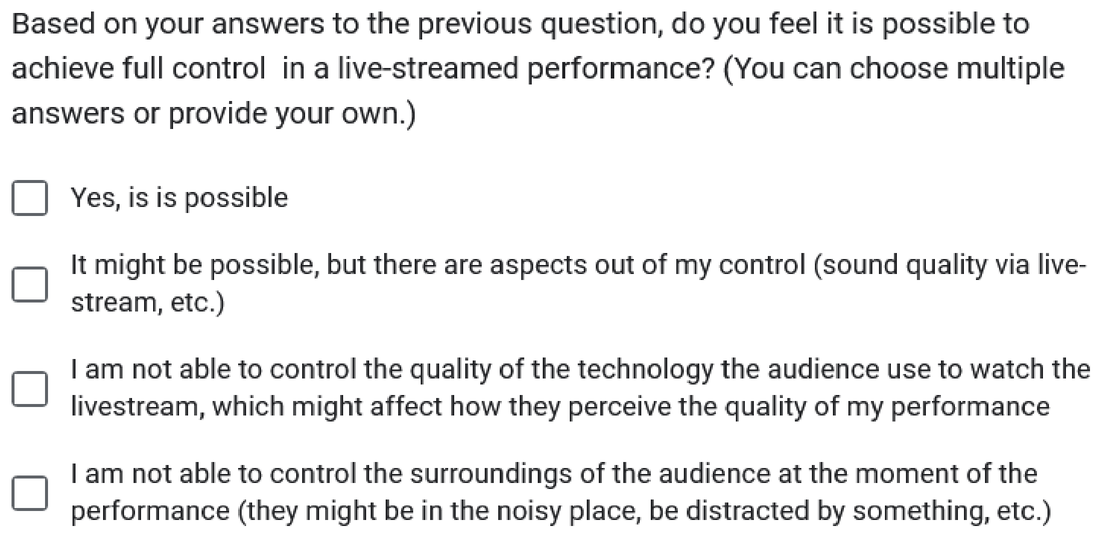
[64] Survey respondent no. 34.

Figure 7: Survey Question no. 14



Based on your answers to the previous question, do you feel it is possible to achieve full control in a live-streamed performance? (You can choose multiple answers or provide your own.)

☐ Yes, is is possible

☐ It might be possible, but there are aspects out of my control (sound quality via live-stream, etc.)

☐ I am not able to control the quality of the technology the audience use to watch the livestream, which might affect how they perceive the quality of my performance

☐ I am not able to control the surroundings of the audience at the moment of the performance (they might be in the noisy place, be distracted by something, etc.)

The answers performers gave were not surprising and confirmed the statements of the interviews—the majority did feel like control had been taken away from them as long as technology stood between them and the audience. However, 27% of respondents were confident in their ability to remain fully in charge in an online concert setting. I suspect that for many of these performers the concept of control in a live performance was never the priority. As one of the respondents stated: 'Control is not the framework I find useful. I own my craftmanship, not the audience reception.'[65]

This statement resonated with my own thoughts—when I realised I could no longer control how I am perceived by the audience, my focus unintentionally shifted away from it. I found myself concentrating more on myself and my on-stage colleagues, on music itself. I was not performing for the audience, I was simply performing and not expecting any feedback or validation, because the end result of performance was out of my control.

In terms of my research project the most important question was: 'Has the pandemic and performing without the in-person audience changed the attitude of performers towards live performance in any way?' Although not enough time has passed to observe any long-term effects, I most definitely have some revelations to take away from this unprecedented situation. To find out if my fellow performers feel the same way, I included this question as an optional one in the survey. The ones who decided to share their opinions stated that they appreciate the in-person audience and live concerts more now, mostly because they realised it can be so easily taken away. Some of the respondents revealed that they perceive audience differently now, which resonated with my own thoughts. The time without the audience had made me self-sufficient when it comes to performing—I no longer rely on external stimuli and validation of the audience, which makes me less exposed to anxiety and stress, and improves my performance.

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[65] Survey respondent no. 46.

Overall, the findings of the survey mirrored the interview statements. Respondents indicated the same positive and negative aspects of live-streamed events during the pandemic as their peers did in the interviews, naming the lack of control as the most stressful aspect and the ability to share their work with larger audiences as the most rewarding one. The difference in time between the interviews and survey did not significantly change the way performers felt about the live-streamed events during the pandemic.

Conclusion

The responses of the participants in the interviews and the surveys and my own experience documented in the form of reflective writing and video diaries together reveal that the period of the pandemic has had a significant and apparently lasting effect on both performers and audiences. Although live events have resumed everywhere in the world, there are many aspects of performance that are perceived differently now. The interview responses of the performers revealed a notable shift in their attitude towards the audience. Many musicians named the lack of emotional feedback from the listeners as the main challenge while performing without an actual audience. Also, the responses of participants demonstrated that although they were aware of the audience watching and listening to their performance at home, it was difficult to fully comprehend it. Once the audience were no longer present in the concert hall, many performers, even those who have had an experience with the live-streamed concerts before the pandemic, realised the importance of the 'invisible audience', which now had to be acknowledged as an undeniable force in determining the success of the performance. My own experience shows that I perceive the audience differently now—before the pandemic I often found myself thinking of the audience as participants or team players with the common goal—to create the performance, the occasion, therefore the attitude of the audience played a crucial role for me. However, during the pandemic the direct interaction with listeners was limited or non-existent, therefore I have learned to interact more with the musicians on stage and do not concentrate on the audience as much as I did before. In a way the audience is still behind the invisible screen for me now. When I think back to the beginning of the Covid-19 pandemic and all the restrictions we experienced as musicians (and simply as human beings), I remember how lost and even terrified we felt. The concert halls were closed (for how long no one knew) and we were only beginning to have a sense of how it would affect everyone mentally and financially: it should come as no surprise that my and others' initial reactions to the situation were mostly negative—we performers were not ready, every concert was a challenge, and the feedback, no matter how positive, sometimes was not enough to feel good about performing without the audience. Many performers stopped performing altogether, finding themselves unable to adjust to the new rules. The rest of us, who tried to keep going, learned new ways to connect with the audience and found our own coping mechanisms, which follow us to this day. What strikes me most clearly, looking back, is how resilient we have become: we have developed new skills and have found new ways to connect to the audience which was impossible before the pandemic. Now that I have reached the end of this research project, I realise that the outcome is, by and large, mostly positive.

It is too early to predict the long-term effects of this situation—will live-streamed performances return to their pre-pandemic form as an extension to or substitute for live, in-person events, or will audiences and performers be interested in maintaining online events as a separate, independent mode of performance, considering their many advantages? The most significant one is that online events allow performers to reach more people—live-streamed performance is more affordable in terms of both money and time invested by the listeners. Therefore, online performances could be the way to involve new social groups—such as young people, and those who are not able to afford to attend live events for financial, health or mobility reasons. Also, online concerts could reach listeners who live in more obscure places, far from any concert hall or culture venue. Another group that could benefit from online concerts are parents of small children, who are often unable to attend the concerts and, as my own experience suggests, parents of neurodivergent children who are simply unable to sit through the two hours of concert, but still undoubtedly would benefit from hearing it. For example, many children with ADHD find it impossible to sit still and be quiet for longer than 20–30 minutes, even in their teen years, due to the lack of impulse control; they often need more visual and auditory stimulation than a standard classical concert can offer. All of this makes it very difficult for them to attend a concert in person. My own experience with my son suggests that live-streamed concerts make a huge difference—he enjoys the fact that he can watch the concert in real time (for some reason it is important to him) without being pressured to conform to the rules of concert-going, which he is often unable to do. I am sure many parents of neurodivergent children would agree with me. Striking a balance between introducing a neurodivergent child to various social events, including classical concerts, and not disturbing others who are trying to enjoy the event in more traditional ways is always a challenging task. This question has been widely discussed, and I believe live-streamed concerts can often be an answer.

Performers themselves could benefit from the increased number of recorded performances—before the pandemic most live concerts were not filmed therefore performers often did not have any documented evidence of their performance. This is especially important for young musicians at the beginning of their careers, since recorded performances are often a requirement in auditions and competitions. The recording from an actual concert would be far more convincing than something recorded on the phone in a practice room, which is often the case, because students and young professionals are not always able to afford professional video recordings.

As was expected, the situation in the post-pandemic world of classical music is constantly changing and both musicians and the audience are still trying to find the balance between in-person and online forms of interaction, therefore any long-term or permanent effects are yet to be confirmed. However, the shift in our collective perception as artists has happened: perhaps now we are more self-sufficient and more reliant on our own internal, intuitive artistic roadmap rather than external validation, while at the same time we have learned to appreciate our audience in a better, healthier way. I hope to observe and investigate this theory in my future research projects, but for now I would like to conclude my journey through the complicated world of pandemic and post-pandemic performances with a short excerpt from one of my concert diaries. I believe these thoughts serve as the most truthful statement about my experience as a musician and resonate with the experience of other performers.

The following diary entry was written on October 20, 2022, when concerts with in-person audiences were resumed and all Covid restrictions were lifted. In my opinion it reflects the mindset many performers had shortly after the pandemic. Not only were they having to deal with the aftermath of this unprecedented and traumatic experience, they also had to keep up with concert schedules which often were even more hectic than before the pandemic due to postponed performances. We were keen to move on from this experience, often ignoring changes in our perception of the audience and the whole process of performing live. The isolation we faced and learned to deal with during Covid-19, transformed into more self-sufficient and self-centred performance practices—we became less dependent on, and at the same time less connected with, the audience, which led to self-reflective, almost introverted performances. Even now, almost two years later, I think about all the unexpected ways in which performing without the in-person audience has changed me as a musician and maybe even as a person. Of course, in a way, the pandemic changed everyone's perspective—we now have this experience under our belts and hopefully we have learned a thing or two. In my case, I have learned to appreciate things I took for granted before—both in my private and my professional life. The understanding that everything can and probably will change, has made me more resilient and less dependent on the routine of things. I do not expect the concerts go a certain way anymore; performing during the pandemic has taught me to cope with every unexpected situation imaginable (and some previously unimaginable too):

'I am on my way to the concert venue once again, and my mind inevitably begins to wander. I think about the last couple of years and how different our experiences as performers have been—how we have been forced to go from in-person live concerts we naively thought was an untouchable cultural and social value, to complete silence at first, and then to different forms of live-streamed performances which I have lost count of already—I have done live-streamed performances that actually was live-streamed in real time; the ones that were pre-recorded and broadcasted later on different social media platforms. I have even done 'fake' live-streamed events, which were marketed by the organisers as live, but were pre-recorded, because, after a while, no one wanted to deal with technical issues of actual live-streams anymore. I have done concerts without the in-person audience; with very little audience due to restrictions; in masks; without the masks—the list is endless.

The list is indeed endless, and many performers are so keen to forget—in private conversations before and after concerts, in airports, concert halls, whenever and wherever I happen to meet my colleagues, I often hear the same phrase—everything is back to normal now. But is it really?

Now we are fully back to pre-covid 'normal'—live concerts with an in-person audience and without any restrictions. Most musicians are keen to erase the confusing experience of Covid time from their minds as soon as possible and are determined to never look back. We are all moving on at full speed, pretending the pandemic time was just a minor glitch in the matrix and everything is fixed now. Or are we? And is *everything really fixed? Is it even possible to live through the traumatic experience of the pandemic without any consequences and without any impact on a person's mindset? The music industry professionals talk about the possible short-term and long-term effects of Covid on the listening habits of audiences—the tickets sales are dropping and that means we have to find new ways to connect with the audience yet again (the statement every performer has heard countless times in the last two years) and invent new strategies to convince audiences come back to the concert halls. As in any industry the main focus understandably is on the consumer, and classical music is no exception. However, I am wondering, perhaps selfishly—how about us, the performers? How have the last three years and constant uncertainty affected us? Do we still perceive live performance the way we did before the pandemic? Are we really just wanting to move on as fast as possible, hoping the next glitch that will stop everything is not just around the corner?*

While reading Igor Levit's *House Concert* I was thinking about the same question—how about us, the performers? He mentioned that performing for the online audience during the pandemic made him feel that he is not a fake, that his art is indeed needed. I have to be absolutely honest, it seemed incredible to me that an artist of such calibre would doubt himself; that he would be almost relieved people would still listen to his music, even without the massive work of his agents and even if it is a live-stream on X from his living room and the programme is improvised on the spot. This made me think about how we perceive the audience—obviously, we crave positive feedback, but is that it? Do we see ourselves as successful and fulfilled artists only if we have the chance to perform before the audience? This debate is by no means new, Glenn Gould and his decision to stop performing in public instantly comes to mind, but I wonder—has Covid-19 given it a new angle? How do we perceive the audience now, when we know it can be invisible and even non-existent? As my diary entry suggests, the shift in my own mind had already happened:

All these questions first came to my mind during the very first post-covid performance with the in-person audience in summer 2021. I remember going on stage with a feeling of relief—finally I can do my job again the way I have done it for two decades. I *expected to feel the familiar emotional connection with the audience, which I was convinced would help me battle my performance anxiety. I was looking forward to being part of the unique and unpredictable process that only happens when people on stage and in the audience experience the live performance together. I was sure the feeling would come back immediately, despite the two years break, because it is something that simply cannot be lost—like riding a bike—once you learn how to do it, the skill is yours forever. Instead, my reaction was unexpected and unfamiliar—it almost seemed like there was an invisible wall between me and the audience. I could not feel any kind of connection with the listeners, and I remember thinking the unthinkable—do I even need to look for this connection if it does not happen naturally? Would it really affect the quality of performance if I did not? I admit this is a very unexpected revelation for someone who has spent their whole performing career trying to please the audience. Since that performance, despite many concerts in between, I still find myself struggling to return to the 'old normal' - the audience is still 'hiding' behind that invisible wall in my mind (or is it the other way around?) and seemingly temporary feeling of isolation has become a 'new normal' for me. I still see it as a flaw and, the closer I get to tonight's concert venue, the stronger my determination becomes - I intend to finally tear that imaginary wall down.*

I would like to pause here and reflect on this last statement. Why do I feel the need to do something that will clearly make me struggle again? That is, if I know that a large part of my performance anxiety has always been caused by trying to connect with the audience, that instead of having a positive interaction, it often made me feel judged and conscious of my every move. Why, instead of trying to fit back into the uncomfortable 'old normal', could I not devote the same energy to finding a new, better way to feel comfortable on stage? This transition happened in my mind during this performance, and I am happy that I was able to recognise and capture it:

Once I go on stage, I make a conscious decision to interact with the audience more—luckily, we are expected to talk about the music we perform and conversation is the most straightforward form of interaction, so technically it should contribute to my goal. As the concert goes on, I alternate between playing, talking, and observing the *audience and suddenly realise that no one has any idea of what goes on in my mind. It is not written on my face and my voice does not sound any different. I give my best performance and the audience do not show any visible signs of boredom. Even my on-stage partners seem to be in their own world, busy with endless sheet music pages, technical passages and never-ending struggle of adjusting to the acoustics of the hall and projecting the best possible sound (after all, there are no sound engineers to blame now). That is when it occurs to me—what if this—being in our own world—is the answer? What if my inability to connect with the audience the way I did before Covid is the direct response to the almost two years of performances without the in-person audience? What if what I saw as a struggle and a problem is, in fact, something entirely different—a ticket to freedom, a blessing if you will? And finally, what if—and that thought seems so groundbreaking at the time, I almost miss my entrance and flautist gives me a puzzled look—the concept of live concerts, that we have perceived as an undoubtedly collective experience so far, has become in a way a solitary one?*

This thought might feel like an oxymoron at first—how can something happening in front of many people be a solitary experience? This seems impossible and does not make any sense at first. However, if I dig deeper, I realise how solitary and even lonely the life of a performer actually is—since from a very young age we spend hours practicing alone, we think about our interpretations alone, we try to fight our performance anxiety alone, we often travel alone, we spend hours in our hotel rooms alone. These are all clearly solitary experiences and that makes me wonder—why cannot we perceive the performing on stage as one?

Obviously, I can only speak for myself at this point, but this notion could be one of the aftereffects of the pandemic time. The actual, physical absence of the in-person audience, that in the early stages of the pandemic seemed like the end of the world, has paved the way for the completely new approach to performing for me—I have distanced myself from the listeners and turned the experience that used to make me anxious into the more comforting solitary experience—now it's just me, my emotions, my music. I still vividly remember the mind-numbing bouts of performance anxiety I used to experience when I was younger, to the extent I had to put a score in front of

> *me at every performance, because I was not sure I would be able to get through the piece without it. Every time I went on stage, I felt exposed—like the audience somehow had unintentionally intruded my personal space. With time and a lot of effort, I learned to cope and concentrate on the positive aspects of performance, but this feeling never went away completely. It never occurred to me to distance myself from the audience on purpose—it seemed like a completely wrong path to follow and definitely not the one that could liberate me from the crippling anxiety. The indisputable notion—we perform for the audience because the reaction of the audience determines our success—has been etched into our minds by our teachers since we first stepped on stage, in my case—at the age of seven. While still on stage that evening, I realised, once I consciously stopped focusing on the audience, I felt much more at ease with myself. It occurred to me that I have subconsciously been applying the strategy I sometimes used in live-streamed concerts during the pandemic—to be able to focus on the music and to maintain a least some illusion of live performance, I deliberately distanced myself from the recording equipment mentally and even physically, because those performances without the in-person audience resembled the recording session more than a live concert, which was extremely confusing to me. Apparently, the same approach helped me to battle my performance anxiety now—this was a completely unexpected discovery.*

I am obviously not trying to compare the audience and the recording equipment here, although the thought itself amuses me. In no way do I want to be disrespectful to the people who choose to come to my concert, or to any other concert for that matter. We, performers, have always treasured our audience, but at the same time we have to find the ways to overcome our performance anxiety to be able to give our best performance instead of a pale reflection of it. For me, the answer or solution came unexpectedly—thus it will take some time to process and test the longevity of this revelation:

> *I admit, the thought that collective experience simultaneously can be the solitary one is still very fresh in my mind. I still need time to process it, but it has put down roots and I suspect, it will not leave. Before the pandemic, I never allowed myself to think that focusing on myself and distancing myself from the audience can be a good,*

healthy attitude towards the complicated process of performing live. During the last two years I have talked a lot about what it means to perform live, I have read books and articles about the notion of 'liveness' in music and theatre, but it never occurred to me that a live concert where we find ourselves in the room full of likeminded people with the same goal—clearly a collective experience, can also be a solitary act of performing and listening. To a certain extent it is like listening to music alone or practicing without the audience, or even recording in a recording studio. The moment of the performance, be it a live one in a concert hall or a live-streamed or pre-recorded one; at that specific moment in time when the performance happens, we are all alone with our thoughts and emotions—on stage and in the audience. The shared emotions and energy, the feedback in form of applause and requested encores—all these integral and familiar components of any live performance—come after the last sound has vanished. Until then—it is our own unique experience, and we are alone with it and in it, even if we are in a room full of people.

Initially, this was where I wanted to end my journey—with a strong, authentic statement of my plans for more analysis in the future, observing and documenting my attitude towards the audience in the years to come. It seemed like there was nothing more to say about the pandemic's effects on performers, and we needed more time to see what would happen with live-streaming and live performances. However, the more I think about it, the more I realise the future will most likely bring changes we cannot predict now. I often contemplate the current digitisation of the entire world and the escalating presence and influence of technology in the future. Indeed, live-streaming as we know it may soon become the thing of the past, giving way to more advanced technologies that provide a higher level of entertainment and, most importantly, a sense of 'presentness' for both the audience *and* performers. We can already see the advent of virtual reality events—mostly in popular music for now, but I presume in classical music before too long. There are already many VR recordings of classical performers on YouTube, from solo piano pieces to orchestral and even operatic works. Currently, this format does not provide an 'in-person' experience for classical music audiences due to its limited capacity, but it offers an opportunity to 'look behind the scenes’. However, it is only a matter of time when the technologies will advance to a point where this experience becomes possible. When this happens, we will be discussing ‘presentness’ on a completely new level: once VR technologies are able to offer a truly lifelike experience to viewers, they will most definitely open up a new world for the audience, and the experience of ‘being in the performance’ rather than watching it on the screen will change the way we perceive notions of ‘presentness’ and ‘liveness’. This could potentially allow us to reassess the priorities of such performances. If we can provide a virtual reality setting that closely resembles an in-person experience, we might not need to place as much emphasis on the technical perfection of the performance as we currently do. Always assuming it does not make us completely redundant, perhaps the new type of ‘liveness’ and ‘presentness’ offered by VR technologies could finally free us, performers, from prioritising technical perfection over artistic goals or even over the experience of simply being together in the moment of performance, which unfortunately still tends to happen to this day, all the more when any kind of technology is involved in the performance.

My own experience suggests that the more we get used to the presence of technologies during our performances, the more we learn to cope and even thrive. The online presence of classical performers increases every year, and with the rapid development of technologies, I hope that we could finally use the opportunity to be more comfortable in the digital world and not see it as a rival of the in-person, real-time, and otherwise ‘live’ concert.

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Appendix A

The full list of interview questions

What are the challenges and advantages of different real-time performance forms from the performers' perspective:

1. real-time performance with an audience in the room.
2. real-time performance with an audience in the room + recording technologies (in other words, a 'live recording'.)
3. real-time performance with an audience in the room and live-streaming technologies connecting you to an audience remotely.
4. real-time performance with no audience in the room but with live-streaming technologies connecting you to an audience remotely.
5. real-time performance in a recording studio.

The questions were constructed around these five different situations, which helped me to maintain a clear structure during interview yet allowed respondents to answer freely, without feeling overly restricted.

- Are there any specific requirements (physical or mental) for successful work in the recording studio?
- How do you feel about the recording process—many repetitions, performing short sections of the piece etc., engineering, sound?
- How do you ensure the continuity of phrasing and overall musical line of the musical piece during recording process?
- What does it mean to you to perform in front of the live audience? How important is the immediate feedback of the audience?
- If you suffer from performance anxiety during performance—is it better or worse when audience is involved?
- Do you experience performance anxiety in the recording studio while working with a sound engineer and producer?
- Do you feel the need for applause and/or other forms of praise after the performance?

- What are the major challenges during the live-streamed performance?
- Is there a difference between live performance in a concert hall with and without live-stream?
- Is there a difference between live-streamed performance with and without the audience?
- How do you connect with the audience ‘behind the camera’?
- Does lack of emotional feedback from the audience affect your performance?
- Is there a particular way of preparation for a live-streamed performance?
- Can live-streamed performance be compared to a recording and if yes-in what ways?
- How do you feel after the performance without immediate reaction from audience?
- Is it easier for you to perform without the audience?

Appendix B

Performers' survey questions[66]

Online performances before and during the pandemic.

This survey is for professional and amateur performers (musicians, dancers, actors, artists). As part of my doctoral research, I would like to ask you some questions about your experience with online (live-streamed or broadcasted performances) both with and without in-person audience. Thank you in advance for your time.

1.Your age

- 18-25
- 26-35
- 36-45
- 46-55
- 56-65
- Above 65

2.Your gender

- Female
- Male
- Prefer not to say
- Other

3.Your nationality. (This question is optional.)

4.Which of these performance types best describes what you do?

- Instrumentalist
- Singer

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[66] Online survey as it was presented to the respondents: https://docs.google.com/forms/d/e/1FAIpQLSe7rX0qMSYVWIZMK3wanHJygxTo8N0jJztdv9MYqjd5q4dAxA/viewform?usp=sf_link

- Dancer
- Actor
- Artist
- Conductor
- Other

5.How would you describe your experience with online performances before the pandemic? (You can choose multiple answers or provide your own.)

- Before the pandemic, I had never participated in online or pre-recorded performances.
- Before the pandemic, I had participated in broadcasted or live-streamed (radio and/or TV) performances with an in-person audience.
- Before the pandemic, I had participated in pre-recorded performances without an in-person audience.
- Other

6.How would you describe your experience with online performances during the pandemic? (You can choose multiple answers or provide your own.)

- I did not participate in any live-streamed performances during the pandemic.
- I participated in live-streamed performances without an in-person audience.
- I participated in pre-recorded performances without an in-person audience.
- Other

7.How important is it to you to receive immediate audience feedback (applause, flowers, requested encores, etc.)?

- Not important
- 1
- 2
- 3
- 4
- 5
- Very important

8.Could you elaborate on your previous answer? (This question is optional.)

9.How important is to you to receive feedback over the longer term (magazine reviews, online comments, etc.)?

- Not important
- 1
- 2
- 3
- 4
- 5
- Very important

10.Could you elaborate on your previous answer? (This question is optional.)

11.Which would best describe your attitude towards the presence of recording equipment (microphones, cameras) during a live performance **with an in-person audience**? (You can choose multiple answers or provide your own.)

- I am glad that my performance will be seen/heard by more people thanks to the recording equipment.
- I become more self-conscious and concentrate on the technical aspects of my performance more if I know the performance is being recorded/live-streamed.
- I am aware of the recording equipment, and I think it heightens my concentration on my performance overall.
- I am not aware of the recording equipment, as I am totally focused on the in-person audience.
- Other

12.When you think about the invisible audience ‘behind the screen’ - the people who watch your live-streamed performance - what do you think? (You can choose multiple answers or provide your own.)

- I wonder if anyone is watching at all.
- I wonder what the feedback will be like (positive or negative)
- I wonder what my performance sounds like and looks like to the audience.
- I wonder what kind of environment the audience is in while they are watching/listening.

- I wonder what kind of audio-visual technology the audience is using to watch/listen.
- I wonder if the audience hears my technical mistakes more than they would in an in-person performance.
- Other

13.How important is it to have full control over every aspect of your performance?

- Not important
- 1
- 2
- 3
- 4
- 5
- Very important

14.Would you like to elaborate on your previous answer? (This question is optional.)

15.What, in your opinion, is required to achieve full control over all aspects of live performance? (You can choose multiple answers or provide your own.)

- I must practice enough to eliminate any technical mistakes.
- I must be informed about the background of the work I will perform (musical piece, play, ballet, etc.)
- I must be familiar with the performance venue (acoustics, lights, temperature, air humidity, etc.)
- I must be in good physical condition (had enough sleep, not hungry or thirsty, etc.)
- Other

16.Based on your answers to the previous question, do you feel it is possible to achieve full control in a live-streamed performance? (You can choose multiple answers or provide your own.)

- Yes, it is possible.
- It might be possible, but there are aspects out of my control (sound quality via live stream, etc.)

- I am not able to control the quality of the technology the audience use to watch the live-stream, which might affect how they perceive the quality of my performance.
- I am not able to control the surroundings of the audience at the moment of the performance (they might be in a noisy place, be distracted by something, etc.)
- Other

17.What would best describe your experience with online performances **without an in-person audience** during the pandemic? (You can choose multiple answers or provide your own.)

- I enjoyed performing without an in-person audience (I was less nervous, etc.)
- I did not feel any different (a performance is still a performance, etc.)
- I felt isolated from the audience, and it made me anxious.
- I felt like I had no control over the sound and image.
- I was worried about my looks (camera close-ups, angles, lighting, etc.)
- I felt like I was recording in the studio rather than performing live.
- It was difficult for me to connect with the invisible audience.
- I was worried about the feedback (comments on social media, etc.)
- I appreciated the chance to have a video recording of my performance.
- I was happy to share my performance with people from different countries who could not see it in person.
- Other

18.Have you had an unsuccessful experience with live-streamed performances? If yes, what would best describe it? (You can choose multiple answers or provide your own.)

- I was not happy with the sound quality of the live stream.
- I did not like how I looked.
- Technical difficulties made it impossible for the audience to see the performance.
- I was struggling to meet the expectations of sound engineers and producers.
- I felt isolated from the audience.
- No one watched my live-streamed performance.

- Other

19.If your experience with live-streamed events was positive, please indicate which answer best describes it. (You can choose multiple answers or provide your own.) *

- It was a possibility to stay connected to the audience.
- I could share my performance with people around the world.
- I learned new ways to connect with the audience.
- I realised the importance of the online audience.
- It helped me not to feel isolated during the pandemic.
- I learned more about recording and dissemination technologies.
- Other

20.Do you agree with the following statement:

'The online performances have to offer something that is not available in the live performance - multimedia features, backstage footage, different camera angles, close-ups etc.'

*

- Strongly agree
- Agree somewhat
- Neither agree nor disagree
- Disagree somewhat
- Strongly disagree
- Other

21.Would you like to elaborate on your previous answer? (This question is optional).

22.Do you agree with the following statement:

'The successful online performance should offer the element of 'liveness' - the audience should feel like they are attending the live performance.'

- Strongly agree
- Agree somewhat
- Neither agree nor disagree
- Disagree somewhat

- Strongly disagree
- Other

23.Would like to elaborate on your previous answer? (This question is optional).

24.What is your opinion about the future of live-streamed events? (You can choose multiple answers or provide your own.)

- The live-streamed events will happen more than before the pandemic, because many concert halls and art venues now have the equipment and experience in organising such events.
- Maybe in the future people will return to live-streamed events, but for now everyone is enjoying the live in-person events.
- For people who are unable to attend live in-person events, live-streamed events are a good opportunity to enjoy real-time performance.
- Live-streamed events are a good opportunity to attract larger audiences.
- Other

25.Has the pandemic and performing without the in-person audience changed your attitude towards live performance in any way? (This question is optional)

26.Based on your own experience with live-streamed events, is there anything you would like to add which was not covered by this survey? (This question is optional).

Thank you!

Appendix C: Concert Programmes

Concert 1

St. Peter’s Cathedral, Riga, Latvia
April 4th, 2021

Tatjana Ostrovska (violin)
Tereze Ziberte-Ijaba (violin)
Liene Martinsone (viola)
Dace Zalite-Zilberte (cello)
YouTube link: https://youtu.be/J__qtt4wEIo

Programme

Joseph Haydn (1732-1809)	**The Seven Last Words of Our Saviour on The Cross, Op. 51, Hob. III:50-56 3.** In the video: Sonata II (Grave e Cantabile), excerpt.

Concert 2

Latvian National Library, Riga, Latvia

December 20th, 2021

NYX TRIO

Tatjana Ostrovska (violin), Anete Toca (flute), Ieva Sarja (piano)

YouTube link: https://youtu.be/3XuWo4El1Dc

Programme

Jānis Lūsēns (1959)	***Arcadia*** (2020) for flute, violin and piano
Aigars Raumanis (1997)	***The Closed Courtyard***, based on a story by Pauls Bankovskis (2020) for violin, flute and piano
Agneta Krilova (1980)	***The Rose Petal Waltz*** (2021) for violin, flute and piano
Rihards Dubra (1964)	***Les passions d’hiver*** (2020) for flute, violin and piano
Aivars Kalējs (1951)	***The Girl on a Flaxen Horse*** (2017) for flute, violin and piano

Concert 3

Great Guild Hall, Riga, Latvia

April 13th, 2023

NYX TRIO

Tatjana Ostrovska (violin), Anete Toca (flute), Ieva Sarja (piano)

YouTube link: https://youtu.be/3XuWo4El1Dc

Programme

I

Arturs Grīnups (1931-1989)	**Trio** (1989) for flute, violin and piano I Andante sostenuto II Allegro III Andante IV Allegro giocondo
Krists Auznieks (1992)	**Three** (2023) for flute, violin and piano
Aigars Raumanis (1997)	***The Closed Courtyard***, based on a story by Pauls Bankovskis (2020) for violin, flute and piano

II

Jānis Lūsēns (1959)	***Arcadia*** (2020) for flute, violin and piano
Agneta Krilova (1980)	***The Rose Petal Waltz*** (2021) for violin, flute and piano
Agneta Krilova (1980)	**Purvitis. Brightly *Gray*** (2022) for violin and piano

Aivars Kalējs (1951)

French Quadrilogy (2021) for flute, violin and piano

- *The Girl on a Flaxen Horse*
- *The Dream*
- *Meeting in the Rain*
- *Toccata*

Concert 4

Latvian Radio 1st Studio

May 20, 2024

NYX TRIO

(Tatjana Ostrovska—violin, Ieva Sarja—piano, Anete Toca—flute)

https://klasika.lsm.lv/lv/raksts/koncerti-latvijas-radio-studija/trio-nyx-latviesu-komponistu-muzika-latvijas-radio-1.-studija.a191959/

The programme

Juris Karlsons (1948)	**'Smilšu Laiks'** Trio for violin, flute and piano (1988) *Lento* *Allegro Moderato* *Lento*
Aleksandrs Avramecs (2000)	**'Delta'** for flute, violin and piano (2024)
Andris Vecumnieks (1964)	**Nyx Variations** for violin, flute and piano (2011)
Vilnis Smidbergs (1944)	**Trio-Sonata** for violin, flute and piano (1989)

Krists Auznieks (1992)	**Three** for violin, flute and piano (2023)
Lolita Ritmanis (1962)	**The Flight** for violin, flute and piano (2024)