DESIGN THINKING FOR CONCERT EXPERIENCES

by

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Dedicated to my parents,

for your insistence that I finish this degree.

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Preface

The twenty-first century artist is living through an epic transformation. From concert programming to the traditional artist profile, there is an unstoppable momentum that only a fraction of the arts world is embracing and the rest are considering what this change means to them.

Eight years ago, I proposed the topic of exploring interdisciplinary arts, primarily in search of new concert experiences. My quest for Design Thinking concepts and interdisciplinary presence on stage is nothing new. Iconic figures such as John Cage, Merce Cunningham, George Crumb, Meredith Monk, and Steve Reich have all celebrated the integration of interdisciplinary performances and designed extraordinary visions on this theme throughout their careers. And yet, this approach to programming is still remarkably rare in classical music—it has not been adopted or encouraged as a common practice on stage, nor has it been prioritized in students' curricula and learning in traditional music schools.

Over the past decade, the most significant shift that I have noticed in live performances is the relationship between the artist's role in programming and program design itself. Artists are creating unique career niches at an exponentially faster rate than in previous decades. Experimentation is now not only reserved for the contemporary-focused enthusiasts. Organizations are altering their programming blueprint, revenue model, and even their mission in order to evolve alongside the communities they serve. Unsurprisingly, these changes are typically aimed at fiscal sustainability and new audience acquisitions, but what *achieves* these goals are often bypassed—the exploration of interdisciplinary collaborations, Design Thinking projects, and role expansions for musicians.

I would like to preface this essay by noting that I do not think all concerts should dramatically transform and incorporate other disciplines, or that there is a need to follow a step-by-step process resembling Design Thinking. There is still a place and an audience for the traditional subscription concerts with canon repertoire, piano recitals with beloved works, and chamber concerts with time-honored string quartets. I only aim to share an aspect of the Design Thinking philosophy so that this approach can be discussed and more readily connected to program design, and perhaps one day, more

robust research will study the link between the two. It is my hope that if a music student wishes to create something new on stage, understanding Design Thinking concepts could provide the tools to reimagine unique concert formats; if an established artist would like to redefine his or her role in the classical music ecosystem, Design Thinking can support the search for a broader definition of that role; and if an educator wants to refine his or her advice to students entering the professional realm, a Design Thinking approach can help identify training paths that are current, effective, and appropriate for each individual student.

In this essay, I discuss the principles of Design Thinking only in the context of concert program design. But Design Thinking can be applied in a multitude of ways to artists' lives both on and off stage, from discovering how to set up a teaching studio to preparing for the next competition or audition. My journey with Design Thinking began when I attended a serendipitous workshop led by Bill Burnett and Dave Evans in 2017. The two co-wrote a book, *Designing Your Life*, and co-teach a class bearing the same name at Stanford University. When I proposed my essay topic in 2013, Design Thinking was the approach I had sought to articulate, but I had not encountered the term or its umbrella of concepts yet. The workshop gave me a fresh, new perspective that I bring to all aspects of my life now: the possibilities are endless if you proactively and regularly engage in a cycle of design-assess-redesign-reassess. This approach can be realized in the form of designing a concert, a career, or even your life.

If I am to be honest, each of the ensuing chapters deserve a dedicated book in order for me to dive deeper into their respective nuances. Instead, I am choosing to provide a wide scope of the past, present, and future landscape of program design—and to illustrate the pianist's role in this evolution. As we know, there is a delicate and undeniable link between what happens on stage and how we define a musician's role in concerts. I want to explore this connection to uncover how concert design is gradually becoming a part of a musician's responsibility. Additionally, I conclude by asking how this shift may provoke a change in future educational models for performance majors. How have classical music concerts evolved in the past 150 years? What was the pianist's role? How do artists fit into the current classical performance ecosystem? How do we prepare our next generation of artists for this change—and are we ready to do so?

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Chapter 1: Design Thinking for the Arts

What is Design Thinking? Design Thinking is not a new term, but rather, a concept that began garnering momentum in the mid-twentieth century by psychologists who wished to study and articulate the science of design. Cognitive psychologist and Nobel Prize laureate Herbert A. Simon is considered the founding father of design theorists, and his book, *The Sciences of the Artificial*, was first published in 1969 and continues to be one of the most influential writings about design theory.

Simon's own thinking evolves over time, as one might anticipate for a field such as design science, and he writes a second and third edition for *The Sciences of the Artificial* in 1981 and 1996, respectively. Both editions widen the scope of relevance beyond his original theories and incorporate additional concepts such as creativity and social dynamics. For example, in his second edition, he adds a new chapter titled "Social Planning: Designing the Evolving Artifact," where he tackles the idea of design as a social activity with an evolving goal. He suggests that "the idea of final goals is inconsistent with our limited ability to foretell or determine the future. The real result of our actions is to establish initial conditions for the next succeeding stage of action." Musicians might perceive their own practice in such a way—to create, listen, reflect, respond, and produce for their next stage of action.

Simon spent his entire life studying the science of design, and devised seven phases in his Design Thinking model: define, research, ideate, prototype, choose, implement, and learn. Presently, the number of phases vary depending on the school of thought, but they all share the same frameworks and urge the use of these tenets beyond the sciences or engineering. DJ Huppatz writes in his reflection on Simon's work that "Simon's 'science of design' was part of his broader project of unifying the social sciences with problem solving as the glue." Therefore, as we drew closer to the twenty-first century, design theory began to take on a philosophical approach to thinking as opposed to the primary pursuit of defining highly

¹ Herbert A. Simon, *The Sciences of the Artificial*, 3rd ed. (Cambridge: MIT Press, 1996), 163.

² DJ Huppatz, "Revisiting Herbert Simon's 'Science of Design," *Design Issues* 31, no. 2 (2015): 29-40, 29, https://www.jstor.org/stable/43829378 (accessed December 1, 2020).

structured processes. Eventually, these ideas began to mobilize further research in design theory and practitioners spread practical usage of these ideologies across a vast number of industries, from engineering, architecture, and business management to education and the liberal arts.

Inter- and Transdisciplinary Roots in Design Thinking

As noted by many researchers in this field, Design Thinking concepts are distinctly interdisciplinary in nature and heighten multi-sector collaboration. In support of this cross-pollination of disciplines, another theorist, Richard Buchanan claims in 1992:

The search for new integrative disciplines to complement the arts and sciences has become one of the central themes of intellectual and practical life in the twentieth century. . . . The emergence of Design Thinking in the twentieth century is important in this context. Designers are exploring concrete integrations of knowledge that will combine theory with practice for new productive purposes, and this is the reason why we turn to Design Thinking for insight into the new liberal arts of technological culture.³

One of the earliest and most prolific researchers on interdisciplinary studies is Julie Thompson Klein. In her book, *Crossing Boundaries*, she admits that while "interdisciplinarity is on everyone's agenda; actually implementing it in institutional settings is a more difficult proposition." On the topic of group creativity, Paul B. Paulus specifically writes in his article, "Groups, Teams, and Creativity: The Creative Potential of Idea-Generating Groups," about the need for diversity in thought, skills, and background in order to produce both social and cognitive stimulation within individuals. Paulus suggests that this will in turn lead to a higher rate of production for innovative ideas because "one advantage of cognitive diversity in groups is that it increases the potential number of novel combinations that can be developed within the group." Furthermore, experts have now made a distinction between multidisciplinary, interdisciplinary, and transdisciplinary working relationships in practice and efficacy as it pertains to innovative design.

³ Richard Buchanan, "Wicked Problems in Design Thinking," *Design Issues* 8, no. 2 (1992): 5-21, 6, https://www.jstor.org/stable/1511637 (accessed December 7, 2020).

⁴ Julie Thompson Klein, *Crossing Boundaries: Knowledge, Disciplinarities, and Interdisciplinarities* (Charlottesville: University Press of Virginia, 1996), 209.

⁵ Paul Paulus, "Groups, Teams, and Creativity: The Creative Potential of Idea-Generating Groups," *Applied Psychology* 49, no. 2 (2000): 250, https://doi.org/10.1111/1464-0597.00013 (accessed January 4, 2021).

Figure 1 below shows this convergence of thought in an editorial titled "Transdisciplinary Innovation" by Chris McPhee, Matin Bliemel, and Mieke van der Bijl-Brouwer.⁶

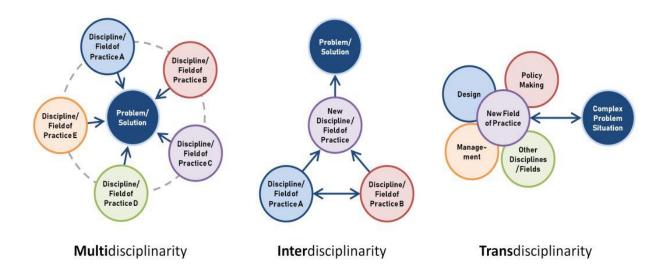


Figure 1. McPhee, Bliemel and van der Bijl-Brouwer show a comparison of multidisciplinary, interdisciplinary, and transdisciplinary approaches to innovation. Image taken from an open access editorial in the *Technology Innovation Management Review*, August 2018.

The difference between these collaborative processes is that multidisciplinary refers to each discipline maintaining its differences while interacting to solve a problem or design a product or experience; interdisciplinary refers to the integration of expertise of all the disciplines involved in order to reach a goal; and transdisciplinary is the unity of knowledge across various disciplines, including those in academia, industry, government, and private and public organizations, to gain new intellectual space.⁷

I believe one of the golden keys for the future of the arts is through interdisciplinary and transdisciplinary collaborations. Cross-discipline experiences can easily be at the root of creative spark across industries, and we already see this as a source of innovation in numerous cutting-edge arts organizations, artistic ventures, and partner projects. In 2010, The League of American Orchestras

⁶ Chris McPhee, Martin Bliemel, and Mieke van der Bijl-Brouwer, "Editorial: Transdisciplinary Innovation," *Technology Innovation Management Review* 8, no. 8 (August 2018): 4, http://doi.org/10.22215/timreview/1173 (accessed January 7, 2021).

⁷ Basarab Nicolescu and Atila Ertas, eds., *Transdisciplinary Theory and Practice* (United States: TheATLAS, 2008), 189.

published a report, *Fearless Journeys: Innovation in Five American Orchestras*, which focused on the topic of innovation. It details the work of five orchestras as case studies, and declares that

building a reputation for creating and presenting new music—as well as for engaging audiences around it—requires a fundamental shift in perspective for any orchestra. Going yet one step further and actively exploring cross-disciplinary links and intersections that lead to robust and provocative new forms and presentation formats is completely new territory. First, the organization must believe passionately and sincerely that classical music is an evolving art form, not a library of historic masterpieces. It must believe that the fields of dance, theater, electronic media, and other disciplines can inform and expand musical programming and performances.⁸

This can be said in reference to the topography of repertoire and concert experiences in not only orchestras, but also in piano recitals and chamber music concerts—as a plea to all genres within classical music to push the boundaries of concert design. These types of disciplinary-crossing performances have often become the chosen tool used by performers, educators, arts programmers, and concert presenters in order to attract new audiences, engage in educational pursuits, exchange artistic intellect, and build stronger communities in the current market for classical music consumption.

Service Design Reframed for Concert Design

As mentioned earlier, towards the final quarter of the twentieth century, the use of design theory can be seen in not only the production of physical objects, but also in the services surrounding it.

Introduced as "service design" in the late 1970s, G. Lynn Shostack made a differentiation in her writings between two types of service evidence: peripheral and essential evidence. It is noted that peripheral evidence is something that can be possessed by a consumer, such as a concert ticket, whereas essential evidence cannot be possessed. And yet, the latter can have equal or greater effect on someone's perception of the product or experience. In the above example of a concert ticket, the essential evidence

⁸ Lela Tepavac, *Fearless Journeys: Innovation in Five American Orchestras*, ed. Catherine Maciariello (New York: League of American Orchestras, 2010), 14, https://americanorchestras.org/images/stories/research_innov_pdf/Fearless_Journeys.pdf (accessed December 10, 2020)

⁹ G. Lynn Shostack, "How to Design a Service," *European Journal of Marketing* 16, no. 1 (1982): 52, https://doi.org/10.1108/EUM000000004799 (accessed December 2, 2020).

can potentially encompass the performance, the repertoire chosen, the artists' pre-concert involvement, the concert hall's ambience, the program notes, the way intermission is programmed, the box office experience, the pre-concert talk, or more—essentially, the entire experience from beginning to end.

It is interesting to note that in figure 2 below, Shostack places the theater very much on the service side of this spectrum of product and service entities.¹⁰ I believe this prompts us to imagine where classical music concerts would be on this continuum.

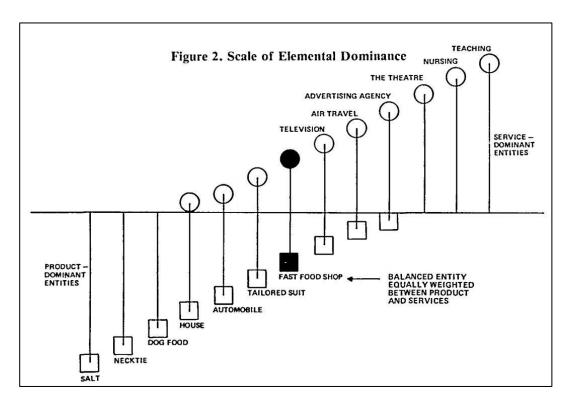


Figure 2. Shostack's Scale of Elemental Dominance, showing a spectrum of product- versus service-dominant entities. Reproduced by permission of Emerald Insight Publications.

I would like to point out that typically, there is much controversy amongst artists when the word "service" is used in conjunction with classical music in conversations or literature. I will share three notes on this: (1) most concerts performed by artists are presented by nonprofit organizations, whether they are a concert series, symphony orchestra, school, competition, or arts venue; (2) the purpose for creating a

¹⁰ Shostack, 52.

nonprofit is to be in service of a mission that benefits a community, focused demographic, school, sector, need, or all of the above, and; (3) if we simply exchange the word "service" with "concert," we are now discussing concert design rather than service design—while still utilizing precisely the same theories.

Concert program design has been a hot topic in recent years. For most organizations, it is intimately linked to audience development, fiscal management, and community and educational efforts. Research, reports, and publications are tackling this issue from all sides, with books like *The Performing Arts in a New Era* by McCarthy et al., 11 conferences and publications such as the League of American Orchestras' findings, and major foundations' call-to-action reports like the Wallace Foundation's *Extending Reach with Technology*. 12 All have referenced the decline in ticket sales, the skew towards an aging demographic, and a need for innovative ways to attract new audiences. Publications will share strategies on how to do the above, so that organizations and classical music can be more financially sustainable and continue to evolve. What I find startlingly absent in most of these, and not as a criticism of the literature itself but merely as an observation, is the role of the artist and education sector in sharing these responsibilities and participating in the transformation. Concert design is no longer only about the repertoire selected or the date and venue of performance. The newly minted Music Director of the San Francisco Symphony, Esa-Pekka Salonen, famously said to the *New York Times* in 2018 before a New York Philharmonic engagement:

The concert experience has become predictable. . . . I'm not talking about [the] artistic quality or content of the program, but the ritual itself. It's quite predictable—and, visually, mostly dead boring, to be totally honest. . . . I'm not trying to say that every concert has to have all kinds of bells and whistles. But orchestras must consider what audiences—especially young ones—want from a performance. 13

¹¹ Kevin F. McCarthy et al., *The Performing Arts in a New Era* (Santa Monica: Rand, 2001).

¹² Bob Harlow, "Extending Reach with Technology," (New York: Wallace Foundation, 2015), https://www.wallacefoundation.org/knowledge-center/Documents/Extending-Reach-With-Technology.pdf (accessed December 2, 2020).

¹³ Joshua Barone, "A Manifesto for the 21st-Century Concert. (Drinks Allowed.)," *The New York Times*, June 6, 2018, https://www.nytimes.com/2018/06/06/arts/music/esa-pekka-salonen-new-york-philharmonic.html (accessed December 2, 2020).

Salonen is not simply offering a grumbling comment in the face of these challenges, but rather, is an artist who follows through with action behind his words. As a composer, he is a big proponent of contemporary works, often bringing the audience along in his search for an interesting, rarely programmed piece; he is also a trailblazer in seeking fresh projects for classical music as a whole. An example would be his role in London Philharmonia's exploration of virtual reality and the creation of their *VR Sound Stage* in 2016.¹⁴ Artists can become powerhouses, whether it is through recital design, chamber formations, or orchestral participation, in leading this change and discovering the next concert format to dominate the stage, hall, or any other space. The relationship between the artist and the audience is incredibly important and under increased scrutiny in the twenty-first century. Furthermore, the entire experience of "going to a concert" can now be defined by some, per Design Thinking and the theory of service design, as the integration of each and every interaction shared between the audience and this art form.

Design Thinking and Innovation

The term "innovation" is exceptionally loose in definition, and particularly so in the arts world.

To create structure around this word, Peter Denning, Robert Durham, and John Seely Brown provided a definition in their book, *The Innovator's Way: Essential Practices for Successful Innovation*. They write,

We invest enormous energy in developing new ideas and fostering research, and too little in fostering adoption. We need a much better balance between our efforts in invention and innovation. A simple but important step in this direction would be to agree on a precise and rigorous definition of innovation. Common notions like "innovation is new ideas" do not distinguish innovation from invention. Since the acid test of innovation is adoption, we have defined innovation in this book as "new practice adopted by a community."¹⁵

Another pair of definitions is supplied by Voehl et al. in their book, *The Framework for Innovation: A Guide to the Body of Innovation Knowledge*. They suggest that there are two interrelated definitions, and

¹⁴ London Philharmonia, "Immersive," London Philharmonia Digital Immersive, https://philharmonia.co.uk/what-we-do/digital-immersive/immersive/ (accessed December 12, 2020).

¹⁵ Peter J. Denning, Robert Dunham, and John Seely Brown, *The Innovator's Way: Essential Practices for Successful Innovation* (Cambridge: The MIT Press, 2010), xv.

in order for innovation to occur, both would have to happen. "Definition 1: Innovation is the process of value creation, which consists of changing the composition of a set of variables describing a system. Definition 2: Innovation is an outcome of the process that fits Definition 1." Essentially, there needs to be value created in order for it to be considered innovation. Who defines what is valuable? Is it the audience, the artist, or both? Does the economic factor, in the form of ticket sales, play a part in this decision? With these two frameworks in mind, each of the seven phases in Simon's Design Thinking model can be aligned with the ultimate goal of creating value for a community and then facilitating adoption by that community.

According to historian and educator Peter Miller, the process of Design Thinking is an approach that can be reduced to "five modes—empathize, define, ideate, prototype, test—and three headings: hear, create, deliver." Stanford University's Hasso Plattner Institute of Design, known as the d.school, was created in 2004 and is one of the most well-known educational programs for students seeking design theory deployment in their professional careers. Alongside a number of MBA programs that have also infused Design Thinking into their curriculum, d.school's founder David Kelley also founded IDEO, a global design company that has inspired many traditional businesses such as IBM and Deloitte to use cross-disciplinary skills to implement Design Thinking in their own practice. Each entity has its own outline of what constitutes Design Thinking. For example, Stanford utilizes the five-phase model as described by Miller—empathize, define, ideate, prototype, and test; IBEO practices three groupings labeled as inspiration, ideation, and implementation; and IBM models its practice after three phases categorized as observation, reflection, and creation. All of these companies warn that the process of

¹⁶ Frank Voehl et al., *The Framework for Innovation: a Guide to the Body of Innovation Knowledge* (Boca Raton: Taylor & Francis Group, 2019), 113.

¹⁷ Peter N. Miller, "Is "Design Thinking" the New Liberal Arts?," in *The Evolution of Liberal Arts in the Global Age*, ed. Peter Marber and Daniel Araya (New York: Routledge, 2017), 167.

¹⁸ Michael Shanks, "An Introduction to Design Thinking," Hasso Platter Institute of Design, Stanford University, https://web.stanford.edu/~mshanks/MichaelShanks/files/509554.pdf (accessed December 14, 2020).

¹⁹ IDEO, "The Field Guide to Human-Centered Design," IDEO,

https://d1r3w4d5z5a88i.cloudfront.net/assets/guide/Field%20Guide%20to%20Human-field%20Guide%20Human-field%20Guide%20Human-field%20Guide%20Human-field%20Guide%20Human-field%20Guide%20Human-field%20Guide%20Guide%20Human-field%20Guide

Centered%20Design IDEOorg English-0f60d33bce6b870e7d80f9cc1642c8e7.pdf (accessed December 14, 2020).

designing something new may be uncomfortable, foreign, and ambiguous, and often force individuals and companies alike to answer challenging questions or hurdles. But the theme of learning, failing, designing, empathizing, and reassessing is always present. Figure 3 below illustrates IDEO's broad three phases.²⁰

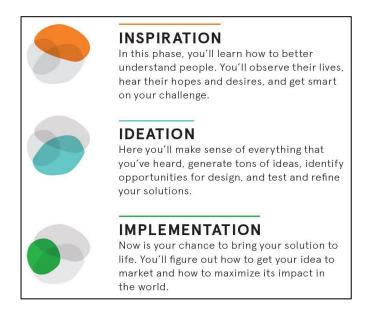


Figure 3. IDEO's design thinking process, taken from IDEO's publication "The Field Guide to Human-Centered Design."

It is clear that none of these processes strictly follow Simon's model of seven design phases. What they share are the underlying principles of Simon's work, which lead to a human-centered approach to designing innovative processes, products, solutions, and experiences.

Applying Design Thinking to the Arts

In practicing empathy for this next section, I will switch my perspective to a listener's point of view. Empathy in Design Thinking is described as both an emotional and cognitive exercise. It is "the belief that a deeper understanding of users' needs is critical for a designer to respond with more effective product outcomes. By employing empathic modelling strategies, designers can gain insight and shared

²⁰ IDEO, 11.

understanding with their target users."²¹ I believe there is much work that can be done through empathy in the realm of designing audience experiences. It is not a secret that first time concert-goers are the most difficult to retain. Melissa Dobson and Stephanie Pitts report on their study of the classical concert-going experience and find the greatest barrier to be the lack of contextual knowledge available for guests. This manifests in participants' desire for performers to speak more about the works, for a heightened level of inclusion in the experience itself—that is, a wish for performers to bring the listener along for the journey, and for the ability to comprehend the complex hierarchy of ritualistic behaviors in the concert hall. In the end, as part of Dobson and Pitts' recommendations, they write,

These findings suggest that it is important for real-world studies of music listening to take into account the performance context as a whole: to consider the artifacts surrounding classical music performance—including aspects of the venues in which it is held, and the information channels and publicity materials available—as concert-goers' experiences are clearly influenced by more than just "the music itself." ²²

This demonstrates a clear void and obvious space for artists to bridge a connection between themselves and the audience, and not only first-time concert-goers. Putting into practice the foundational principles of Design Thinking, such as exercising empathy for the audience, can facilitate the preservation of the art form and allow program design to evolve beyond the nineteenth-century model.

Another way to connect design to the arts is through the creation of a narrative thread, also known as storytelling. Lisa Cron writes in her book, *Wired for Story*, that human brains yearn for stories.²³ Elizabeth Hellmuth Margulis oversaw a 2017 study on participants' imagined narrative responses to classical music. Her writing surveys music's relationship with language and emotions, and in her findings, she suggests that "listeners' proclivity to imagine stories has implications for musicians and performers seeking to connect with their audiences, as well as for arts presenters hoping to facilitate such

²¹ Deana McDonagh and J. Thomas, "Rethinking Design Thinking: Empathy Supporting Innovation," *Australasian Medical Journal* 3, no. 8 (September 2012): 458, https://doi.org/10.4066/amj.2010.391 (accessed December 13, 2020).

²² Melissa C. Dobson and Stephanie E. Pitts, "Classical Cult or Learning Community? Exploring New Audience Members' Social and Musical Responses to First-Time Concert Attendance," *Ethnomusicology Forum* 20, no. 3 (December 2011): 356, https://doi.org/10.1080/17411912.2011.641717 (accessed December 13, 2020).

²³ Lisa Cron, Wired for Story: the Writer's Guide to Using Brain Science to Hook Readers from the Very First Sentence (New York: Ten Speed Press, 2012), 11.

communication."²⁴ Design Thinking can bring storytelling into the concert experience for both the artist and audience. It can design the thematic journey, the messages and questions that the artist may want the listeners to ponder post-concert, and a fully immersive experience for both parties.

In Chapter 2, I travel back to the eighteenth and nineteenth centuries in order to convey the evolution of concert design over the past 250 years. This will bring context to the development of the modern-day concert and share insights about how we arrived at the twenty-first century classical music performance model. What were concerts like in each era? What types of repertoire or genres did musicians play? What was the pianist's role in this evolution? How did both the artists' role in concerts and listeners' musical taste change over the centuries?

In Chapter 3, I share examples of concert designs that explore Design Thinking principles.

Through each case study in the latter half of the document, I aim to pose these questions:

- 1. What does it mean to *empathize* and how are artists best suited to do this?
- 2. What could be *defined* when one begins to design a concert experience?
- 3. With whom could artists *ideate* with? Which other disciplines can participate?
- 4. How can concerts be thought of as *prototypes*?
- 5. What can be *tested*, when can it be tested, and how does one go about testing ideas?

The above may sound prescriptive, dry, and perhaps even superficial—particularly as I link this ideology to concert creation. Design does not have to sacrifice artistic intent or quality. Instead, I believe there is an enormous amount to be learned from the philosophical tenets of Design Thinking—the human-centered, message-driven, open-minded, solution-oriented, intensely collaborative, and highly experimental values—when we look at the typography of classical music's future.

11

²⁴ Elizabeth Hellmuth Margulis, "An Exploratory Study of Narrative Experiences of Music," *Music Perception: An Interdisciplinary Journal* 35, no. 2 (2017): 245, doi:10.2307/26417393 (accessed January 4, 2021).

Chapter 2: An Evolution of Program Design in the Eighteenth and Nineteenth Centuries

In order to discuss Design Thinking for concerts, we need to take a step back to first look at the history of concert programs and how artists and programmers have traditionally designed them. Historian William Weber documents this evolution in his book, *The Great Transformations of Musical Taste:*Concert Programming from Haydn to Brahms. Through a collection of concert programs and insightful analysis on how trends have shifted, Weber concentrates his studies on the recital, chamber concert, and orchestral program across four major cities in Europe—London, Paris, Leipzig, and Vienna. Another historian, James H. Johnson focuses his attention on Paris, noting how rare public concerts were before the late eighteenth century and that instrumental music were mostly heard in patrons' homes. He makes a clear distinction between the "Concerts of the Old Regime" and "The Birth of the Public Concert" in two chapters titled respectively in Listening in Paris: A Cultural History. Johnson describes this kind of boom in concerts across Europe as a result of the economic, social, cultural, and political transformations caused by ideologies that led to the French Revolution. The new social class in Paris shared the sentiment that the creation and consumption of art was now to be inclusive rather than exclusive, and to be praised and critiqued by the public, as opposed to by only the monarchy or nobility. "Once private, festivity was now a public good." Essentially, the power to define musical taste have now transferred hands.

The Miscellany

To begin, Weber refers to the term "miscellany" as ground zero for the primary way concerts were designed in the eighteenth century. The governing rules for miscellanies were variety, virtuosity,

²⁵ William Weber, *The Great Transformation of Musical Taste: Concert Programming from Haydn to Brahms* (New York: Cambridge University Press, 2008).

²⁶ James H. Johnson, *Listening in Paris: A Cultural History* (Berkeley: University of California Press, 2008), 73.

²⁷ Johnson, 197.

contemporary-ism, and collegiality. Concerts were supposed to welcome all tastes, and a musical appetizer was readily available for each type of listener. In essence, there was no main course to these programs—the collective was the entire meal. Weber notes that "the principles of miscellany dictated that a program maintain contrast in its sequence of pieces. . . . Two or more examples of the same genre could not occur back to back, and contrast was maintained among male and female singers and soloists playing on different instruments."²⁸ Each European city had its own model for designing miscellanies, but in all regions, it was typical for a program to encompass a few arias, a movement of a symphony, a couple of concertos, and solo instrumental pieces. The majority of each program consisted of works by living composers, usually performed by the composers themselves, and interestingly, the concept of canon repertoire as we know it today was called "ancient music" in the eighteenth century, and later "classical music."²⁹ A concerto with orchestra was the customary choice for instrumentalists; pianists performed works by Beethoven, Hoffmeister, Hummel, Koželuch, Mozart, Paradis, Preindl and Wolfl—all living composers except for Mozart—in the 1790s Viennese concert scene. 30 In France, a familiar movement from a Haydn symphony or a popular Mozart aria were the usual canon works on programs. David Ferris suggests that listeners were more enthralled by the "virtuosity, spontaneity, and variety than with musical form or structure."31 Whole sonatas or symphonies were typically not presented fully in a single concert program, and while performers may choose to include a movement or two, it was this mix of old and new, plus the variety of genres, that welcomed concert-goers back time and time again.

As a precursor to the recital, virtuoso concerts—also called benefit concerts—dominated the cultural landscape of the European musical life through the early 1800s. In these events, one or two musicians held the role of "organizer," where he or she would bring together a host of musicians to

²⁸ Weber, 41.

²⁹ Weber, 29.

³⁰ Katalin Komlós, "After Mozart: The Viennese Piano Scene in the 1790s," *Studia Musicologica* 49, no. 1/2 (2008): 37, https://www.jstor.org/stable/25598311 (accessed January 7, 2021).

³¹ David Ferris, "Public Performance and Private Understanding: Clara Wieck's Concerts in Berlin," *Journal of the American Musicological Society* 56, no. 2 (2003): 354, https://doi.org/10.1525/jams.2003.56.2.351 (accessed December 14, 2020).

perform a large sampling of ensemble and solo works in one evening.³² This method of presenting music was clearly ripe with collaborative effort. The virtuoso concert was a space where "players focused on the performative process—the fantasie, variations, transcription, and improvisation."³³ Instrumental adaptation or improvisations of opera numbers was a common and welcome repertoire choice, led by touring performers such as Thalberg, Liszt, and Paganini, to name a few. Weber claims, "Organizing a concert was a collegial undertaking, a sorting out of priorities among professionals accustomed to working together."³⁴ This type of collaboration was paramount to designing a well-balanced program, serving the appetite of the eighteenth- and early nineteenth-century listener. In Leipzig's Gewandhaus, the expectation of a typical program in the late 1700s through 1820 can be seen as follows:

Overture or Symphony
Opera aria
Concerto, usually composed by the performer
Opera ensemble number
[Intermission]
Overture or Symphony
Opera aria or ensemble number
Operatic choral ensemble number
Symphony or instrumental piece³⁵

In Vienna, while the practice was to incorporate many composers, performers, and genres into one concert program, those musicians—such as Mozart—who organized concerts and programmed two-thirds or even the entirety of the evening with their own works were the exception.³⁶ By the 1830s, the general public was zealously enchanted by the virtuoso persona, and thus, performers needed to balance self-promotion and collegiality. One of the ways Thalberg and Liszt did so was to showcase local composers and popular operatic numbers in concerts, and to eliminate the orchestra from the program.³⁷

³² Weber, 5.

³³ Weber, 143.

³⁴ Weber, 40.

³⁵ Weber, 43.

³⁶ Weber, 56.

³⁷ Weber, 149.

The social atmosphere surrounding classical music concerts in the eighteenth- and early nineteenth-century was also vastly different from the concert expectations in the late nineteenth century through the present day. Prior to the mid-nineteenth century, people applauded during performances, demonstrating their immediate reactions to the music; concert programs could be improvised on stage to fit current affairs; and concert start times could begin as late as midnight. Kenneth Hamilton humors us by writing that the beginning of a piece was not typically the first notes of the score. As a common practice in virtuoso concerts in the nineteenth century, pianists were comfortable "preluding" or improvising at the beginning of a piece or as a transition between works. Hamilton laments,

An improvised introduction was, for hundreds of years, a sign of musical good manners and a chance for the player to frame appropriately the pieces in his program. It was also an opportunity to give the audience a gentle reminder that the player too was a creative artist. . . . What we rarely find, however, [now] is a prelude being used simply as that—a prelude—because the custom of preluding has almost entirely been abandoned.³⁹

Beyond this shift to a more serious mood onstage, there was also a change in the behavior of the listener pre- and post-1850s. For example, it would be a normal pre-1850 evening for someone to attend the first half of a concert, then the second act of an opera, followed by the final act of a play to end the night.⁴⁰ Evidently, this spontaneity in listeners' cultural escapades began to fade in the mid-nineteenth century.

The Rise of Serious Music

By the late eighteenth century, there was a clear fork in the road for the chosen style of musical taste and concert design. The evolution of what was known as "serious music" later became "classical music," and "the people who took up idealistic musical values . . . rejected the assumption that members of the musical community had to accommodate themselves to lesser kinds of music, and instead called for musical culture to be based on a learned high culture. To a certain extent, the movement arose as a

³⁸ Alex Ross, "Why So Serious?," *The New Yorker*, September 8, 2008, https://www.newyorker.com/magazine/2008/09/08/why-so-serious (accessed November 8, 2020).

³⁹ Kenneth Hamilton, *After the Golden Age: Romantic Pianism and Modern Performance* (New York: Oxford University Press, 2008), 101.

⁴⁰ Weber, 16-17.

reaction against the growing commercialization of opera and concert life."⁴¹ Due to the political instability found in the post-French Revolution world, there was a resulting philosophical shift in the cross-pollination between social classes. Weber speculates that "musical idealism" came from the rising middle class in three main ways: in the publications and writings about music, the heightened social mobility between the upper-middle class and nobility, and the emergence of a commonality in musical taste regardless of social class. This last one is particularly interesting, as it shaped people's behavior based on taste as opposed to class, as had been the case in previous centuries. "The new dichotomy of taste between light and serious music brought together people from parts of the middle class and the nobility under common cultural identities. Thus the quartet series and the fashionable virtuoso concert each brought together people from diverse social levels under the aegis of a unifying musical outlook."⁴²

In the book, *Music as Thought: Listening to the Symphony in the Age of Beethoven*, historian Mark Evan Bonds studies the perception and reception of instrumental music at this turn of the century. To demonstrate the drastic shift in attitude, Bonds notes how Immanuel Kant's writings in 1790 defined instrumental music as "entertaining," while a mere 20 years later in 1810, E.T.A. Hoffmann readily declared that instrumental music now held the highest place amongst all art forms. "In any event, Hoffmann was not prepared to grant listeners any kind of positive role in instrumental music's newly elevated status. This new music, he claimed, demanded a more strenuous kind of listening, and audiences would have to elevate themselves to new heights of comprehension if they were to assimilate these works." ⁴³ Bonds reveals the reasons behind the inevitable emergence of serious music in the nineteenth century and further deconstructs this abrupt change in the European musical life into three major causes: (1) what was composed at the time, (2) how music was performed, and (3) how it was heard. ⁴⁴ Of all the high-profile artists in the early 1800s, one of the most prolific pairs to carry this mantle of serious music

⁴¹ Weber, 87.

⁴² Weber, 90-91.

⁴³ Mark Evan Bonds, *Music as Thought. Listening to the Symphony in the Age of Beethoven* (Princeton, NJ: Princeton University Press, 2006), 9.

⁴⁴ Bonds, 8.

was Robert and Clara Schumann. Through their compositions, touring, writing, and artistic friendships, they instigated the return of the classics and study of the canon repertoire. With this, the identity of nineteenth-century musicians and their relationship with program design was rapidly changing. The gradual shift in musical taste, fueled by socioeconomic, cultural, and political conditions, was the gateway to our modern-day concert formats: the recital, the chamber music concert, and symphonic program.

The Recital: Performer-Composer Turned Interpreter

The term "recital" was originally used to describe dramatic reciting of poetry performed from memory. But in the nineteenth century, the music recital was born. While the performer-composer profile prevailed even in the early 1800s, examples of documented concert programs captured the pivotal transition of the performer-composer into performer-interpreter—particularly for recitalists in the middle of the century. Weber writes, "Pianists led the movement to reform musical taste, embracing . . . [the] performance of classical works; exclusion of lesser genres; replacement of opera excerpts with serious songs; and the perception of the concert-giver as interpreter." The growing popularity of the piano and its wider range of expressive ability made it possible for composers to become more detailed in their musical scores. In Sandra Rosenblum's study of *Performance Practices in Classic Piano Music*, she suggests that the increased capabilities of the piano created "a need for composers to edit their music and for performers to receive this information." A number of historians including David Ferris, Carl Dahlhaus, William Weber, and Lawrence Kramer make a distinction between "performer's music" and "composer's music," where "one is devoted to performative display and the other to the realization of the composed work. . . . The first style is typical of pianistic virtuosity . . . [while the] second style is typical of the pianist as executant, faithful equally to the letter of the composition and the spirit of the

⁴⁵ Weber, 159.

⁴⁶ Sandra P. Rosenblum, *Performance Practices in Classic Piano Music* (Bloomington: Indiana University Press, 1988), 17.

⁴⁷ Ferris, 354.

composer." Hamilton makes a perfect assessment of the trend and displays a juxtaposition between the pre-nineteenth century performer-composer and the modern-day performer-interpreter by stating that "the fundamental facet of the romantic attitude to interpretation was that virtually all pianists were composers as well as performers. . . . Our present era has largely abandoned this tradition and often segregates conservatory performance students into separate performance, composition, and musicology realms." Rosenblum even claims that at the turn of the century, Beethoven became famous in the European musical circle not for his compositional triumphs, but rather, for his pianistic prowess and demonstrations as an improviser. Being a musician at the time did not come with the requirement of specialization—it was simply a full embodiment of the creative artistic profile.

Two figures who changed the course of concert design and the instrumentalists' artistic profile—particularly for pianists—were Franz Liszt and Clara Weick Schumann. Liszt was one of the firsts to play an entire concert from memory; he moved the piano in order to display his profile to the audience; he opened the lid for a bigger sound projection; and most notably, he introduced the term "recital" to the musical world in 1840 with two of his London concerts. Alongside Richard Wagner, Liszt was a major proponent of the development of programme music through the nineteenth century, inventing the symphonic poem and advocating for extra-musical narratives in conjunction with music. Naturally, Liszt embraced operatic works and supplied his own transcriptions of arias, opera overtures, and symphonic works by popular demand from the audience. However, the modern-day recital did not adopt all of Liszt's improvisatory mannerisms. Even though he played many solo concerts, he still "continued to share the stage regularly with other artists, to prelude before pieces, and to showcase improvisations on themes provided by the audience at the climax of the event."

⁴⁸ Lawrence Kramer, *Musical Meaning: Toward a Critical History* (Berkeley and Los Angeles: University of California Press, 2002), 74.

⁴⁹ Hamilton, 181.

⁵⁰ Rosenblum, 27.

⁵¹ Alan Walker, *Franz Liszt: The Virtuoso Years (1811-1847)*, vol. 1 of *Franz Liszt* (Ithaca: Cornell University Press, 1987), 285-286.

⁵² Hamilton, 17.

Parallel to Liszt's legacy, Clara Schumann was another pianist forging her own path forward. Post-1840, Schumann began to focus more on the classical canon repertoire, in search of pure "absolute music" alongside composers like Robert Schumann and Johannes Brahms. She utilized her status as a leading performer of the day—especially from 1840 to 1850, where she circulated fewer than thirty works by only four composers: Mozart, Beethoven, Mendelssohn, and Robert Schumann—to shift the musical taste of the general public away from "frivolous" contemporary music. Walter Frisch deduces that Schumann "became one of the first pianists to give solo piano concerts without any assisting artists, thus departing from the tradition of mixed programs with a variety of performers. She made her concerts shorter, and offered fewer compositions. She paid close attention to the composer's written text, and avoided any additions or embellishments."53 This evolved the artistic profile of musicians immensely for the ensuing centuries, adding more weight and validity to the interpreter role as opposed to the traditional composer role. Ferris supports Frisch's stance and writes, "Clara Wieck's historical significance as a pianist, in fact, derives in part from the way in which she manipulated the gray area between performer's and composer's music in her concert programs and ultimately played a leading role in turning the virtuoso concert into a recital of composers' works."54 Ultimately, her work altered the future of classical music consumption by the public, the type of repertoire chosen for programs, the length of recitals, the relationship between performer and composer, the role of the performer as interpreter, and how we view the classical music genre and its canon of works today. In her later years, Schumann passed down this philosophy to her students as well, creating a legacy of studying the traditional repertoire. This practice is still in place today, as part of the curriculum and doctrine of most conservatories across the globe. Between Liszt and Schumann, their dual influence on the role of a pianist and the piano recital forever changed the way instrumental concerts were designed and presented to the public, and a fusion of their life's work gradually became a model for how the modern touring musicians curated their artistic profile.

⁵³ Walter Frisch, Music in the Nineteenth Century (New York: Norton, 2013), 89.

⁵⁴ Ferris, 355.

In historian John Gould's study of program design and repertoire selection amongst pianists, he analyzes a select portion of the recital programs compiled by George Kehler in his book, *The Piano in Concert*, where Kehler catalogued and carefully annotated 15,000 programs. Gould looks at a wide variety of concerts, from Liszt, Clara Schumann, Thalberg, and Rubenstein to Godowsky, Horowitz, Rachmanioff, Argerich, and Pollini, to name a few. An interesting—and not surprising—discovery is the gradual move from the pre-1860 program design of nearly 80% of all programs presented as mixed-genre, compared to the 20% in solo piano recitals, to the 1980 ratio of nearly 100% of recital programs by these same artists being offered as solo piano recitals.⁵⁵ Gould goes on to share that the more insightful phenomenon from his sampling was not simply the proportion of mixed to solo recitals, but that

the popularity of the virtuoso pianists of the 1830s and 1840s enabled them to dictate the overall structure of the event to a much greater degree. The number of performers other than the solo pianist was gradually reduced, and [these performers] came to be described in programmes and advertisements as "assistant artists," with the [piano] soloist as "Concertgeber(in)," to emphasize who was the leading attraction.⁵⁶

In terms of repertoire, the dominance of Beethoven, Chopin, and Liszt can be seen throughout, making up nearly 50% of all composers in pre-1860 recitals and just under 40% by 1980; most recitals presented by 1980 held no more than three composers on the program; and there was a sharp decrease in the total number of composers programmed overall. Gould describes his analysis in three periods, where the first period, pre-1860, showed the rise of the solo piano recital, with the prioritization of serious classical music; the second period, between 1870-1950, stayed relatively the same, but pianists in countries other than Germany and Austria presented programs with more composers; and the final period, post-1950, had the biggest change with "the average number of composers per recital virtually halved . . . [and] composers from outside the German-Austrian tradition faring particularly badly."⁵⁷ Although pianists like Horowitz favored and praised program design that demonstrated variety, it seems in the latter half of the

⁵⁵ John Gould, "What Did They Play?: The Changing Repertoire of the Piano Recital from the Beginnings to 1980," *The Musical Times* 146, no. 1893 (2005): 62, https://doi.org/10.2307/30044125 (accessed January 15, 2021)

⁵⁶ Gould, 63.

⁵⁷ Gould, 75.

twentieth century, pianists relied heavily on "frequent repetition of a very limited range of works, and even identical repetition of entire programmes in several centers." I understand and am sensitive to the notion of an economy of scale for programs in the hands of the touring concert pianist. However, in light of all this, might there be room to explore projects that may accomplish both tasks—rethinking the recital format and diversifying the piano repertoire—simultaneously.

Chamber Music Concerts

Instead of sharing an extensive summary of the evolution of the chamber music concert and orchestral concert, I will share a brief overview that articulates how these two concert formats laid the groundwork for our modern-day notion of concert design and the artistic profile. To explain the earlier mention of the origin of "classical music" deriving from "ancient music," I would like to provide context for this term: "the concept of classical music should be seen as pioneering rather than conservative during the first half of the nineteenth century. Endowing older works with canonic authority took two generations to accomplish because it made a fundamental break with musical tradition." In other words, studying "ancient music" was not a common practice done by performers for the sole purpose of concertizing before the mid-nineteenth century. Composers may have studied older works to gain insight into compositional techniques; however, the majority of performances were programmed to showcase contemporary compositions. Besides the work that Clara Schumann did on the recital front, the rise of chamber music concerts propelled the study of the traditional classical repertoire as well. Musicologist Nancy November studies the string quartet model as an analysis on the changing culture of listening in the nineteenth century. She writes,

The string quartet was being constructed and used as a symbol of a musical work designed for "serious listening": the artists were trying to show how one should, ideally, listen to "serious" music in general. . . . Scholars who study listening practices are united in the view that the nineteenth century witnessed a fundamental shift in the nature of listening. It is agreed that, during this era . . . a culture of silent, reverent listening arose,

⁵⁸ Gould, 76.

⁵⁹ Weber, 122.

in tandem with [a] burgeoning concert life, and increasing middle-class initiative, participation, and leadership therein.⁶⁰

There were two main programming directions for the chamber music concert—one was led by violinist Pierre Baillot and the other by violinist Ignaz Schuppanzigh. Baillot continued the miscellany traditions by programming five or six pieces in a concert, often including the practice of solo virtuosity and his own works. Schuppanzigh was one of the firsts to program public concerts without vocal music for his string quartet in 1804, and like Clara Schumann, he also limited the number of pieces on the program to only three or four, focusing on the serious study of composers such as Haydn, Mozart, and Beethoven. Weber claims that "Schuppanzigh, Baillot, and their successors should be credited with imaginative and determined leadership. Their events greatly influenced later innovations in concert design. As musical life broke up into separate spheres in the 1850s, the idealism inherent in the quartet concert served as a model for the solo recital and for the New Music concert, and indeed for programming as a whole."

Orchestra Concerts

In the orchestral realm, the symphonic concert rose to formidable standing within the span of sixty years or so, undergoing a substantial shift in program design. The repertoire performed by orchestras was broader than that of chamber music concerts, since many orchestral concerts still followed the tradition of benefit concerts of the past by incorporating vocal music. Like chamber music concerts, the orchestral genre also grew in two directions: the more serious symphonic path and the promenade concert for popular music. The promenade was a descendant of the miscellany format and an ancestor of the modern-day pops concert. It leaned towards a popular flavor in its program design, and often included a host of operatic numbers, with an emphasis on providing a visual as well as an aural experience for the

⁶⁰ Nancy November, "Picturing Nineteenth-Century String Quartet Listeners," *Music in Art* 41, no. 1-2 (2016): 237, https://www.jstor.org/stable/90012999 (accessed December 10, 2020).

⁶¹ Weber, 132.

⁶² Weber, 81.

⁶³ November, 240.

⁶⁴ Weber 140.

listener.⁶⁵ In America, this genre was also extremely popular, as seen by the launch of the Promenade Concerts at Boston Music Hall in 1885.⁶⁶ Some organizations even created completely distinct brands to perform the serious programs versus the popular ones—such as the Boston Pops Orchestra and Boston Symphony Orchestra, founded in 1885 and 1881 respectively. The Pops Orchestra currently consists of all the members of the Boston Symphony Orchestra except for the first chairs.⁶⁷

The major European orchestras, such as Leipzig's Gewandhaus, the Vienna Philharmonic, the Philharmonic Society of London, and the Society of Concerts of the Conservatoire in Paris, all came into existence between 1781-1842, and by the 1830s, symphonics matured into the cornerstone genre in orchestral concert series, with a newly heightened ritual of having the entire second half of a concert dominated by one symphonic work. While its repertoire hosted more than Haydn, Mozart, and Beethoven, Weber indicates that "in the 1780s a piece could be praised for being a well-crafted and affecting work by a master composer, but it eventually would be superseded by something new. By 1870 a composition soon had to be deemed a great work—indeed, an artwork—by a classical composer, to be selected for a major orchestral series." This was a tall order for emerging composers in the second half of the nineteenth century, as it must have been incredibly difficult to test new works with the public and break into the mainstream orchestral programming. In fact, "the status of new music would become a major source of dispute throughout Europe during the second half of the nineteenth century."

⁶⁵ Weber, 209.

⁶⁶ Kenneth H. Marcus, "Every Evening at 8': The Rise of the Promenade Concerts in Late Nineteenth-Century Boston," *American Music* 36, no. 2 (2018): 194, https://doi.org/10.5406/americanmusic.36.2.0194 (accessed December 10, 2020).

⁶⁷ Boston Symphony Orchestra, "A Brief History of the Boston Pops Boston Symphony Orchestra," Boston Pops, https://www.bso.org/brands/pops/about-us/historyarchives/the-history-of-the-boston-pops.aspx (accessed January 22, 2021).

⁶⁸ Weber, 169-175.

⁶⁹ Weber, 170.

⁷⁰ Weber, 207.

This trend was also echoed in the United States, as can be seen in the website "Pulsecheck: Is Orchestral Music Still a Living Art Form in 2017?" by data scientist, design engineer, and former composer Eric William Lin. Lin brings together concert program data from across the New York Philharmonic's 175 years of existence, from 1842 to 2017, in order to visualize this change. The dotted line in figure 4 below demonstrates the percentage of pieces that are repeat performances of music by living composers against the backdrop of repertoire by living and deceased composers.⁷¹

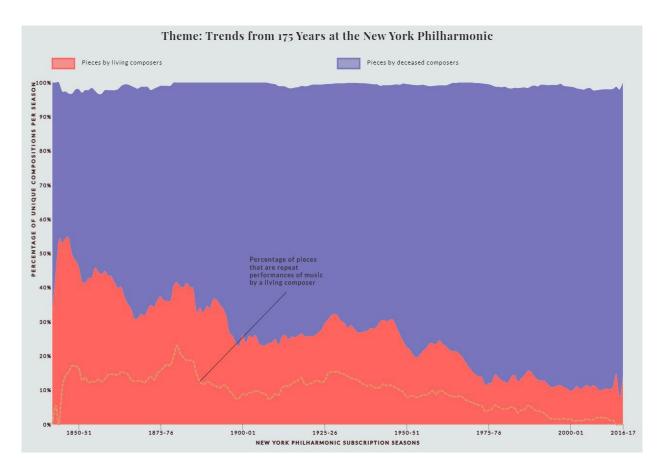


Figure 4. Trends from 175 Years at the New York Philharmonic, comparing the volume of pieces by living composers to deceased composers on concert programs from 1842 to 2017. Image taken from Lin's website.

⁷¹ Eric William Lin, "Pulsecheck: Is Orchestral Music Still a Living Art Form in 2017?," Trends from 175 seasons at the New York Philharmonic, posted November 2017, https://ericwilliamlin.com/NYPhil_data_viz/ (accessed December 10, 2020).

It is clear that there was a decidedly lower volume of living composers, and even fewer who saw their music played more than once on a program. This nineteenth-century trend of preserving the coveted classical composers on concert programs was a practice across the globe in the musical world.

The Transformation

This overview on the evolution of the recital, chamber music concert, and orchestral concert displays an overwhelming collection of evidence that the nineteenth century held a highly hierarchical outlook for public concerts and artistic tastes in general. Cultural historians such as Lawrence Levine and Paul DiMaggio have examined this topic extensively, supplying perspectives on how and why this evolution developed from a sociological angle. DiMaggio states that "taste, then, is a form of ritual identification and a means of constructing social relations. . . . The high arts have become important status markers, for they are subject to few barriers of age, region, or gender, and are consecrated in school curricula. . . . If there is a common cultural currency, the arts . . . constitute it." Lawrence Levine is even more straightforward in his book, *Highbrow/Lowbrow*, where he provides a reflection on the cultural shift in American history across theater, orchestral halls, opera houses, and museums in the nineteenth century. He sheds light on the way this distinctly affected the attitudes of artists, which in turn completely changed concert program design and the artistic profile of musicians.

These worlds of strangers [the middle class] did not remain contained; they spilled over into the public spaces that characterized nineteenth-century America and that included theaters, music halls, opera houses, museums, parks, fairs, and the rich public cultural life that took place daily on the streets of American cities. This is precisely where the threat lay and the response of the elites was a tripartite one: to retreat into their own private spaces whenever possible; to transform public spaces by rules, systems of taste, and canons of behavior of their own choosing; and, finally, to convert the strangers so that their modes of behavior and cultural predilections emulated those of the elites.⁷³

⁷² Paul DiMaggio, "Classification in Art," *American Sociological Review* 52, no. 4 (1987): 443, http://www.jstor.org/stable/2095290 (accessed January 13, 2021).

⁷³ Lawrence Levine, *Highbrow/Lowbrow: The Emergence of Cultural Hierarchy in America* (Cambridge: Harvard University Press, 1990), 177.

Between the rising middle class' desire for a higher quality of life, the elite's fear of a sudden loss of control, and the Industrial Revolution's economic boom that led to the domestic presence of pianos, the musical world—and its concerts, artists, and listeners—would be unquestionably changed in this inevitable cultural collision. This transformation was continued well into the twentieth and twenty-first centuries, and led to an eager preservation of these newfound traditions in concert formats.

Chapter 3: A New Take on Concert Experiences and the Modern-Day Artist-Curator

The most remarkable feat for the rise of the nineteenth-century model for program design was that it sustained immensely well into the twenty-first century. As we recall, there were two directions that the recital, chamber music concert, and orchestral concert matured into: the more serious type and the popular programs. In actuality, besides the repertoire played, both tracks tended to follow the same format in terms of concert etiquette. In historian Christopher Small's book, *Musicking: The Meanings of Performing and Listening*, he urges readers to think of music as a process rather than a product, and begins his book with the following: "In the concert hall, two thousand people settle in their seats, and an intense silence falls. A hundred musicians bring their instruments to the ready. The conductor raises his baton, and after a few moments the symphony begins. As the orchestra plays, each member of the audience sits alone, listening to the work of the great, dead, composer." This evokes an image that is familiar to all of us, and yet, it leaves me wondering, is there another concert format to try? What is the artist's role in the next evolution of concert design?

The hierarchical way that we perceived classical music in the 1800s led to this unfortunate divide in the musical world, between serious and popular programs, which in my opinion hinders the future of classical music. It is allowing us to define "classical music" as the old rather than the new. The original road to existence for the nineteenth-century concert model was revolutionary, and it was founded with the principal goal of elevating music to a higher status and aligning with the musical tastes of the time. Has there been a revolution like this in the past 150 years? Has musical taste changed since? How could it not? Small declares that "the repertory of works that will today attract a sizable audience virtually froze around the time of the First World War, and little that has appeared since then carries the appeal for the

⁷⁴ Christopher Small, *Musicking: the Meanings of Performing and Listening* (Hanover: University Press of New England, 1998), 1.

average audience that earlier works do."⁷⁵ What is our responsibility as artists and educators to curate musical taste in this century?

I believe we have reaped the benefits from the nineteenth-century approach to classical music. By hoisting music onto a pedestal, it became a serious art, one to be studied, researched, written about, and performed professionally. But, what has been lost in these two hundred years is the spontaneity and out-of-the-box creativity that was once the hallmark of music—likely for fear of damaging the traditions built by the classical masters we revere today. Could there be concert programs designed to be serious, thoughtful, insightful, and engaging, while spotlighting both the canon works intermingled with contemporary ones? Could the concert design be curated in a holistic way to produce an experience for the twenty-first century public that is different from what Small references in his book? I am not advocating for the total abandonment of the traditional recital, orchestral, or chamber concert format. However, I do think we can ask ourselves whether there is enough space, figuratively, on the concert stage for both the nineteenth-century serious model as well as newer concert formats. I believe the answer is yes. But more importantly, do we train our next generation of students and young artists to think about their contributions to the arts world in this way? This, I am not so sure.

The nineteenth-century purist method of concert presentation allows the music to speak for itself without any extra-musical distraction. There is value in this, and it is clear that certain segments of the public may even seek this singular auditory experience—they are the ones "in the know." They recognize what to listen for, how to listen, and when to anticipate the next musical event within their sonic experience. And yet, for those who are not "in the know," performers often have to take on the role of a teacher in the concert hall and lead listeners through a program. Much research has been done on how people learn and the various learning styles, from auditory to visual to kinesthetic to writing and reading. One of the ways an educator can approach this is by matching a student's learning style to a teaching

⁷⁵ Small, 32.

method. Akin to this matchmaking of learning processes, listeners also absorb information differently from one another, much like students. If artists are to create an inclusive environment for people to experience classical music, perhaps there is merit to exploring the integration of multiple disciplines into the concert experience, not just for the sake of matching styles but also for the exposure of multiple modes of concert absorption for listeners. One school of thought breaks teaching down into two main groups—the instructor-centered and student-centered. Many of the instructor-centered methods, such as lecturing and modeling, are referred to as expository teaching strategies in Jeanne Ormrod's *Educational Psychology*. The student-centered strategies involve discovery and inquiry learning, which tend to be interactive and collaborative in nature. Them the standpoint of programming, a newcomer might find the strict rituals of the nineteenth-century concert format to be foreign and incredibly exclusionary. Their experience may be akin to being on the receiving end of this music, similar to the lecture style of teaching. This begs us to ask the question: how do we adjust program design so that the audience is drawn inward for an experience of discovery as opposed to a peripheral encounter that places them on the other side of the stage, passively observing a musical exhibit?

For this chapter, I would like to focus on four case studies that demonstrate Design Thinking through interdisciplinary and transdisciplinary collaborations. As a sampling across the last fifteen years, I believe each of these cases can serve as an inspiration to pianists as they design their own programs.

Case Study No. 1: San Francisco Symphony

The San Francisco Symphony launched a music laboratory series named SoundBox in 2014—a collection of three to five programs each season, with a multipronged approach of offering an alternative type of concert experience, increasing collaboration across various media, expanding upon the

⁷⁶ Wilbert J. McKeachie and Marilla Svinicki, *McKeachie's Teaching Tips* (Boston: Houghton Mifflin Company, 2006), 167.

⁷⁷ Jeanne Ellis Ormrod, *Educational Psychology: Developing Learners*, 6th ed. (Upper Saddle River: Pearson, 2008), 453-496.

institution's brand, broadening the artistic profiles of its orchestra musicians, and diversifying the audience reach of the organization. The series invites collaborators such as lighting and art installation designer Luke Kritzeck, 78 documentary filmmaker and projection designer Adam Larsen, 79 composer Bryce Dessner, 80 composer-performer Missy Mazoli, 81 new music group the International Contemporary Ensemble, 82 performer Meow Meow, 83 designer-sculptor-fabricator-engineer-musician Oliver DiCicco, 84 dance group the L.A. Dance Project, 85 and floral installation company Rito-ito, 86 to name just a few. This philosophy of inter- and transdisciplinary program design is interwoven throughout each concert, with performances featuring soloists, various ensemble make-ups, and the orchestra. The reason I survey this particular series is because its concerts blur the line between the recital, chamber, and orchestral program. Multiple senses—visual, auditory, olfactory, gustatory, and tactile—are invited to participate in an experience that begins at 9:00 p.m. and often ends close to midnight, after three acts and two intermissions. When curating the program, every medium is planned jointly and relates deeply to the music presented. That is, collaborators are not preparing their art (i.e. their part of the performance) in a vacuum. As seen in figure 5 on the next page, there are several stages for performers; curated visual art projections are an essential part of the performance; and seating is casual, spontaneous, and mobile. An

⁷⁸ Luke Kritzeck, "SoundBox," Luke Kritzeck, https://www.lukekritzeck.com/soundbox (accessed January 14, 2021).

⁷⁹ Adam Larsen, "BAR / SoundBox," HUM-BAR, https://www.hum-bar.com/projection/soundbox/ (accessed January 14, 2021).

⁸⁰ San Francisco Symphony, "Notes on the Music from Wires," SoundBox, http://sfsoundbox.com/notes-on-the-music-from-wires/ (accessed January 14, 2021).

⁸¹ San Francisco Symphony, "SoundBox: Modern Sanctuary," https://www.sfsymphony.org/Data/Event-Data/Program-Notes/S/SoundBox-Modern-Sanctuary (accessed January 14, 2021).

⁸² International Contemporary Ensemble, "ICE and San Francisco Symphony at Soundbox," https://www.iceorg.org/events/2018/2/9/san-francisco-symphony-soundbox (accessed January 14, 2021).

⁸³ Meow Meow, "San Francisco SoundBox," In Descent, https://meowmeowrevolution.com/san-fransisco-soundbox (accessed January 14, 2021).

⁸⁴ San Francisco Symphony, "Musical Sculptures by Oliver DiCicco," SoundBox, http://sfsoundbox.com/musical-sculptures-by-oliver-dicicco/ (accessed January 14, 2021).

⁸⁵ L.A. Dance Project, "SoundBox," http://ladanceproject.org/performance-calendar-1/2019/2/22/soundbox (accessed January 14, 2021).

⁸⁶ Alexandra Rose Franco, "Roses: Obsession & Creation - Rito-Ito," Rito-ito, May 11, 2016, https://www.rito-ito.com/2016/05/11/roses-obsession-creation/ (accessed January 14, 2021).

orchestral pit, as pictured in figure 6 below, is malleable and can be reconfigured into an installation playground for things like a sound sculpture that compliments a program with Terry Riley's *Keyboard Study No. 2*, or a meticulously crafted sonic garden in tandem with John Cage's *Branches*.⁸⁷



Figure 5. SoundBox, showing multiple performance stages and visual art presentations in a 2016 performance. Photograph by Cory Weaver. Courtesy of San Francisco Symphony's Press Kit.



Figure 6. SoundBox, where the orchestra pit is turned into a performance space. Photograph by Cory Weaver. Courtesy of San Francisco Symphony's Press Kit.

⁸⁷ San Francisco Symphony, "Press Kit: SoundBox," https://www.sfsymphony.org/About-SFS/Press-Room/Press-Kits/Soundbox (accessed January 14, 2021).

Each program has an artist-curator to lead the vision, theme, and design of the experience. There are strict vocabulary guideposts to keep the brand of SoundBox fresh, hip, and accessible, such as referring to each concert as a "show." While this may seem contradictory to our ingrained hierarchical notion of classical music—i.e. the idea that if we call it a show, its artistic integrity would be degraded—I think this label is rather appropriate for this particular program design. It provides the audience with an expectation for a multisensory experience with music at the foreground. Curators range from composers and conductors to vocalists and instrumentalists, and repertoire selections span the entire gamut of musical eras, stretching from Monteverdi to Beethoven to Ravel to David Lang. Below is an example of a program titled "Hidden Worlds," which was presented in January 2016.

ACT I	Heitor Villa Lobos's "The Little Train of the Caipira" from <i>Bachianas</i>
	Brasilieras No. 2 (arranged for cello and piano, 4')
	Andy Akiho's Oscillate (for string orchestra, percussion, and piano, 18')

FIRST INTERMISSION

ACT II Camille Saint-Saëns's "Aquarium" from *The Carnival of the Animals* (arranged for chamber orchestra, 2')
George Crumb's *Voice of the Whale* (for flute, piano, and cello, 18')

SECOND INTERMISSION

ACT III David Lang's *are you experienced?* (for narrator, chamber orchestra, and electric tuba, 23')⁸⁸

In the example above, one may note the array of offerings, much like the miscellanies of the eighteenth century. Each act was approximately 20 minutes in length. The idea here was to offer musical courses throughout the evening, with an appetizer here, a salad course there; to evoke curiosity during and post-performance; and most importantly, to make space for conversations between acts. This gave listeners time to react and discuss what they had just heard across the multiple stages throughout the SoundBox space. The repertoire unfolded in a way that might resemble going on an excursion, and pianist and

⁸⁸ San Francisco Symphony, "Notes on Music at 'Hidden Worlds," SoundBox, http://sfsoundbox.com/notes-on-music-at-hidden-worlds/ (accessed January 14, 2021).

conductor Christian Reif's curated program titled "Synesthesia" also achieved this feeling. Reif called on each of the senses, and urged the audience to imagine removing one sense or adding another throughout the evening. In one of the acts, he programmed a piece for solo timpani by Jacob Sello, where the timpani head was replaced with a touchpad that controlled sound, light, and imagery. This was followed by an Anna Thorvaldsdottir work performed (mostly) in pitch darkness—to experiment with the removal of visual stimulation in listeners. Next, Reif included a late Beethoven string quartet, which allowed the curator to discuss the auditory implications of the composer's untimely hearing issues. We can see examples of a designed program that utilize many of the tenets in Design Thinking:

- 1. Empathy was used to design the program from the artist's and audience's perspective.
- 2. A theme was defined for the program, and the organization and artists used storytelling to share this tightly interlaced theme with the audience before and during the performance.
- 3. The repertoire was ideated upon, with rounds of program selections explored, discarded, and salvaged between Reif and other artistic collaborators.
- 4. Prototypes were the concerts themselves, and were presented to the public each month, so that the organization could learn how listeners would react to each experience.
- 5. Testing was done through audience email surveys after each show in order for the organization to evolve its concert design each year.

Experimentation is in the DNA of SoundBox. In 2015, San Francisco Symphony retained the consulting firm, *Prophet*, who specializes in organizational transformations—such as developing a customer experience strategy. Later, the Symphony engaged the digital design firm, *Propane*, to reposition its brand and craft a content strategy map for the orchestra. ⁸⁹ This type of work allowed the artists, staff, and board to utilize Design Thinking principles on a regular basis. Testing of prototypes was a must for SoundBox, with curators, composers, artists, designers, producers, and administrators all participating in the process. The tests were executed in the form of attendee surveys tracking reception of repertoire selections, start time of the show, ticket prices, thematic narratives, furniture layout, placement

⁸⁹ Propane, "Redefining an Institution: SF Symphony Brand & Content Strategy," Propane, https://propane.agency/work/sanfranciscosymphonybrand (accessed January 14, 2021).

of the bar for food and drinks, and more. Anything that was considered part of the experience was readily available for questioning and improvement. Richard Lonsdorf was a lead producer for SoundBox's first three seasons, and he writes on his website, "in order to test the limits of audience engagement, I pushed our team to consider new options for venue layout and performance locations whenever possible." Interestingly, due to the limited supply of under 500 seats per night, the shows repeatedly sold out within minutes of each on-sale launch. And yet, the repertoire selections were never disclosed until the audience arrived—only the theme was shared. No one knew what they were about to see or hear; they simply knew it would be an experience they wanted to be a part of.

Case Study No. 2: tears become... streams become...

In December 2014, pianist Hélène Grimaud joined forces with Turner Prize-winning visual artist Douglas Gordon to design an adventurous production that married art, music, and architecture at the Park Avenue Armory in New York. With over 122,000 gallons of water brought in to flood the space, Grimaud and Gordon invited a team of engineers to help them design an experience for guests that would run through the month of December. For this "journey," as Grimaud called it, she selected a sixty-minute program of water-themed works and performed for ten nights. The month-long installation even compelled the Armory to stay open and welcome the public into the space during the day, where a player piano sounded Grimaud's recorded performance in the haunting hall. Chief music critic of the *New York Times*, Anthony Tommasini, details Grimaud's program in a raving review of the project, and the

⁹⁰ Richard Lonsdorf, "SoundBox," SoundBox, https://www.richardlonsdorf.com/soundbox (accessed January 14, 2021).

⁹¹ Park Avenue Armory, "Artist Douglas Gordon and pianist Hélène Grimaud flood Armory's Drill Hall with water, light, and music in new site-specific and genre-defying collaboration this December," Press Releases, posted on December 9, 2014,

http://armoryonpark.org/images/content_images/tears_become_streams_become_Press_Release.pdf (accessed on January 15, 2021).

⁹² Park Avenue Armory, "tears become...streams become...," 2014, https://www.armoryonpark.org/programs_events/detail/tears_become_streams_become (accessed on January 15, 2021).

repertoire she chose for the ten live performances is below. 93 Figure 7 below also shows a photograph of the installation taken from the Park Avenue Armory. 94

Luciano Berio's Wasserklavier (1965)
Toru Takemitsu's Rain Tree Sketch II (1992)
Gabriel Fauré's Barcarolle no. 5 in F sharp minor (1893)
Maurice Ravel's Jeux d'eau (1901)
Isaac Albéniz's "Almería" from Iberia (1905-9)
Franz Liszt's Les jeux d'eau à la Villa d'Este (1866)
Leoš Janáček's Andante from In the Mists (1912)
Claude Debussy's La Cathédrale engloutie (1910)



Figure 7. 'tears become...' installation by Grimaud and Gordon at the Park Avenue Armory. Photograph by James Ewing. Courtesy of Park Avenue Armory.

Grimaud's choice of repertoire resembled an aspect of the eighteenth-century performance model, where there was a conscious decision to include as many composers as possible, sometimes playing only a movement of a cycle. She shared that her goal of prioritizing variety above traditional form led her to rethink her program design. In the end, she only included one piece or movement per composer. And,

⁹³ Anthony Tommasini, "Harmonic Ripples in a Watery World," *New York Times*, December 10, 2014, https://www.nytimes.com/2014/12/11/arts/music/hlne-grimaud-performs-tears-become-streams-become.html (accessed on January 15, 2021).

⁹⁴ Museograph, "Douglas Gordon & Hélène Grimaud, Tears Become...Streams Become...," museograph, posted on Tumblr, January 19, 2015, https://tmblr.co/ZKEsks1b9apR6 (accessed on January 15, 2021).

there was also another reason for limiting her program length to sixty minutes: Grimaud and Gordon both wanted to incorporate the visual art installation as part of the program. They wished to integrate the slow emergence of water into the hall for each performance in order for the audience to experience this haunting part of the evening. Making these decisions together, this production is a superb case study for a true interdisciplinary, and perhaps even transdisciplinary, partnership between multiple art forms.

Design elements by Grimaud and Gordon can be seen throughout this production, such as when Gordon mentioned that he had to prepare plans A, B, C, D, E, F, and G while intimating that each of the ten performances by Grimaud was like a test for the next performance. Faced with numerous hurdles, the project took over a year to conceptualize, with many phases of cross-disciplinary brainstorming on what might work in the Armory. Detailed considerations for both the internal production challenges as well as external user-experience elements aligned well with Design Thinking processes. Internally, Steinway was concerned about the humidity of their pianos, as they would essentially be sitting above a lake. This was resolved by applying principles of psychometrics, where in order to achieve zero humidity, the engineers kept the water to a cool temperature of 50 to 55 degrees while maintaining the surrounding air temperature at 70 to 76 degrees. 95 Prototypes were supplied such as when "the engineering firm Arup . . . tried out Mr. Gordon's 'let's flood the armory' idea on a one-hundredth scale model, about the size of a dining room table, and then . . . on a section of the Drill Hall floor about one-twentieth the size of the final lake infrastructure."96 Utilizing empathy so that the audience could gain more insider knowledge on the project, Park Avenue Armory also produced a short documentary film that included a collection of fireside chats with the artists, engineers, and staff.⁹⁷ This insightful episode gave context to the installation and performances for the audience and provided an overall narrative for creating such a piece.

⁹⁵ William Grimes, "A Stage, a Pool, a Flood of Ideas," *New York Times*, December 4, 2014, https://www.nytimes.com/2014/12/05/arts/design/tears-become-streams-become-fills-the-armory.html (accessed January 15, 2021).

⁹⁶ Grimes, "A Stage, a Pool, a Flood of Ideas."

⁹⁷ Park Avenue Armory, "An Inside Look at tears become... streams become...," YouTube video, 12:07, Produced by Park Avenue Armory, December 23, 2014, https://youtu.be/ySJRRFoP9FA (accessed January 16, 2021).

The Armory's President and Executive Producer Rebecca Robertson shared that the goal of the Armory is to allow artists to be curators, to have designed interdisciplinary experiences come to life, and to offer the space as an empty box for artist-curators to push beyond the boundaries of the normal concert stage. 98

In Tommasini's interview with Gordon and Grimaud, he shared that they wished to "pose two questions [to the audience]: 'How many times have you cried in your life? How much fluid have you given to the world?' The way the water seeped into cracks in the floor at the start of this piece seemed to be a metaphor for crying. We all have within us an endless supply of tears, just waiting to be tapped."99

This narrative and journey that Gordon and Grimaud shared with the audience pulled people in to reflect on why such an experience was designed in the first place. In Jesper L. Jensen's article, "Designing for Profound Experiences," he advises readers to consider moving their thinking from designing solutions to designing possibilities. Here, he suggests that there are three dimensions of an experience: the instrumental, the usage, and the profound experience. The instrumental is similar to an object that helps facilitate the other dimensions, like a ticket to a concert; the usage is akin to Shostack's service design concept, where designers observe end-users utilizing the final product—such as attending the concert that the ticket gave entry to; and finally, the profound experience refers to the fully immersed event where people find meaning. Grimaud and Gordon created a profound experience. How can the twenty-first century artist design concert experiences that are fully immersive, provoke unconventional thought, and intentionally discover layers on top of the recital format that our ancestral artists provided us?

Case Study No. 3: Half/Cut/Split with Schumann

Music and dance as a collaborative duo is not a new venture of the twenty-first century by any means. However, to date, music and dance as *equal* collaborative partners on stage is still rare, especially

⁹⁸ Park Avenue Armory, "An Inside Look at tears become... streams become..."

⁹⁹ Tommasini, "Harmonic Ripples in a Watery World."

¹⁰⁰ Jesper L. Jensen, "Designing for Profound Experiences," *Design Issues* 30, no. 3 (2014): 42-45, https://doi.org/10.1162/desi a 00277 (accessed January 17, 2021).

in live performance settings. One of the most iconic music and dance partnerships in the twentieth century began in the 1940s between John Cage and Merce Cunningham. This lifelong collaboration is well documented in celebrated dancer Carolyn Brown's memoir. She writes, "having determined that the barest definition of music is sound and silence, Cage then arrived at a corollary in dance: movement and stillness. From that premise he resolved that the common denominator of music and dance is time. Following Cage's lead, Cunningham structured his dances by time lengths." The two created some of the most adventurous interdisciplinary projects at the time, such as *The Seasons* in 1947. Even so, in a collaboration between music and dance, we often see it between a composer and choreographer, such as with Cage and Cunningham and now between David Lang and Benjamin Millepied. Rarely do we see a partnership forming between performer and choreographer.

In 2014, pianist Joyce Yang approached the Aspen Santa Fe Ballet, looking to create a project for music and dance. She was introduced to Finnish contemporary choreographer Jorma Elo, and they met in New York City's Steinway Hall. Right from the beginning, it was a partnership that was rooted in design and cross-discipline collaboration. Yang writes a blog about this project on her website, where she claimed, "I was shocked that he brought his own score to our meeting . . . [and he] wrote and sketched in his score as I explained my set of visuals." After months, they decided on the repertoire together, selecting Robert Schumann's *Carnaval* as the cornerstone of the performance, with new choreography titled *Half/Cut/Split* by Elo, and two additional works to round out the program: *Mad Rush*, Metamorphosis No. 2 by Philip Glass with choreography, *Where We Left Off*, by Nicolo Fonte, and excerpts from Leoš Janáček's *On an Overgrown Path*, Sonata "1905," and *Diary of One Who Disappeared* with choreography, *Return to a Strange Land*, by Jiří Kylián. This was the first time in

¹⁰¹ Carolyn Brown, *Chance and Circumstance: Twenty Years with Cage and Cunningham* (United Kingdom: Knopf Doubleday Publishing Group, 2009), chap. 2, Kindle.

¹⁰² Joyce Yang, "Music and Movement," Joyce Yang, posted on December 28, 2017, https://pianistjoyceyang.com/content/music-and-movement (accessed January 19, 2021).

¹⁰³ Younes and Soraya Nazarian Center for the Performing Arts, "Aspen Santa Fe Ballet," posted on March 19, 2018, https://www.thesoraya.org/assets/ShowPro/press/PressRelease/Aspen-Santa-Fe-Release-FINAL2.pdf (accessed on January 19, 2021).

Aspen Santa Fe Ballet's history of twenty-one years—at the time in 2018—where dancers performed with live music onstage, and the Aspen Santa Fe Ballet even shared some of this collaboration in a video posted on Vimeo.¹⁰⁴ Figures 8 and 9 below show Yang's performance with the ballet company.¹⁰⁵



Figure 8. Aspen Santa Fe Ballet and pianist Joyce Yang performing Philip Glass and Nicolo Fonte's *Where We Left Off.* Photo by Michelle Cardamone. Courtesy of Dance Music.



Figure 9. Aspen Santa Fe Ballet and pianist Joyce Yang performing Schumann's *Carnaval* and Jorma Elo's *Half/Cut/Split*. Photo by Rose Eichenbaum. Courtesy of Dance Music.

Why Robert Schumann? Yang explained her fascination and determination in choosing Schumann by stating that she had hoped a performance like this—which included visual storytelling—would allow more audience members to understand the complexities and intricacies of Schumann's compositions. ¹⁰⁶ She is not alone in this, as Gould notes that Chopin and Wagner never touched Schumann's works, and Liszt only did so towards the end of his life, believing that "his music [was] unsuitable for public recitals. Even Clara, for all her efforts on behalf of Robert's music, acknowledged that the public found his longer works, which Schumann himself never heard in concert,

¹⁰⁴ Aspen Santa Fe Ballet, "Half/Cut/Split," Vimeo video, 2:13, Produced by Aspen Santa Fe Ballet, June 20, 2018, https://vimeo.com/276095903 (accessed on January 19, 2021).

¹⁰⁵ Johnny Nevin, "Pianist Joyce Yang writes about Music and Movement at Aspen Santa Fe Ballet," Dancer Music, August 27, 2018, https://dancermusic.com/pianist-joyce-yang-writes-about-music-and-movement-at-aspen-santa-fe-ballet/ (accessed on January 21, 2021).

¹⁰⁶ Yang, "Music and Movement,"

difficult to understand. She introduced them cautiously, playing at first only extracts rather than the complete work." Yang utilized Design Thinking by empathizing with her audience and envisioning an experience where both the artist can express her intentions and the listener can have a better chance of hearing—and seeing—this intention. One of the leading communication strategists Michael Maslansky wrote the book, *The Language of Trust*, and trademarked the phrase, *It's not what you say, it's what they hear*. ¹⁰⁸ I believe this phrase applies superbly to Yang's situation. She wanted to design an experience where the listener will hear what she intends to say. When it comes to audience engagement, retention, and daring repertoire selections, trust is key to repertoire exploration between the artist and audience. If we don't build trust with the listener, they will not willingly come on the journey with us when we wish to explore adventurous programming.

In preparation for the premiere of this project, Yang arrived two weeks early in Aspen to rehearse with the dancers. Referring to this project as "cross-genre chamber music," she writes that

the things that Jorma and the dancers found interesting about the music were sometimes things that I had never considered. Musicians tend to get stuck on the literal interpretation of the score, but . . . together, we tried to find the right balance between music and movement—building on a constantly changing landscape. Today I think I play *Carnaval* very differently than I did before our rehearsal period. ¹⁰⁹

This is precisely the type of attitude that is at the core of Design Thinking—to try, fail, succeed, and test experimental perspectives. Mitcheltree, Holskog, and Ringen describe the frameworks of Design Thinking to be "a structured process of exploration . . . and a human centered innovation process that emphasize on observation, collaboration, fast learning, visualization of ideas, rapid concept prototyping, and concurrent business analysis." ¹¹⁰ I believe the recital format does not simply end with the nineteenth-

¹⁰⁷ Gould, 68.

¹⁰⁸ Michael Maslansky, *The Language of Trust: Selling Ideas in a World of Skeptics* (New York: Prentice Hall Press, 2011).

¹⁰⁹ Yang, "Music and Movement."

¹¹⁰ Christina Marie Mitcheltree, Halvor Holtskog, and Geir Ringen, "Studying Design Thinking as a Forthcoming Source to Innovation Speed," in *Proceedings of the 22nd International Conference on Engineering Design (ICED19)* (The Netherlands: NTNU, August 5-8, 2019), https://doi.org/10.1017/dsi.2019.242, 2359 (accessed January 23, 2021).

century concert model. There is always a way to find a new approach to experience a longstanding piece of music—and Design Thinking can help artists in the process of designing these new prototypes.

While Yang and Elo were not the first, it is interesting to see how this project has enabled the prevalence of a new dynamic: the performer-choreographer partnership. By infusing this performer-choreographer dynamic into the rotations of concertizing, collaborations between music and dance are not only for the contemporary repertoire, and the narrow performer-interpreter role that originated in the nineteenth century has broadened ever so slightly to allow the artist to become curators of their own reimagined presentations. This includes Lang Lang's "The Chopin Dance Project" with choreographer Stanton Welch and the Houston Ballet in 2013, 111 the new music ensemble eighth blackbird's endeavor with L.A. Dance Project, composer Brycer Dessner, visual artist Sterling Ruby, and choreographer Justin Peck in 2014, 112 and pianist Conrad Tao's Library of Congress collaboration with tap dancer Caleb Teicher in 2020. 113 Again, with all of these activities, there are still two noticeable absences: (1) the concept of classical music with other art forms onstage as a "serious" endeavor in artistic expression and exploration, and (2) an adoption by music schools and their faculty to teach cross-disciplinarity and design skills to students entering the professional twenty-first century industry.

Case Study No. 4: Pictures Reframed

In 2007, Norwegian pianist Leif Ove Andsnes met South African visual artist Robin Rhode. The result of this meeting was the bubbling birth of a new project that would eventually be titled "Pictures Reframed." At the heart of this project is one of the staples of the classical piano literature, Modest Mussorgsky's *Pictures at an Exhibition* (hereafter: *Pictures*), and this collaboration tested the boundaries

^{111 &}quot;Lang Lang - The Chopin Dance Project," HDVDARTS, June 15, 2015, https://www.hdvdarts.com/titles/lang-lang-the-chopin-dance-project.html (accessed January 24, 2021).

¹¹² eighth blackbird, "Murder Ballades with LA Dance Project," eighth blackbird, October 5, 2014, https://www.eighthblackbird.org/event/murder-ballades-la-dance-project/ (accessed January 24, 2021).

¹¹³ Conrad Tao and Caleb Teicher, "Virtual Program: Conrad Tao, Piano & Caleb Teicher, Tap Dance," (Concerts from the Library of Congress, 2020-2021, October 23, 2020), https://www.loc.gov/concerts/tao-teicher.html (accessed January 24, 2021).

of both art forms in a most daring way, combining music, film, and still imagery. The *Telegraph* declared it a "brave new marriage between piano recital and video installation." After further research, I found that the live performances were only a slice of the entire project. It premiered in New York's Lincoln Center in November 2009, accompanied by the CD-DVD release of its preview performance in Risør, Norway by *EMI Classics*. This was preceded by a year-long process of filming and photographing Andsnes and Rhode doing street art, making installations, and shooting live action. The tour that followed had them traveling across major cities in the United States and Europe. A highly designed and intensely experimental project for both the artist and audience, Andsnes is quoted as saying,

Mussorgsky's famous suite [*Pictures*] of 1874 is one of the most demanding pieces for solo piano. It proved so experimental that, over the years, hundreds of artists have taken the work as a starting point for new interpretations. Robin Rhode and I have joined forces and embarked on our journey—a new approach. . . . It's an amazing adventure, and not without risks, but hopefully they are risks worth taking.¹¹⁵

In an interview with Andsnes and Rhode by *Dazed* magazine, Andsnes shared that his original intention was to "bring [*Pictures*] back to visual arts where it originated from and complete the circle . . . [and that] hopefully it's a new expression . . . by combining these two art forms."¹¹⁶ His way of thinking already hinted at a transdisciplinary collaboration with Rhode, where their disciplines could come together and potentially produce a new creative expression. When Andsnes referred to the full circle, he was paying homage to the Russian artist, Viktor Hartmann, who posthumously inspired Mussorgsky to write the ten musical sketches in *Pictures*. Upon Hartmann's untimely death, Mussorgsky attended his memorial

¹¹⁴ Jasper Rees, "Leif Ove Andsnes on Pictures Reframed," *The Telegraph*, November 25, 2009, https://www.telegraph.co.uk/culture/music/classicalmusic/6654644/Leif-Ove-Andsnes-on-Pictures-Reframed.html (accessed January 25, 2021).

¹¹⁵ Chip Michael, "Leif Ove Andsnes & Robin Rhode: 'Pictures Reframed,'" Interchanging Idioms Blog, entry posted May 20, 2009, https://interchangingidioms.blogspot.com/2009/05/leif-ove-andsnes-robin-rhode-pictures.html (accessed January 25, 2021).

¹¹⁶ Pryor, John-Paul, Interview with Leif Ove Andsnes and Robin Rhode, "Pictures Reframed," *Dazed* (Dazed Media, November 10, 2009), https://www.dazeddigital.com/artsandculture/article/5694/1/pictures-reframed (accessed January 25, 2021).

exhibit where over four hundred pieces of his artwork were displayed, and soon afterwards, *Pictures* was composed.¹¹⁷ Michael Russ, who has studied *Pictures* extensively for two decades, suggests that

to some extent, Musorgskij's composition has become the exhibition, but he does not attempt to represent Gartman's pictures faithfully, because for him to create music he must first visualise a scene. Thus a nutcracker intended as a Christmas tree decoration must come alive ("Gnomus"); in "Tuilleries" children depicted in the garden must get into a quarrel; "Baba Âga" is not a clock but the ride of the witch. 118

This explains Andsnes' yearning to seek out a visual artist to design this project together. Rhode's background is in urban street art, but he is also known for taking risks in his cross-disciplinary films—melding several visual art forms into one, including the use of film, photography, drawings, performance, and sculpture. In the *Dazed* interview, both he and Rhode delved deeper into the process of how they absorbed and fed off of each other's art form in order to define this collaboration and augment their integration of disciplines.

The collaboration included many highlights, as can be seen in the documentary released on the Norwegian television public broadcasting company, *NRK*. ¹²⁰ Even though the film's narration is in Norwegian, much of the dialogue between Andsnes and Rhode is in English. The creations of the "Promenade" movements and "The Great Gate of Kiev" were particularly interesting. In the documentary, we can hear Rhode and Andsnes converse about the number of promenades throughout the suite and how they may each relate to Rhode's drawing, digital animation, and performance art. In all five promenades, Rhode and Andsnes carefully linked the gallery walker in Mussorgsky's *Pictures* to Mussorgsky's own youth. They did this by naming the character in the video installation "Kadet," an homage to when Mussorgsky was in the Russian military. They also referred to Mussorgsky's personal

¹¹⁷ Alfred Frankenstein, "Victor Hartmann and Modeste Musorgsky," *The Musical Quarterly* 25, no. 3 (1939): 271, https://www.jstor.org/stable/738744 (accessed January 28, 2021).

¹¹⁸ Michael Russ, "Returning to the Exhibition: Musorgskij's Pictures Reconsidered," *Music in Art* 39, no. 1-2 (2014): 220, http://www.jstor.org/stable/90012960 (accessed January 28, 2021).

¹¹⁹ Los Angeles Contemporary Museum of Art, *Contemporary Projects: Robin Rhode Exhibition* (Los Angeles, CA: Los Angeles Contemporary Museum of Art, 2010), https://archive.org/details/RobinRhodeBrochure/mode/2up (accessed January 28, 2021).

¹²⁰ NRK, "NRK Musikk: Høyt Spill - Med Leif Ove Andsnes," April 18, 2012, Television broadcast, 58:00, https://tv.nrk.no/serie/folk/2009/PRHO57002009/avspiller (accessed January 24, 2021).

life through the staggering walk of the character in the video installation, as a symbol of his struggle with alcohol. The evolution of the promenades became a narrative for Andsnes and Rhode, and they hinted at the composer's pursuit of self-discovery alongside their own journey through this project. Each promenade was a rendition of Mussorgsky himself as he walked through the gallery from exhibition to exhibition. Figure 10 below shows Rhode as the video performer, with Andsnes giving the first performance at the 2009 Risør Festival of Chamber Music in Risør, Norway. 121



Figure 10. "Pictures Reframed," showing Rhode's video installation behind Andsnes' live performance. Rhode is also the performer in the video installation. Performance documentation from 2009 Risør Festival of Chamber Music in Risør, Norway. Photo courtesy of EMI Classics.

In the finale movement, "The Great Gate of Kiev," Andsnes and Rhode curated a stunning concept that was executed via film, performance art, and live concert performance. Following the journey of the baby grand piano that Andsnes used in the film, journalist Sølve Rydland shared an article detailing the origins of the piano. From a factory in Barmen, Germany—a town that no longer exists—in 1908, the piano had a few lives before becoming the centerpiece of the finale of "Pictures Reframed." Rhode's

¹²¹ Marcia Argyriades, "Robin Rhode and Leif Ove Andsnes," *Yatzer*, September 29, 2009, https://www.yatzer.com/Robin-Rhode-and-Leif-Ove-Andsnes (accessed January 28, 2021).

artistic concept for the final bombastic movement was to portray the culminating act of "killing the piano" on film, and together with Andsnes, they "settled for drowning [it]." With only one chance to capture the footage, Andsnes and Rhode designed the artistic vision for this day together. On the day of the shoot, the piano was lowered and strapped to the concrete at the bottom of a shipyard in Bergen, Norway, and when the dam opened, sea water poured in as Andsnes performed the final movement inside the harbor. Figure 11 below is a picture from the live shoot in Bergen. 123



Figure 11. "Opening the Floodgates," Andsnes performing *Pictures* during a live video shoot in Bergen, Norway on March 13, 2009. Photo by Tore Zakariassen. Photo courtesy of EMI Classics.

To watch a more detailed video narrative of this day, see the *NRK* documentary at 37:00 to 41:00.¹²⁴ As I was watching it, I realized that this was one of the most extreme performance preparations I have ever witnessed. Titled "The Opening of the Floodgates," the awe-inspiring footage ended the final movement with the piano submerged in water and was filmed to serve as part of the video installation for the live performance tour.

¹²² Sølve Rydland, "Fiery Farewell," *NRK*, December 31, 2017, https://www.nrk.no/vestland/xl/fiery-farewell-1.13837853 (accessed January 28, 2021).

¹²³ Argyriades, "Robin Rhode and Leif Ove Andsnes."

¹²⁴ NRK, 37:00-41:00.

Musically, Andsnes pushed the boundaries of the role set forth by the nineteenth-century performer-interpreter. For this project, he followed in the footsteps of Horowitz's *Pictures*, where the latter arranged his own version of the piano score by drawing from both the original Mussorgsky score and Ravel's orchestral arrangement. In a short YouTube video posted by Warner Classics, Andsnes spoke about his motives behind a strong urge to expand upon Mussorgsky's original score, such as adding octaves in "Samuel' Goldenberg and Schmuÿle." Both he and Rhode embodied the artist-curator role when they produced this epic installation together. Their expansion on the definition of the twenty-first century artist was portrayed in the NRK documentary, where a colleague of theirs described the venture as an entirely international project. He mentioned that the artwork was printed in Germany, but photographed in New York by an Italian photographer; the installation was envisioned by a South African artist; the music was performed by a Norwegian pianist; the preview performance was held in Norway; the world premiere took place in New York; the project was supervised by the French; and finally, the whole thing was paid for by the English. 126 Their commitment to the expanded responsibilities of an artist—bringing in social-political commentary, boundary-pushing design, and fresh artistic perspectives—is a sign of where the artist-curator role is heading in the coming decades. My observation is that their onscreen collaboration exemplified elements of a transdisciplinary partnership while their live performances were interdisciplinary in nature. Regardless of whether a listener enjoys this type of concert format or genre, Andsnes and Rhode's level of collaboration and risk-taking is highly admirable. Music critic of the Houston Chronicle Charles Ward writes, "Pictures Reframed' was a provocative example of a small but slowly growing genre: the recital as collaboration among artists from different fields. At its best, the result is far more rewarding than the usual musical event."127

Warner Classics, "Leif Ove Andsnes & Robin Rhode - Pictures Reframed (HD)," YouTube Video, 8:34, Posted by Warner Classics, May 11, 2009, https://youtu.be/0Vh_3jLX8rQ (accessed January 29, 2021).
126 NRK, 51:00.

¹²⁷ Charles Ward, "Collaboration Offers Glimpse of What Recitals May Offer," *Houston Chronicle*, November 23, 2009, https://www.chron.com/entertainment/article/Collaboration-offers-glimpse-of-what-recitals-may-1736697.php (accessed on January 26, 2021).

Conclusion

The future of concert design is ever evolving. This essay aims to bring into focus both the history of concerts and the expanding horizon of new program designs. The pianist's role in this transformation from the eighteenth century to the twentieth century was crucial. Clara Schumann, Franz Liszt, and their contemporaries ushered in a new era for the professional concertizing musician, especially for the recitalist. However, this model has stayed relatively flat for close to two hundred years, and we have yet to see the next iteration of the recital format—not just as a pre-labeled "innovation project," but as a core offering on the twenty-first century stage. As shown in the case studies examined, artists and listeners have become more adventurous as we progress further into the twenty-first century. Perhaps it may even be accurate to say that some are yearning for the carefree spirit of the eighteenth-century miscellanies. The case studies I presented all include elements of this varied concert model. Have we gone too far in one direction in our search for "serious music"? I don't actually believe that the reason behind declining ticket sales and the aging demographic is because people dislike or are tired of classical music. Musical taste may be evolving, much like how it shifted in the eighteenth and nineteenth centuries, and classical music is perhaps catching a moving train.

From the brief overview of history that I introduced in this essay, we see artists guiding and responding to the preferences of the public decade after decade. Our role as artists, educators, schools, and organizations *is* to guide and respond to those preferences. Across industries, we see people craving for a wider variety of experiences. They have a thirst for more experimental approaches to engagement. Why would classical music be any different and escape this trend? The concert experience now goes well beyond the repertoire on the program or the elapsed time between the first and last notes played. This new way to look at the holistic experience does not have to take away from the artistic quality, as Esa-Pekka Salonen so eloquently mentioned. When reframed, new concert formats can be seen as an exploration to offer something new rather than a loss of the conventional definition of artistic quality. As a result, program selection is becoming more intentional, allowing for a narrative to be built and shared with the

audience verbally, visually, or in written form. Listeners are curious and questioning the "why" and "how"—and this is a positive thing. This curiosity is the lifeline of the art form. When people stop asking "why," they cease to care. Audience members want to know more about why a piece was chosen, why the program was ordered in such a way, why a particular edition was selected, how or why did an artist choose to work with another, and how does this piece or program fit into the larger context of the era, genre, and classical music as a whole.

When an artist begins to design a program that adds extra-musical layers, especially when working with collaborators in other disciplines, he or she has stepped into the artist-curator realm. I touch upon the idea of the modern-day artist-curator in this essay because I believe that the role that artists hold is quickly changing. Knowing how to work within the inter- and transdisciplinary space is a desirable skill. Creating context is part of an artist's responsibility now—hence, the curation. Those who do it well will help listeners retain, recollect, reminisce, and return to the concert hall. In order to take on the responsibilities of curation in this way, we have to assess whether our educational system is supporting and preparing students with the tools to become artist-curators as they enter the professional market.

There are many reasons why the classical music industry looks different than it did fifty or even twenty years ago. The infrastructure that fostered artists in the late-twentieth century, including recording labels, competitions, professorships, and coveted orchestra positions, likely does not exist in the same way for the twenty-first century artist. This can be seen in the disproportionate ratio between adjunct and tenured professorships, the limited openings in orchestras that offer viable living wages, and the shifting economic effect of the digital age on the recording industry. Due to these drastic changes over the last quarter of a century, students are beginning to realize upon graduation that they need to create their own space for their musical careers. Oftentimes young graduates have to design programs, concerts, or projects that serve multiple constituents on and off the stage in their local communities. They may even have to work with non-musicians or non-artists. So, how can schools help prepare students for this shift in the field? Besides becoming experts at their instruments, how are institutions fostering an entrepreneurial mindset—an approach that aligns closely with Design Thinking principles—in their students? Could a

Bachelor of Music curriculum include exposure to design skills, brand management, writing, public speaking, and financial acumen? Could a portion of a student's recital requirements include a collaborative project with other disciplines outside of the music school? Do we want to encourage students to work with their local communities so that they can hone their community-building skills during their four-year or two-year program? These are all vital questions for schools, as some institutions have already begun to reassess their long-established curricula. I would say that learning such skills should not be seen as extracurricular, but rather as essential for young professionals building sustainable careers in music.

The artist's exploration of performance possibilities is paramount to the growth of program design in the twenty-first century and beyond. While Design Thinking is not the only way to face the challenges ahead, it is an important philosophical mindset that prioritizes experimentation and open-mindedness. This mental framework allows for artists to develop projects that can connect to audiences in new ways, and potentially bring a more enriching process of discovery to their own creative expression. It is my hope that these ideas not only grow, but thrive within institutions and on the stages of tomorrow.

Bibliography

- Barone, Joshua. "A Manifesto for the 21st-Century Concert. (Drinks Allowed.)." *New York Times*, June 6, 2018. https://www.nytimes.com/2018/06/06/arts/music/esa-pekka-salonen-new-york-philharmonic.html (accessed December 2, 2020).
- Bonds, Mark Evan. *Music as Thought. Listening to the Symphony in the Age of Beethoven*. Princeton, NJ: Princeton University Press, 2006.
- Buchanan, Richard. "Wicked Problems in Design Thinking." *Design Issues* 8, no. 2 (1992): 5-21. https://www.jstor.org/stable/1511637 (accessed December 7, 2020).
- Denning, Peter J., Robert Dunham, and John Seely Brown. *The Innovator's Way: Essential Practices for Successful Innovation*. Cambridge: The MIT Press, 2010.
- DiMaggio, Paul. "Classification in Art." *American Sociological Review* 52, no. 4 (1987): 440-55. http://www.jstor.org/stable/2095290 (accessed January 13, 2021).
- Dobson, Melissa C. and Stephanie E. Pitts. "Classical Cult or Learning Community? Exploring New Audience Members' Social and Musical Responses to First-Time Concert Attendance." *Ethnomusicology Forum* 20, no. 3 (December 2011): 353-383, https://doi.org/10.1080/17411912.2011.641717 (accessed December 13, 2020).
- Ferris, David. "Public Performance and Private Understanding: Clara Wieck's Concerts in Berlin." *Journal of the American Musicological Society* 56, no. 2 (2003): 351–408. https://doi.org/10.1525/jams.2003.56.2.351 (accessed December 14, 2020).
- Frankenstein, Alfred. "Victor Hartmann and Modeste Musorgsky." *The Musical Quarterly* 25, no. 3 (1939): 268-91. http://www.jstor.org/stable/738744 (accessed January 28, 2021).
- Frisch, Walter. Music in the Nineteenth Century. New York: Norton, 2013.
- Gould, John. "What Did They Play?: The Changing Repertoire of the Piano Recital from the Beginnings to 1980." *The Musical Times* 146, no. 1893 (2005): 61–76. https://doi.org/10.2307/30044125 (accessed January 15, 2021).
- Hamilton, Kenneth. *After the Golden Age: Romantic Pianism and Modern Performance*. New York: Oxford University Press, 2008.
- Huppatz, DJ. "Revisiting Herbert Simon's "Science of Design"." *Design Issues* 31, no. 2 (2015): 29-40. https://www.jstor.org/stable/43829378 (accessed December 1, 2020).
- Jensen, Jesper L. "Designing for Profound Experiences." *Design Issues* 30, no. 3 (2014): 39–52. https://doi.org/10.1162/desi a 00277 (accessed January 17, 2021).
- Johnson, James H. Listening in Paris: a Cultural History. Berkeley: Univ. of California Press, 2008.

- Klein, Julie Thompson. *Crossing Boundaries: Knowledge, Disciplinarities, and Interdisciplinarities*. Charlottesville: University Press of Virginia, 1996.
- Komlós, Katalin. "After Mozart: The Viennese Piano Scene in the 1790s." *Studia Musicologica* 49, no. 1/2 (2008): 35-48. http://www.jstor.org/stable/25598311 (accessed January 7, 2021).
- Kramer, Lawrence. *Musical Meaning: Toward a Critical History*. Berkeley and Los Angeles: University of California Press, 2002.
- Levine, Lawrence. *Highbrow/Lowbrow: The Emergence of Cultural Hierarchy in America*. Cambridge, MA: Harvard University Press, 1990.
- Marcus, Kenneth H. "Every Evening at 8': The Rise of the Promenade Concerts in Late Nineteenth-Century Boston." *American Music* 36, no. 2 (2018): 194–221. https://doi.org/10.5406/americanmusic.36.2.0194 (accessed December 10, 2020).
- Margulis, Elizabeth Hellmuth. "An Exploratory Study of Narrative Experiences of Music." *Music Perception: An Interdisciplinary Journal* 35, no. 2 (2017): 235-48. doi:10.2307/26417393 (accessed January 4, 2021).
- McDonagh, Deana, and J. Thomas. "Rethinking Design Thinking: Empathy Supporting Innovation." *Australasian Medical Journal* 3, no. 8 (September 2012): 458–64. https://doi.org/10.4066/amj.2010.391 (accessed December 13, 2020).
- McPhee, Chris, Martin Bliemel, and Mieke van der Bijl-Brouwer. "Transdisciplinary Innovation." *Technology Innovation Management Review* 8, no. 8 (August 2018): 3-6. http://doi.org/10.22215/timreview/1173 (accessed January 7, 2021).
- Miller, Peter N. "Is 'Design Thinking' the New Liberal Arts?." In *The Evolution of Liberal Arts in the Global Age*, edited by Peter Marber and Daniel Araya, 167-173. New York: Routledge, 2017.
- Mitcheltree, Christina Marie, Halvor Holtskog, and Geir Ringen. "Studying Design Thinking as a Forthcoming Source to Innovation Speed." In *Proceedings of the 22nd International Conference on Engineering Design (ICED19)*. The Netherlands: NTNU, August 5-8, 2019. https://doi.org/10.1017/dsi.2019.242 (accessed January 23, 2021).
- Nicolescu, Basarab, and Atila Ertas, eds. *Transdisciplinary Theory and Practice*. United States: TheATLAS, 2008.
- November, Nancy. "Picturing Nineteenth-Century String Quartet Listeners." *Music in Art* 41, no. 1-2 (2016): 237-48. https://www.jstor.org/stable/90012999 (accessed December 10, 2020).
- NRK. "NRK Musikk: Høyt Spill Med Leif Ove Andsnes." *NRK*, April 18, 2012. Video, 58:00. https://tv.nrk.no/serie/folk/2009/PRHO57002009/avspiller (accessed January 24, 2021).
- Park Avenue Armory. "An Inside Look at tears become... streams become...." YouTube video, 12:07. Produced by Park Avenue Armory, December 23, 2014. https://youtu.be/ySJRRFoP9FA (accessed January 16, 2021).

- Paulus, Paul. "Groups, Teams, and Creativity: The Creative Potential of Idea-Generating Groups." *Applied Psychology* 49, no. 2 (2000): 237–62. https://doi.org/10.1111/1464-0597.00013 (accessed January 4, 2021).
- Pryor, John-Paul. Interview with Leif Ove Andsnes and Robin Rhode. "Pictures Reframed." *Dazed*. Dazed Media, November 10, 2009. https://www.dazeddigital.com/artsandculture/article/5694/1/pictures-reframed (accessed January 25, 2021).
- Rosenblum, Sandra P. *Performance Practices in Classic Piano Music*. Bloomington: Indiana University Press, 1988.
- Ross, Alex. "Why So Serious?" *The New Yorker*, September 8, 2008. https://www.newyorker.com/magazine/2008/09/08/why-so-serious (accessed November 8, 2020).
- Russ, Michael. "Returning to the Exhibition: Musorgskij's Pictures Reconsidered." *Music in Art* 39, no. 1-2 (2014): 215-36. http://www.jstor.org/stable/90012960 (accessed January 28, 2021).
- Rydland, Sølve. "Fiery Farewell." *NRK*. December 31, 2017. https://www.nrk.no/vestland/xl/fiery-farewell-1.13837853 (accessed January 28, 2021).
- Shanks, Michael. Publication. *An Introduction to Design Thinking*. Hasso Platter Institute of Design, Stanford University. https://web.stanford.edu/~mshanks/MichaelShanks/files/509554.pdf (accessed December 14, 2020).
- Shostack, G. Lynn. "How to Design a Service." *European Journal of Marketing* 16, no. 1 (1982): 49-63. https://doi.org/10.1108/EUM0000000004799 (accessed December 2, 2020).
- Simon, Herbert A. The Sciences of the Artificial. 3rd ed. Cambridge: MIT Press, 1996.
- Small, Christopher. *Musicking: the Meanings of Performing and Listening*. Hanover: University Press of New England, 1998.
- Tepavac, Lela. Publication. Edited by Catherine Maciariello. *Fearless Journeys: Innovation in Five American Orchestras*. New York: League of American Orchestras, 2010. https://americanorchestras.org/images/stories/research_innov_pdf/Fearless_Journeys.pdf (accessed December 10, 2020).
- Tommasini, Anthony. "Harmonic Ripples in a Watery World." *New York Times*, December 10, 2014. https://www.nytimes.com/2014/12/11/arts/music/hlne-grimaud-performs-tears-become-streams-become.html (accessed January 15, 2021).
- Voehl, Frank, H. James Harrington, Rick Fernandez, and Brett Trusko. *The Framework for Innovation: a Guide to the Body of Innovation Knowledge*. Boca Raton: Taylor & Francis Group, 2019.
- Warner Classics. "Leif Ove Andsnes & Robin Rhode Pictures Reframed (HD)." YouTube video, 8:34. Posted by Warner Classics, May 11, 2009. https://youtu.be/0Vh_3jLX8rQ (accessed January 29, 2021).
- Weber, William. *The Great Transformation of Musical Taste: Concert Programming from Haydn to Brahms*. New York: Cambridge University Press, 2008.