HOW THE LION LEARNED TO MOONWALK

AND OTHER STORIES ON HOW TO DESIGN FOR CLASSICAL MUSIC EXPERIENCES

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The title of this book, 'How the Lion Learned to Moonwalk', refers to a quote in chapter 5. This chapter accounts for an experiment where children co-created the set design of a family concert. In excitement of the music and the visuals, a child says: "I saw my lion on stage! I knew it was mine because it moonwalked".

Designing Classical Music Experiences—Musikalsk Oplevelsesdesign

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INTRODUCTION

Live classical music is facing considerable challenges. Many philharmonic orchestras across Europe have seen sizeable cuts in funding, and a few have even been closed down. For the orchestras that survive, issues relating to diversity—e.g., musical, generational, socioeconomic, and ethnic— are central. A diversity of voices within the organization is also an important concern. How can philharmonic orchestras, organizations that are heavily rooted in the past, become more democratic and better connected to the societies they are situated in? Making connections is about building new relationships and alliances. To achieve that, you must scrutinize traditional relationships such as that between art and audience, between art and organization, and between past and present.

These issues have been explored in the *Designing Classical Music Experiences* project. Through collaboration across institutional borders and knowledge domains, the project's ambitions were to develop new spatial and mediated audience experiences; to reach new audiences in the Øresund Region; to develop new innovation processes through which cultural institutions, academia, audiences, and media companies can collaborate; and to develop new business models. The vision was nothing less than to democratize classical music. The project partners aimed to fulfill these ambitions through studying what others have done, by openly sharing current concerns, and through collaboratively developing and carrying through experiments and productions that would yield new knowledge and durable practices.

One of the premises of the project has been to involve musicians, designers, researchers, students, audience members—and many others— in the design- and development processes. Another premise has been to enhance and extend the concert experience through visualizations and other types of visual arts, where concepts and methods related to 'liveness' have been central.

Conclusions

These conclusions are suggestions how one may think and act when designing for classical music experiences, and when creating new formats and relationships. They are the result of evaluations where all partners in the project participated and based on empirical findings presented in research papers written by the academic partners in the project.

ORGANIZATIONAL CHALLENGES

- It is time to try new strategies in order to reach more diverse audiences. We need to stop talking only about "teaching the audience how to appreciate classical music"; instead, we must invite diverse groups of people to jointly explore how classical music can be made more relevant for them.

- The will to change must come from inside the cultural institution, involving all parts of an organization. Change is hard and frightening, sometimes even disruptive, and there needs to be awareness in every function of the cultural organization what its role is, or will be.

- Involving musicians is very important. The majority of people in a philharmonic orchestra are, after all, musicians. Yet, for various reasons, they are rarely asked to contribute. Working with 'orchestra engagement' is thus important because it puts issues of artistic integrity on the table.

- A way to make sure that development processes are well anchored in the organization is to establish a 'task force'. It can be comprised of representatives of each function of the organization, including musicians, and its role is to enroll other people into the process.

- Audiences are willing to commit and can contribute considerably to cultural institutions if the conditions are right. Long-term engagement and processes characterized by mutual learning are conditions that must be fulfilled.

- Both within the cultural institutions and in their relation to other actors and communities, we need to acknowledge that frictions and constructive differences are assets, not problems. Solutions to problems often arise in the intersection of diverse interests.

- Building projects and relationships must be allowed to run over longer time periods. This leaves room for experiments and enables you to invite more people with complementary skills into the development process as it proceeds.

AUDIENCE ENGAGEMENT

- Not all audience involvement is about co-creating the artistic experience. The level of audience involvement ranges from mere listening to enabling the audience members to substantially take control of the artistic experience. What lies in between are more moderate ways of involving the audience, and it is important to know when it is appropriate to use a particular level of involvement, when to use another, and when and how to mix them.

- Audiences do not necessarily want simplified or more comfortable experiences. They respect and appreciate the competence of cultural institutions and they want the music to be taken seriously.

- Audiences appreciate open-ended concert- and media formats. The music should be at the center of attention, and the formats should be open enough so as not to force a preferred way of listening through, for example, a one-directional learning format.

- Audiences appreciate the opportunity to experience the music 'differently' by recomposing, embodying, and animating the music.

- All audience members have ideas of what one is 'allowed' to do in a concert hall. In particular, this seems to apply to concertgoers who rarely visit the concert hall; more frequent visitors seem to have a greater tolerance for artistic expressions and aesthetics that are 'outside the box'. When testing new concepts and formats, it may be wise to choose arenas that are more open for experimentation, such as the foyer, a town square, or online.

MEDIA AND TECHNOLOGIES

- When developing new concepts and formats, don't start with a particular technology. The types of devices or media platforms used should rather be a means to an end. The decision whether to use digital technologies or, for example, physical cut-and-paste workshops, can be made when you know who your audience is and what end you are aiming for.

- Communication doesn't need to be pitch-perfect. Mediated communication is a great tool for building and maintaining relationships with the members of an audience. But, the traditional ways of reaching the audience—through press releases and other types of planned communication—need to be complemented with communication that is more frequent, less 'planned', and more tailored to particular target groups. Timing, types of content, and editorship are central issues to consider. It is also important to think about when to use a particular kind of communication, for example, when to use online media and when to meet face to face.

- Classical music experiences can be extended in time by running activities that take place before, during, and after a concert or event. This builds momentum and anticipation, and it is a vehicle for maintaining relationships with audiences over longer time periods.

- After-the-event activities and actions should have high priority. Engaging audience members in the development process should be seen as an investment in a relationship. Quite often, unfortunately, this relationship ends when the concert ends. It is important to have follow-up strategies, such as evaluations or meetings to discuss what the next step is.

Overview of the book

The above conclusions are developed further in the chapters of this book. Chapters 2 and 3, in the first section of the book, account for two perspectives on how to work with live classical music and audiences from a designer's point of view.

Chapter 2 tells a story of the complexities you face when working with audience engagement: How the institutions, the arts, the audiences, the media, and our societies are intertwined in one another, and what this implies.

Chapter 3 shares insights about how to work with new and meaningful audience experiences by utilizing technologies and visual arts.

Chapters 4–10, in the second section of the book, give detailed accounts of the most high-profiled case studies the project has worked with. Most of them explore how to extend a concert experience in both space and time, but the means for doing so are quite different.

Chapter 4, *Teddy in Space,* looks into how children—through a symphonic sequencer—may 'recompose' one of the pieces played at a Malmö Symphony Orchestra family concert.

Chapter 5, *Shadow Play,* explores how children are involved in co-creating a scenography by adding 'shadow figures' after having listened to classical music. The 'shadows' are then used in a video-projected scenography, created by design students, at a Royal Danish Theatre family concert.

Chapter 6 describes how Copenhagen Phil's *World Online Orchestra* invites online audiences to interactively explore the inner workings of an excerpt of Beethoven's Symphony No. 7 by combining different parts of the orchestra.

Chapter 7, *Joystick,* investigates how a game-music concert format—run by Malmö Symphony Orchestra—can work closer to a gaming community on planning, communicating, and running the event.

Chapter 8, the *Musik2Go* percussion concert (run by the Royal Danish Theatre), describes how bodily sounds and movements through interactive installations and visuals may complement and enhance a concert experience.

Chapter 9, the *Musik2Go* brass concert (run by the Royal Danish Theatre), describes foyer installations that explore how colors and music might be related, and how—during the live concert—the members of the audience can influence the

visual expression.

Chapter 10, *Opus Lux,* explores how concertgoers can express emotions through a collaborative feedback tool, which enables the audience to be part of creating a collective light installation.

Chapter 11 is an epilogue where it is argued that working collaboratively across institutional borders and knowledge domains—on a long-term basis and with a diversity of stakeholders and audiences—can be the modus operandi for any cultural institution that sees itself as a reflective contributor to society.

Creating new values

As mentioned above, one of the ambitions of the project was to develop new business models. The project has continuously had discussions about what values are important to a cultural institution, and how cultural activities can and should be measured and evaluated. Currently, the institutions are assessed and valued predominantly on the basis of audience numbers and financial results. These values, however, say little about the qualitative values that the cultural institutions contribute to. Audience experiences, community benefit, and so-called non-use values— such as individual willingness to pay for maintaining a resource even if there is little likelihood of the individual ever using it—are other kinds of values that could be given higher priority.

Through experiments and concrete productions, the project has explored what opportunities philharmonic orchestras have to renew themselves—with the aim of making live classical music relevant to new audience groups. This may result in a wider demand for classical music, but also in acceptance of the fact that these institutions are publicly funded—a non-use value.

The project has found it difficult to apply conventional business models (for example, the so-called business model canvas) since cultural institutions are guided by other value systems. However, the results of the project show that co-production with external stakeholders—whose skills are complementary to those of the institution—can result in new concepts, processes, services, products, and productions. These new partnerships can, thus, create new contexts and platforms where the orchestras can be of service to new audiences, but also create value for other cultural-sector industries and associations. To conclude, an ongoing discussion on 'values' in the cultural sector is important because it may help create a better understanding of how to think about business models, evaluations, and the 'criteria for success' that govern publicly funded cultural institutions.

WEAVING AUDIENCE ENGAGEMENT:
Classical Music, Design, and Democracy

ERLING BJÖRGVINSSON, PHD, SENIOR LECTURER IN INTERACTION DESIGN, SCHOOL OF ARTS AND COMMUNICATION, MALMÖ UNIVERSITY, SWEDEN.

—UFFE SAVERY,
CEO, COPENHAGEN PHIL.

"How can the orchestra, an organization that is rooted in the past, find an authentic voice in the modern world?"

—DORTE GRANNOV BALSLEV,
OUTREACH MANAGER, ROYAL DANISH THEATRE.

"These old and prestigious institutions need to become more democratic and better connected to the outside world"

The question raised by Uffe Savery and the declaration by Dorte Grannov Balslev is what the *Designing Classical Music Experiences* project has investigated. These issues are central as symphony orchestras, just as many other cultural institutions, are having a tough time. During the last years, several orchestras across Europe have seen sizeable cuts, and a few orchestras have even been closed down. The issues raised are central also because they raise questions on how to think of—and work with—the relationship between organization and art, between art and audiences, and between the past and the present.

The above quotes—and the title, purpose, aims, and vision of the project (see chapter 1)—point at how musical experience design is entangled in organizational issues related to, for example, what new audiences to reach and why, what experiences are to be created, how that is to be achieved, and how mediated communication can interweave with them. Given the project's ambition, it is not the least necessary to address what the words experience and democracy can mean, as they strongly shape what is considered meaningful.

In what follows, these issues will be addressed from three perspectives: Media and communication, audience engagement, and organization. These perspectives are interwoven, but are here discussed from three different angles so as to bring forth different aspects of the work that has been carried out. To put our insights into perspective, however, a very short overview of audience development and audience engagement, and a discussion on experience and democracy, is first put forth.

Audience development and audience engagement

For quite some time, the question of how cultural institutions can attract and build relationships with audiences have predominantly been addressed through the notions of audience development and audience engagement. Audience *development* is typically defined as a planned relationship-building process between the cultural institutions and their audiences. It has focused on making the audience more knowledgeable and appreciative of a particular art form through effective one-way communication (Kolb 2000, Maitland 2000, Hill, O'Sullivan, and O'Sullivan 1995). More recently, we have seen a turn toward audience *engagement* that emphasizes dialogue and mutual learning when planning, implementing, and assessing enriching experiences for all involved (Roberts 2008, McCarthy and Jinnett 2001, Wolf 2006).

Both perspectives, which are predominantly defined by cultural management and marketing literature (Kolb 2000, Maitland 2000, Hill, O'Sullivan, and O'Sullivan 1995), argue that cultural institutions need to reach more diverse groups of people. The solutions put forth is that the cultural institutions need to work with audience segmentation and develop specific concert formats for each segment. This has led to the surfacing of various thematic concert formats such as pop-, rock-, or world music with strings, film music concerts, visually boosted concerts, and school concerts—formats that typically build on the assumption that these audience groups feel alienated by classical music. In order to make classical music more accessible, these audience segments need to be 'taught' how to appreciate the music and be provided with more comfortable—meaning simpler—musical experiences (Baker 2000). In other words, audience development has been viewed as an educational effort typical of the 'bildung' paradigm, or as a customized experience typical for the 'experience economy' paradigm that emerged in the 1990s. These perspectives are often combined. This in turn, it is argued, demands collaboration between the educational, marketing, and the artistic departments (Baker 2000, Hill, O'Sullivan and O'Sullivan 1995, Wolf 2006).

Njörður Sigurjónsson (2009) finds the management and market perspective on audience development and audience engagement highly problematic and reductive. With its focus on marketization and a customer mindset, it never defines or discusses artistic functions and artistic integrity, nor audience experience. It defines the audience as consumers and concerts as products. It reduces the audience experience to an instrumental issue to be managed. And, as he states:

> little research has been conducted into what the qualitative differences are between these diverse activities and what the orchestra is used to doing. The 'project' is considered and evaluated in terms of organizational interests and reduced to a discourse of marketing rather than in terms of development of the art form or the personal aesthetic experience. This has opened the door for a reductive and 'manageable' notion of the listening subject as a consuming customer. (Sigurjónsson 2009, 42)

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This way of thinking, as Sigurjónsson (2009) referring to Lee (2005) argues, have come about at a time when state interventions have increased and cultural policies emphasize the value of social impact, and at a time when the notion of the 'experience economy' became popularized through the work of Pine and Gilmore (1999). The latter, as Sigurjónsson points out, defines experience as prearranged places where people are entertained through escapist and engaging experiences. Although seemingly customer-oriented, the customer is given a secondary role while the company is forefronted. A central point he also makes, referring to Chong (2002), Hayes (2003), and Alvesson and Deetz (2000), is that the management and marketing perspectives have through their language redefined what audience, art, and experience mean. They have now come to mean customers, products, market exchange, fulfillment of government quotas, ticket sales, and performance indicators. Similarly, Cheney, McMillan, and Schwartzman (1996, 1997) argue that customer-oriented education tends to result in fake empowerment and a pseudo-democracy. Alvesson and Deetz (2000), thus, argue that a new management vocabulary that will help seeing the world differently is needed.

Designing for democratized musical experience

Given the above exposé, designing *for* democratized musical experience is not an easy task. The word 'designing' can mean forming, shaping, and can easily be associated with planning and managing, as well as commodifying—as if experiences or democratization can be easily planned and carried through, or could easily be equated with marketization. But, as has already been hinted at, that would turn people into consumers whose only active engagement entails buying an experience, else they are seen as docile subjects that are given reactive roles. What other perspectives on experience and democracy are available that can bring forth other vistas on audience engagement?

Sigurjónsson suggests that we turn to Dewey (1980), via Rorty (1982), who defines experience quite differently and, I would like to add, has a meaningful conception of democracy as well. In *Art as Experience,* Dewey (1980) put forth his dissatisfaction with the role and meaning assigned to art. The metaphor 'art as experience', too often interpreted literally as Sigurjónsson states, was for Dewey an analytical way of putting "critical perspective [into] not only the classical concert construct but any attempt to externally organise or predetermine the process of music" (Sigurjónsson 2009, 9). Dewey argued that due to the institutionalization of art, it had been reduced to an administrative and isolated product, as if art could only be experienced within the confines of the museum or concert hall and according to how these institutions defined art. He also argued that Enlightenment theories on aesthetics 'overspiritualised' art through categorizing and ranking supposedly inherent qualities of art, resulting in practices of idealized ways of viewing and listening. The problem was, thus, the rationalization and classification of art that emerged in the process of modernization. I would argue that these tendencies have increased and become gradually more intensely connected to marketization. With the metaphor

'art as experience', Dewey, according to Steinberg (2004), also wanted to replace the notion of an autonomous 'I' with a cultural and political subjectivity that is in constant negotiation on how the border between autonomy and integration are to be drawn.

Sigurjónsson, in his study of audience development for orchestras, challenges the dominant marketing and management perspective by re-describing—through the pragmatist aesthetic theory—what a listening subject can entail, the meaning of the artwork, and the (organizational) structures and discourses the subject and artwork are entangled in. This, he states, bring forth qualitative dimensions and open up for possibilities of audience development directed toward "musical variation that offers a different perspective, rather than a 'better' experience or more 'involvement'" (Sigurjónsson 2009, 13). From this perspectival shift follows that listening is a dynamic activity, rather than mere passive 'spectacting' (Brown and Novak-Leonard 2011), as is how listening often is viewed in audience development literature. There is thus not a correct form of listening and it cannot "be organized once and for all, we should constantly be on the lookout for different ways to experience music" (Sigurjónsson 2009, 21). In the *Designing Classical Music Experiences* project, we have been critical to both the 'bildung' and the 'experience economy' paradigms. Our aim, although not necessarily reached, has been to have a strong focus on the music. Furthermore, we have aimed at creating open formats and platforms where active subjects can negotiate their understanding of the music and meet the music differently.

The design for audience development and audience engagement within cultural institutions, however, needs to deal with what roles and values the professionals, the audiences, and the arts can have, and how they weave together and are organized. As Sigurjónsson states, referring to Adorno's classical text "Culture and Administration" (Adorno 2001), the uneasy pair 'art and administration' cannot be thought of separately.

Within design, the prevailing perspectives are either product-centric or customer-centric—or a combination of the two where customized discrete experiences or products are created. To a large degree they mirror the previously addressed marketing and management perspectives. Less prevailing perspectives on design, such as participatory design (Ehn, Nilsson, and Topgaard 2014, Ståhl and Lindström 2014, Simonsen and Robertson 2013, Björgvinsson et al. 2012) and speculative design (Wilkie and Ward 2009), argue that both the design process and the design outcome could be thought of and practiced in more democratic ways. These perspectives, partly aimed for in the *Designing Classical Music Experiences* project, see design as the reshaping of existing socio-material practices. They build upon science and technology studies (Latour 2005, Marres 2007) that emphasize that knowledge formations and political processes of negotiating, deciding, and policy formation cannot be separated. This has meant that those affected by the design should be involved in defining what the issue is, how different ways of addressing the issue could be tried out, and what different practices could become durable (rather than the one-shot wonders of customized experiences). In this view, the design for audience experience produces public spheres or 'assemblies' where people negotiate through making. This is in line with Dewey's (1991) view on democracy that emphasized the active role of citizens and argued that public

spheres appear when we disagree and need to negotiate particular issues. More recently Jacques Rancière (1999, 2001) has made similar arguments where he emphasizes the importance of the formation of collective action that questions and want to change the ruling order. Chantal Mouffe (1993, 2000) has also re-actualised the view that democracy is about constructive debates between different opinions. (Interestingly, both Dewey and Rancière view art as having potentially a positive and transformative power). Just as Sigurjónsson states that listening cannot be managed once and for all, participatory design and speculative design do not believe that designing for audience development can be once and for all settled. Instead, it argues for creating frameworks where audience development is continually negotiated. The same goes for what is designed, that it should preferably open up for different interpretations and understandings rather than a correct and predefined reading of the music experience.

In the *Designing Classical Music Experiences* project, we have explored what audience engagement can entail through metaphors such as 'weaving' and 'cat's cradling'. What we mean is that what is designed has been done through constant weaving of relationships and ideas between the audiences, the artistic expressions, the cultural institutions, and the design researchers. The work presented in this book has come about through the collaboration between a wide range of competences and actors: Audiences, musicians, conductors, composers, lighting- and sound technicians, set designers, outreach- and marketing staff, researchers, design students, developers, and industry partners such as programmers and interaction designers. It has also come about by 'weaving together' social situations with a range of materials such as live and recorded music, paper, scissors, glue, motion tracking, shadow screens, VJ equipment, social-media channels, mobile phones, and so forth. The different cases have consisted of different constellations of competences from within the cultural institutions and across the different institutions participating in the project. The formation of various constellations has partly depended on what issues were being addressed, but also by organizational constraints.

The strategy we took on for the first 4–6 months of the project was to focus on and discuss values and audience groups, but also to discuss what were important issues for each participating orchestra in the project. The values and 'keywords' we agreed to focus on were openness and curiosity; that the orchestras should incite surprise, fascination, and be 'seductive' and 'touching', that they should create a 'passionate fellowship', but also to strive for increased contact with the surrounding society. The partners, although sceptical to 'segment' their audience into groups, agreed to focus on young adults, the so-called 'second youth' (that is, adults that have old-enough children that allows them to again become more culturally active), and the multi-cultural Malmö and Copenhagen. We also decided to expand and re-design existing concert formats since the concert program is planned several years in advance.

The cases presented in this book include Teddy in Space that looked into how children through a symphonic sequencer could 'recompose' one of the pieces played at a Malmö Symphony Orchestra family concert (chapter 4); Shadow Play that explored how children could make shadows by listening to the music and creating 'shows' with their bodies, which were later shown at a Royal Danish Theatre family concert (chapter 5); the World Online Orchestra that tried out how online audiences

can interactively explore the inner workings of an excerpt of Beethoven's Symphony No. 7 (chapter 6), Joystick, an experiment that explored how a game-music concert format could work closer to a gaming community on planning, communicating, and running the event (chapter 7); two Musik2Go concerts where it was explored how interactive visuals may complement, extend, and enhance the concert experience (chapters 8 and 9), and, finally, Opus Lux that investigated how concertgoers could express their emotions through visual effects (chapter 10).

Media design

One of the objectives has been to explore how media and communication can weave participation between cultural institutions and their audiences—where active engagement, discussion, and co-creation are enabled, as well as how media can become part of the concert set design and contribute to a different music experience. Furthermore, what combinations of media should be worked with was not predetermined, but rather guided by what was to be achieved.

What we have learned in the *Designing Classical Music Experiences* project is that media can play a valuable role in expanding, in time and space, the audience experience to include before-, during-, and after-concert activities. The Joystick experiment, for example, showed a significant increase in engagement during the weeks before the concert, which loaded the concertgoers with anticipation and 'co-ownership´, as they read about and discussed computer-game music as well as debated and voted on parts of the concert program. The same was also apparent in Teddy in Space, as some of the children waited with anticipation for the music they had played with and re-composed in the 'app' (the symphonic sequencer) to be played by the orchestra. The same goes for Shadow Play where the children, with anticipation but with different understandings of the music, looked for the animals they had made and animated through bodily engagements to appear during the concert. Returning to the game-music concert Joystick, devoted fans were also willing to share their knowledge about game music, as well as share their contacts so that more people would know about the concert. They were also willing to dedicate significant time in decorating the foyer and running events. After the concert, they shared and spread the experience of the concert, as well as gave the orchestra many new ideas about concert formats that they found exciting.

We also learned that a holistic approach to media was needed: Close attention needs to be paid to how mediated relationship-building connects to face-to-face activities happening in the foyer, at workshops, in other venues, or out in the city. Mediations cannot be seen as discrete objects, but should be understood according to what relations they are connected to. It also means that the aesthetics of the media expressions need to be tightly connected to the music performed and be consistent across media platforms, such as print, web, foyer, and the concert hall. In Musik2Go, for example, it was important that the visuals were tightly connected to the rhythm of the music. In Joystick, the pixel aesthetics was the unifying expression used on the web, in the foyer, and in the concert hall. The scenography was thus created through the involvement of many concertgoers, which contributed to that they felt it was their concert hall and that they were part of a larger community.

Girl waiting to hear the music she has played with and 're-composed' in the Teddy in Space app.

Fans of Joystick were willing to spend much time decorating the foyer. Here, a young woman makes Majora's Mask with sticky notes, which took her two days to complete.

In the Shadow Play experiment, members of the audience engaged in physically embodying and animating the music.

The Joystick experiment showed that gamers think that 'going to a concert' is not enough: They want an experience that connects to activities before and after the concert.

On the other hand, a challenge we encountered was that there was a tendency to see mediated communication as freestanding objects that can replace social relations, rather than having the role of strengthening relations. The Royal Danish Theatre, for example, spent considerable time producing educational leaflets and putting them online, while allocating considerably less time on building relationships with the schools the leaflets were aimed for.

Another challenge was how the main visual expression and forms of communication of the cultural institutions and more targeted ways of communicating—including visual expressions adjusted to certain groups—can work together and not create a fragmented picture of the cultural institution. With the Joystick blog and pixel art, we aimed to create a balance between Malmö Symphony Orchestra's aesthetic profile and game aesthetics. This was, and still is, a challenge given that cultural institutions feel that they increasingly need to have different formats for different audience groups.

How the weaving of face-to-face- and mediated communication can be done is thus a central issue to be addressed. There is no universal answer to how this weaving should be done. It demands a situated and pluralistic view on aesthetic and communicative qualities and relationship building. In Shadow Play, both the expansion and the holistic approach led to that the audience seemingly understood the concerts differently, as they actively engaged in discussing, recomposing, or physically embodying and animating the music.

Audience engagement

When it comes to audience groups, we have primarily worked with the 'usual suspects': Children, youngsters, and families (e.g., in Teddy in Space and Shadow Play). We also, however, worked with formats that aimed to reach non-classical music audiences (Musik2Go), and we worked with 'gamers' (Joystick) and people interested in indie music (Copenhagen Phil's 60 Minutes concert format).

The productions, from an audience perspective, have shown that engaging with audiences is a process of mutual learning and can be mutually beneficial to both sides. It is a two-way exchange consisting of collaboration and partnerships to enrich the lives of the community members. By engaging in deepened dialogue with the audience, the cultural institution can understand more about the audience's motivation, dedication, knowledge, and networks. The audiences can experience the music differently and can influence or, at times, co-create productions.

By working closely with the gaming community, through the Joystick experiment, Malmö Symphony Orchestra had to redefine their perception of 'a gamer'. They realised that a lot of gamers are not only youngsters, but people in their thirties and forties. And not all of them are men. Through workshops with gamers, it became quite clear that the gaming community had a different perspective on what it meant to be active and engaged. Going to a concert is not enough; they wanted a holistic experience connected to activities before and after the concert. They want memories to bring home and a forum for sharing ideas and experiences. Those insights led to the Joystick blog, run by a blogger from the gaming community in collaboration with the orchestra. The blogger, and in extension the gaming

community, learnt about how an orchestra works and how classical music connects to game music. They were also invited to take part in deciding the repertoire and what activities to be set up in the foyer. Joystick became 'their' concert.

We also learned that what is needed is a long-term perspective on establishing audience relationships, as weaving engagement with audiences shouldn't be reduced to a marketing strategy for selling tickets. It is a long-term process in which you establish and maintain strategic, dynamic, and sustainable relationships. It is time-consuming to understand different audiences' social and cultural motivations and values, and for the audiences to understand the cultural institution. This means that the cultural institutions need to engage their audiences early on, rather than just a few weeks before a concert.

The Joystick experiment showed that the gaming community is willing to share their knowledge, as well as to become ambassadors that 'spread the word', but also to connect the orchestra to other gaming communities, if the orchestra is mutually engaged. Malmö Symphony Orchestra now has the possibility of working together with small indie-game developers, creating master classes for composing game music, and being an important partner with the Nordic Game Conference and other actors in the gaming industry.

The challenges we have faced have been how to create formats that allow for development over time, together with the audiences and external competences. You need to weave together by doing small experiments along the way instead of trying out a new format once, and then shut it down if you cannot fill the concert hall. It takes time, and you need to evaluate and be open to finding new ways and new constellations. Musik2Go at the Royal Danish Theatre was a series of five concerts, and none of them looked the same—but, unfortunately, the series has now closed down.

Another challenge is that opening up for dialogue and mutual learning generates expectations. With the Teddy in Space production, the audience expected more melodies to be released in the 'app'. This particular expectation is, of course, both a challenge and an opportunity for the orchestra. The Musik2Go audience found it intriguing that each concert tried out a new format and new foyer activities, and they began to expect that something new would happen each time. The Joystick audience has found the deepened collaboration with Malmö Symphony Orchestra of such value that many tickets were sold for the 2015 concert without the program even being announced.

Organizational challenges

From the start, we knew that what types of experiments and productions would be possible to give form to depended partly on organizational possibilities and obstacles: Organizational issues within the cultural institutions, as well as in how the project was set up. What would be possible to do hinged on organizational 'anchoring', or in other words, how engaged the different departments in the cultural institutions would be, the willingness to change organizational values, and the willingness of the partners to negotiate.

In hindsight, the various partners have been willing to conduct open-ended explorations leading to informed experiments in the midst of ongoing production.

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Opening up for a dialogue with the audience generates expectations. With the Teddy in Space production, the audience expected more melodies to be released in the app, which is both a challenge and an opportunity for the orchestra.

The partners had from the start a general framework, but did not know what they would end up producing. The productions came about through constant weaving and through negotiations where the different partners listened to each other's values, needs, know-how, and organizational constraints and possibilities.

The researchers, for example, were not convinced in the value of working with Joystick as it was a format that already worked quite well. Similarly, to begin with, Malmö Symphony Orchestra had a quite different idea on how children can re-compose classical music. But, the orchestra quickly responded to the idea of making a symphonic sequencer and engaging master students in building physical music interfaces for the foyer, recruiting a composer, and booking recording dates with the orchestra. The researchers recruited the right type of programmer and engaged children in the development process.

The partners also quite openly shared the strengths, weaknesses, and current challenges they were facing. Getting to know each other's values, know-how, and building trust takes time and can at times lead to considerable misunderstandings, but is also rewarding.

The challenges have, however, been considerable. It has been difficult to establish production groups that included the various competences in the organizations and to anchor the experiments broadly in the organizations. During the 1.5 years we worked on Joystick, for example, not one person from Malmö Symphony Orchestra was engaged from the start to the end. Both what professions and what individuals would work on the project varied considerably. For the orchestra, it resulted in a fragmented view of the process, lost learning opportunities, and that the institution found it difficult to run the processes without external competences.

Not only organizational stability but also organizational anchoring turned out to be a challenge. The Musik2Go experiments happened without the involvement of the middle manager. The Royal Danish Theatre's project representative, after having tried to anchor it in the organization in 'the correct way', had to go directly to the people working with audience engagement to get things to happen. This lead to 'productive' experiments in the short-term, but as it was not properly anchored (among other factors), it resulted in the shutting down of the Musik2Go format, as the value of the format had not been communicated and anchored well enough in the whole organization.

It has also been a challenge to change core values, which demands new ways of thinking. In the beginning of the project, we agreed upon what core values and what audience groups to work with, but, to a large extent, we ended up working with the often-used group children, while not addressing that the cultural institutions are only to a small degree reaching the diversity of citizens in the surrounding society. Why we did not pursue 'new' audience groups depended partly on the fact that it is more time-consuming and that the outcome is less safe. It can also be explained by the fact that current 'reward' systems focus on efficiency, rather than on effect. Ticket sales are more important than, for example, to what degree the organization reaches the diversity of citizens in the city, which takes time and may initially result in lower tickets sales.

Conclusion

Above insights may be looked at from a democratic perspective, as cultural institutions are one of many important public spheres. We often think about democracy as something that we engage in only when we vote. Another aspect of democracy is to acknowledge the people, voices, and actions that those in power have not recognized or given a voice to. As said above, public spheres come about when various partners disagree, which is often instigated by those whose values, needs, and desires have not been heard.

In this project, the negotiations between different partners have been constructive negotiations where various perspectives have been acknowledged. But, we have also described how broad organizational anchoring has often been difficult, where some perspectives are not given space to engage in forming future practices. Furthermore, we have also shown how bottom-up initiatives have unexpectedly been shut down. We also addressed how difficult it has been to engage new audience groups that would better reflect the diversity of citizens in the region. This is, however, not to say that the institutions don't address this, as El Sistema run by Malmö Symphony Orchestra and various initiatives run by the Royal Danish Theatre and Copenhagen Phil testify to.

However, if we believe that democratic values are important—both within and outside the cultural institutions—it is necessary to recognize that friction and constructive differences are assets, not problems. We also need be aware of the difference between efficiency (as, for example, in the number of tickets sold), and effect. Efficiency is quantitative, while effect is a quality. Of course, we all want a full house, but at times diversity as an effect is more important than reaching the majority, the 'usual suspects'.

From the perspective of audience development and audience engagement, the results show that the audiences we have worked with do not want simpler and more comfortable experiences. Instead, they respect and appreciate the competence of the cultural institutions. They have argued for taking the music more seriously, as was the case with Joystick. However, if given the opportunity, some audiences are willing to commit and can contribute considerably to the cultural institution if the collaboration is solid in the sense of a long-term commitment and based on mutual learning.

Similarly, from the perspective of media and design, we have seen that the audiences have appreciated the open-ended media formats. These various formats have been open enough so as not to force a preferred way of listening through a one-directional deepened learning format. All of them have also had the music in the center of attention. The audiences have also shown appreciation of having the opportunity to experience the music differently by, for example, recompose, embody, and animate the music played (as with Shadow Play and Teddy in Space). They have also shown the appreciation for discussing and debating the music to be performed (as with Joystick).

To conclude, the aims of the project were set high. We have not come as far as we wanted. Perhaps we have put too much emphasis on co-creation and audience involvement. However, the project has, we hope, shown that audience development and audience engagement can be quite meaningful if the music experience, the staff, and the audience are taken equally serious and are not reduced to customers, spectacular products, and quantifiable performance indicators.

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27

CREATING VISUAL DESIGN AND MEANINGFUL AUDIENCE EXPERIENCES

Ideas, Concepts, Methods, Prototypes, and Productions Developed at the Royal Danish Academy of Fine Arts, School of Design.

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Introduction

As part of the two-year EU interregional project *Designing Classical Music Experiences*, artists, lecturers, researchers as well as students from the Royal Danish Academy of Fine Arts, School of Design, teamed up with the other project partners to develop a series of original design concepts, prototypes, and productions to accompany the experience of live-performed classical music. This chapter describes the approaches and methodology used, as well as insights resulting from the project.

Background and objectives

One of the aims of the project was to rethink 'audience experience' and gather information on, and experiment with, practices and technologies that could be applied when producing visual material supplemental to classical music and live concerts. The School of Design's part of the project focused primarily on developing new and meaningful audience experiences, in which live classical music meets new digital technologies. The partners of the project aimed at exploring and developing new experience-design concepts by working together and encouraging each other's complementary competences.

Many cultural institutions consider new technologies, and especially digital media, as appropriate ways to reach new audiences. In the field of classical music, however, the use of new technologies has often been limited to online ticket sales, web-based marketing, and a presence on social media. At the School of Design, we have been working with students and external partners, exploring the manner in which new technology could be used to enrich the *live* experience in ways that both are aesthetically satisfying and might attract new audiences. In *The Search for Shining Eyes,* Thomas Wolf (2006) writes about the status of live classical music in the United States, that: "the problems of orchestras stem not from the music they play but from the delivery systems they employ". Just as music sociologist Christopher Small (1987) does in his paper *Performance as Ritual,* Wolf identifies problems related to the classical concert ritual. According to Small, the classical concert is primarily ritualistic, with a repertoire from circa 1920; concert halls follow their own best interests, thereby alienating both modern composers and contemporary audiences. In order to revitalize the live experience, Wolf suggests several points of interest described as lessons for orchestras. Most importantly, Wolf proposes (1) that the mission of the orchestra must be clear, focused, and achievable, (2) that no single magic bullet will address the many serious problems facing the orchestras, and (3) that the orchestras must do more research on those who do not attend their concerts. Concerning point two, it is suggested that the orchestras must (a) develop more varied and interesting programming, (b) revitalize the concert hall experience, (c) increase involvement of music directors, (d) use technology more innovatively, and (e) develop educational outreach programs. Partly inspired by these suggestions, our work at the design school focused on expanding the use of the concert hall and surrounding areas, and using semi-interactive equipment and digital technology to produce and show audio-visual representations.

Methods

Jakob Ion Wille and Arthur M. Steijn from the Production Design Program at the Royal Danish Academy of Fine Arts, School of Design, recruited design students in an educational program to help develop ideas, concepts, and productions. The methods used in the educational program, as well as in the development of the projects, were principally inspired by methods used for production design and stage design. These methods are based on an interest in content, story, temporal shape, staging, and visual impact of images applied here to the live performance

of classical music. In the school context, the design students had the opportunity to experiment and develop concepts for visual design and for interaction to supplement the experience of live classical music. In 2013, the results of the students' work were mainly conceptual, while the results from 2014 went into production. Students and researchers also developed prototypes and productions not directly connected to the educational program, such as the *Shadow Play* concert (in collaboration with Malmø University and the Royal Danish Theatre, see chapter 5), the *Metro Project* (in collaboration with the Royal Danish Theatre, Malmø Symphony Orchestra, and Copenhagen Phil), and the Chanel and Stravinsky exhibition *Tøj og Toner (Clothes and Tones,* in collaboration with Malmø Symphony Orchestra and Copenhagen Phil); the latter two are described below.

The main concern in developing concepts, prototypes, and productions was linking content with a dramaturgical structure to the audio-visual impact of the overall experience of the classical live concert, performance, or event. Important in this regard were thoughts on the live experience and mediated *liveness*. Production-design methods used in film- and television productions were applied to the development of moving images for motion-graphic sequences projected in the concert halls in connection with the interactive installations, as well as the other elements exhibited in the foyer areas of the concert halls. The students used *production design methods* to create the overall visual framework of the design concept based on the intensity and temporal structure of the musical work—using audio-visual parameters or *partitures* to control the audio and visual intensity and impact in relationship to the temporal progression (figure 1). In *The Visual Story, Creating the Visual Structure of Film, TV and Digital Media,* visual consultant Bruce Block (2007) describes these visual parameters as consisting of components such as space, line, movement, tone, and colour etc. These components can each be further divided. For instance, movement can be described as either straight, curved, or as a combined movement. Space can further be categorized into deep, limited, flat, and ambiguous space. Contrasts in space, such as a movement from flat to deep space, create great visual intensity. Affinity to one spatial parameter, such as continuous ambiguous space, creates low visual intensity. The principles are quite simple, but the possibilities for combining the visual parameters are endless.

Defining the level of *liveness* in the live event is helpful especially when working in partly *mediatized* formats. Philip Auslander (2008) categorizes the historical development of the concept of liveness and indexes types of liveness in relation to their characteristics and their cultural forms as (1) classical liveness (e.g., theater, concerts, dance, sports), (2) live broadcast (e.g., radio, television, Internet), (3) live recording (e.g., LP, CD, DVD), and (4) Internet liveness (Internet-based media). Inspired by Auslander, we developed a simple model or navigation tool for mapping the performance radius of the live concert (figure 2). The live concert is the centre of the model. Surrounding the concert itself, one could imagine various installations or activities with relation to the live event. In this way the model illustrates possible installations, mobile units, and other devices in various spatial and temporal positions surrounding the actual concert. The model also suggests possible routes of the audience attending (or possibly not attending) the live concert. These paths can be perceived as the dramaturgy of the event on an individual level. In short, we suggested taking the idea of *liveness,* the possible media manifesta-
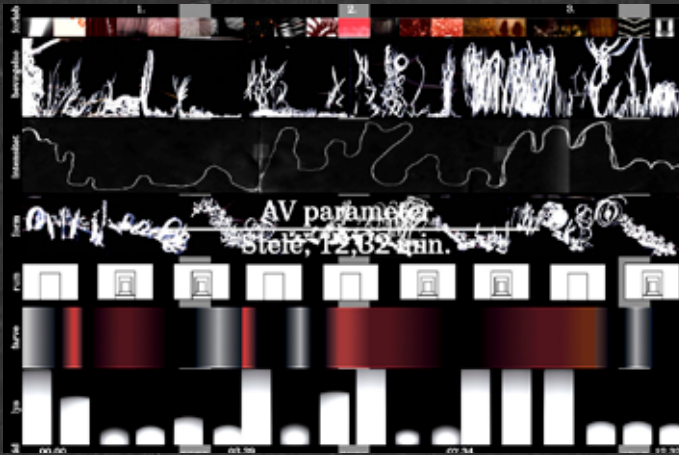
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Figure 1.
A fragment of audio-visual parameters used as a working- and communicating tool in practice. © Illustration by Josephine Farsø Rasmussen and Joy Sun-ra Pawl Hoyle, 2013.
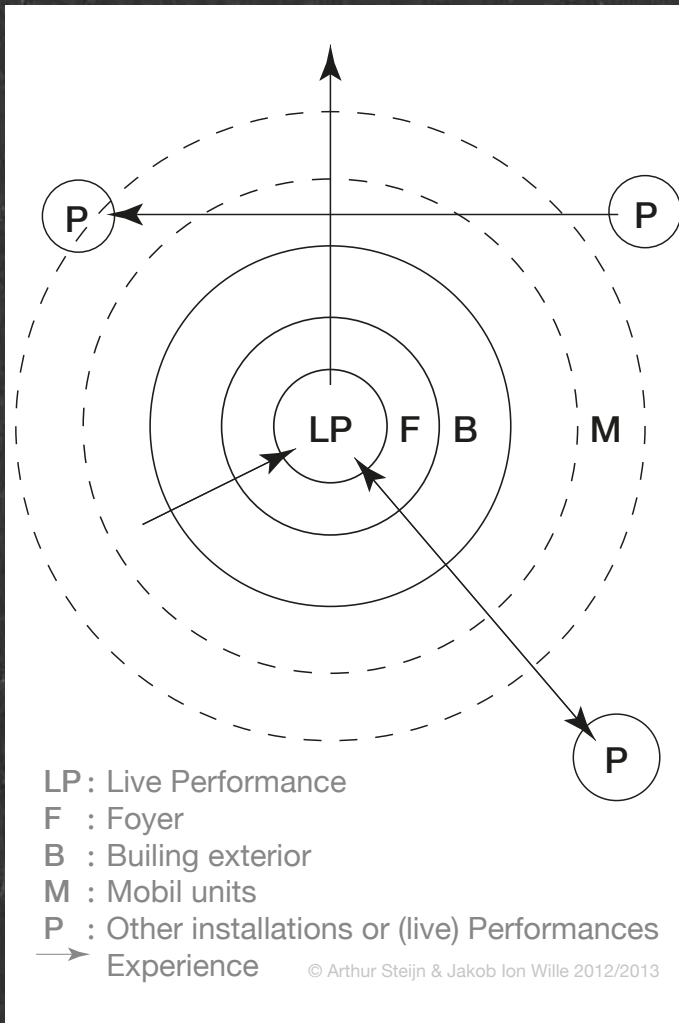

LP : Live Performance
F : Foyer
B : Builing exterior
M : Mobil units
P : Other installations or (live) Performances
     Experience   © Arthur Steijn & Jakob Ion Wille 2012/2013

Figure 2.
Illustration of the performance radius in relation to live concerts. © Model by Arthur M. Steijn and Jakob Ion Wille.

tions, and the architectural framework surrounding the actual musical content into consideration throughout the development of the design concepts. The model was supplemented by another, equally simple, model describing the various possible activities surrounding the live event in relation to chronological time defined as before, during, and after the live event. The two models were necessary tools for navigating throughout the event and its local existence in time and space. For instance, the *Musik2Go* concerts (see chapters 8 and 9) both had interactive installations presenting information and other relevant interactive installations in the foyer area available to the audience immediately *before* the live concert. The visual material produced for the interactive installations was also projected *during* the concert, cued live to the music. We decided to work with simple and meaningful visual-design ideas in order to create a homogeneous and meaningful experience that would link the various activities of the event. For instance, for the *Musik2Go* concert No. 3, with its focus on the percussion section of the Royal Danish Orchestra, the idea of drums being an archetypical instrument relating to the skin and bones of the human body was used. For the *Musik2Go* concert No. 4, we developed a so-called *Airflow Narrative* to create a sensory connection between the music produced by the brass instruments and the colour-based visual projections in the concert hall. The *Airflow Narrative* described the flow of air through the lungs, flowing through and shaped by the mouth, and then 'blown' into the mouthpiece of the instrument where it circulates in tubes, controlled by mechanical frequency-regulators finally resulting in musical tones.

Results

The design projects developed within a scholastic and research framework at the Royal Academy of Fine Arts, School of Design, resulted in a number of concepts, prototypes, and productions, as well as research papers (Steijn 2014a, 2014b). New ways of experiencing classical music and the mediation of live or *liveness* in sound and vision were addressed, and the design problems that arose when working in this area were explored from various angles. The result of the first round of the educational program is described in *Classical Music & Experience Design—Interreg proposals, projects and research* (Steijn and Wille eds. 2013). The first round resulted in eight proposals. For example, design students Josephine Farsø Rasmussen and Joy Sun-ra Pawl Hoyle developed a concept for site-specific use of a so-called *Sound Portal,* as well as motion-graphic sequences to be projected inside the UFO-shaped construction (figure 3). The *Sound Portal* is a portable installation in which high-quality surround sound can be transmitted—conceived and designed by Arup for the 10th London Design Festival. The design students developed a concept using visual elements with reference to the local area in the motion-graphic sequences projected on the inside walls of the portal. In another project, *The Moon Concerts,* Sarah Gad Wøldike Sørensen created a visual structure around classical compositions that in one way or another relate to the Moon (figure 4). Sarah, herself a musician, chose to work with the classical concert ritual in its original format while the music is performed and concentrate on creating environments around these themed live concerts, both in time and in place. *The Moon Concerts* were to be
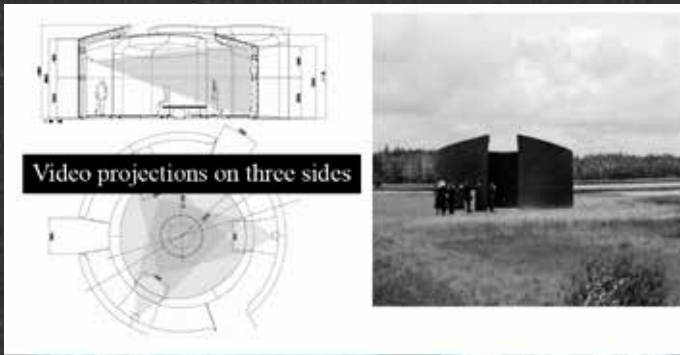
Figure 3.
Technical drawing of the Sound Portal with three video projectors; the Sound Portal placed in the countryside, and an impression of a video test in a 1:10 scale model. © Josephine Farsø Rasmussen and Joy Sun-ra Pawl Hoyle, 2013.

Figure 4.
Poster proposals for the Moon Concerts including a suggested set-up for video projection through a half-transparent screen in a foyer. © Sarah Gad Wøldike Sørensen, 2013.

Figure 5.
Concept, where screen
content and sound are
related to time and
people's behavior.
© 2014 Arthur M. Steijn.
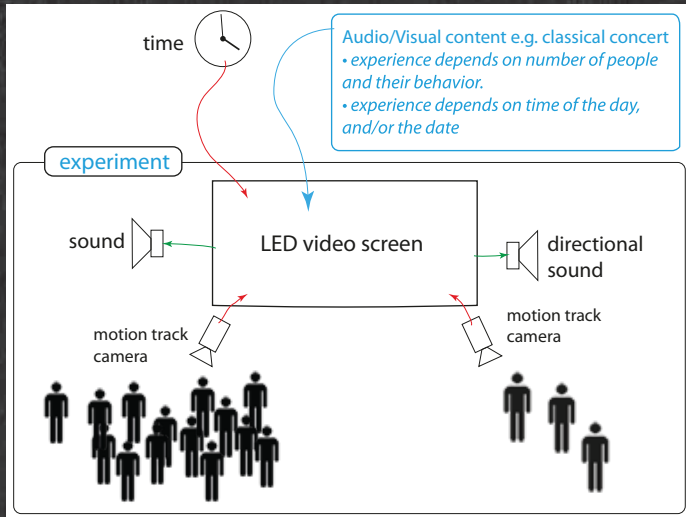
Figure 6.
Drawing of direct inter-
action where multiple
users at the station
create a split-screen.
© 2014 Arthur M. Steijn
and Carl Emil Carlsen.
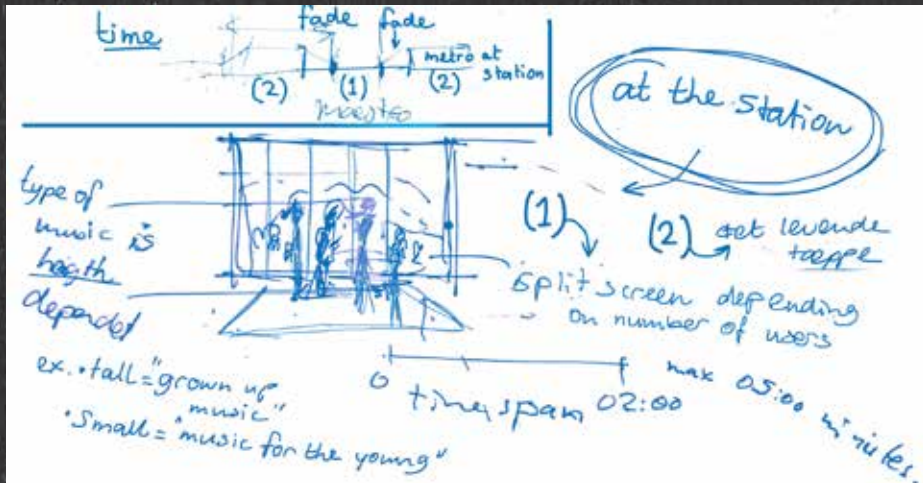
announced by visual means relating to the theme and the genre of the classical music compositions, such as baroque, romantic, and modernistic. Sarah developed her thoughts further in her final prize-winning school project *SoundScape* (2014). Other student productions such as the *Shadow Play* concert and the *Musik2Go* concerts No. 3 and No. 4 are described in more detail in the publication at hand. These concepts and productions were developed in co-operation with the project partners under supervision of lecturers and researchers Arthur M. Steijn and Jakob I. Wille.

During the autumn of 2014, two additional projects were developed and launched: *Metro Maestro* (working title) and *Tøj og Toner (Clothes and Tones)*. *Metro Maestro* is as prototype for interactive screens in the Copenhagen Metro, which is to be tested and developed further, and *Tøj og Toner* is an exhibition inspired by the works of fashion designer Coco Chanel and composer Igor Stravinsky. The following section is a short description of these two projects.

Metro Maestro

The *Metro Maestro* project is an interactive video installation designed for public spaces with the aim of supplementing and enriching the experience of the audience. The installation will have content stemming from and referring to classical music and ballet events, and is triggered on-site through audience interactions—both direct (conscious) and indirect (unaware). A preliminary 1:1 set-up is to be installed at the Copenhagen Airport metro station, in December 2014, as a pilot of the project. This project is being developed by Arthur M. Steijn and Jakob Ion Wille from the School of Design in collaboration with the Royal Danish Theatre, Malmø Symphony Orchestra, and Copenhagen Phil. Arthur M. Steijn devised an approach to using motion-tracking sensors (e.g., Kinect) and/or cameras as a link between the audio-visual content stemming from the involved cultural institutions. This will enable the content to be triggered and altered by the number of passers-by and their interaction behaviours (figure 5).

The prototype is aimed at testing multiple-user interaction experiences of pre-recorded content from participating orchestras. A rough sketch of possible interaction patterns and input based on time of day and tempo of interaction are illustrated in figure 6. The involved institutions have expressed interest in further testing and developing this project, and researchers and students from the School of Design will continue to be involved in the project.

The Coco Chanel and Igor Stravinsky exhibition *Tøj og Toner* (Clothing and Tones)

The Coco Chanel and Igor Stravinsky exhibition was developed and produced for the Stravinsky festival *Music Around* in Malmø, Copenhagen, and Helsingborg, October 2014. The exhibition, *Tøj og Toner* (Clothing and Tones), was originally inspired by the alleged love affair between the famous fashion designer and the modern composer. The exhibition itself focused on the parallel aesthetics of the two artists, such as the use of rhythmic patterns and intense contrast, and the forceful style of expression. The exhibits displayed Chanel inspired modern designs by fashion designers Marie Brandt Overbye and Tilde Bay Kristofferson, photographs by Kajsa Gullberg, and video art by Morten Kantsø Andersen (figures 7, 8, and 9). The exhibition concept was developed by Tilde Bay Kristofferson (designer) and Morten Kantsø Andersen (design student) and curated by Ann Merete Ohrt, Maria Mackinney-Valentin, and Jakob Ion Wille. The exhibition was designed as a catwalk formed by the columns in the foyer area of the concert hall in Malmø. The visitors walked down the black carpet of the exhibition between, on the one side, montage-style video projections and, on the other, hanging garments and large-scale fashion photographs. All designs were in black-and-white. There were no interactive elements or user-generated material, nor were producers, musicians, or conductors from Malmø Symphony Orchestra involved. The exhibition proved to be aesthetically coherent and was very well received by the audience of the Stravinsky concert, according to producer Gabriella Bergman. The exhibition is to be repeated in 2015 at Copenhagen Phil in Copenhagen.

Learnings

The conceptual framework of our projects was developed in dialogue with the involved producers, technicians, and musicians from the institutions and orchestras. A few of the projects incorporated user-generated material. As described in this publication, kindergarten children in workshops created some of the visual elements (paper figures) subsequently used during the *Shadow Play* concert. This method resulted in both creating a feeling of recognition and *ownership* for the children involved, but also some amount of uncertainty for those in the audience who had not been involved in the workshops. Due mostly to an overall tight schedule, this method of content creation made it difficult to involve orchestras in co-creation. However, involvement and contributions from participating musicians and organizations was the key to success of the final projects. In connection with the *Musik2Go* concert No. 3, designers, musicians, and composers worked together (co-creation) and there was also a relatively high level of user participation in creating content—including the use of pre-recorded material in the form of sound and visuals produced in the foyer area before the concert itself, by members of the audience. The Chanel and Stravinsky exhibition *Tøj og Toner* had a relatively limited level of co-creation and user participation, but still gave a highly satisfactory result.

Figure 7.
The Coco Chanel and Igor Stravinsky exhibition in Malmø.
© 2014 Photo: Jeppe Bøje Nielsen.

Figure 8.
© 2014 Design, Marie Brandt Overbye and Tilde Bay Kristofferson, photographs by Kajsa Gullberg.

Figure 9.
© 2014 Design, Marie Brandt
Overbye and Tilde Bay
Kristofferson, photographs by
Kajsa Gullberg.

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CASES

CASE Nº 1

TITLE

TEDDY IN SPACE:

CHILDREN CO-CREATING A CLASSICAL MUSIC EXPERIENCE

ON STAGE

MALMÖ SYMPHONY ORCHESTRA

KEYWORDS

APP, CHILDREN, FIRST PERFORMANCE, FOYER ACTIVITIES, GRANDPARENTS, INTERACTIVE INSTALLATIONS, PARENTS, RE-COMPOSITION, RECORDING, SMARTPHONES, SPACE, TABLETS, TEDDY BEARS

CREDITS

MALMÖ SYMPHONY ORCHESTRA, RESEARCHERS AND STUDENTS AT MALMÖ UNIVERSITY, STUDENTS AT THE ROYAL DANISH ACADEMY OF FINE ARTS—SCHOOL OF DESIGN, COMPOSER NICKLAS SCHMIDT, PROGRAMMER RIKARD LUNDSTEDT, AND SUPER-USERS SAM, ESMERALDA, KLARA, MINNA, HEDDA, EBBA, NILS, AND THEIR PARENTS.

FULL REPORT CMEC.MAH.SE

The doors open and in an instant, hundreds of children crowd the foyer. Sitting still for almost an hour, which the children attending the Teddy in Space concert have just done, has taken its toll. The children want to move and be activated. The foyer has been prepared with interactive installations where the children can use their excess energy, but there is also a table where they can put on headphones and play with the music they have just heard. Through these activities, the concert hall's foyer becomes a platform for social interaction between visitors, but also between the visitor and Malmö Symphony Orchestra.

Extending an experience in time and space

The objective of the Teddy in Space experiment was to explore how you can extend a family concert in both time and space. Central questions were: How can classical music be made more accessible to children? And how can children be involved in co-creation before, during, and after the concert?

Over a period of several months, a number of concepts and prototypes were developed. One prototype was a music-composing application for smartphones and tablets, the Teddy in Space app, in which children could play with original music composed specifically for the Teddy in Space concert. The app could be tested in the concert hall's foyer prior to the concert, as could two interactive installations made by students. The app was available for download, which made it possible to bring the composing activity, and the overall music experience, home after the concert.

Designing engaging user experiences and enabling co-creativity requires many diverse skills. That is why the app was developed by a multi-talented team with skills in music composition, sound design, programming, interaction design, and graphic design.

**AUDIENCE ENGAGEMENT ACTIVITIES**
The most central audience-engagement activities for Teddy in Space were:

- user tests of the app where a group of children could test and give feedback on how the app should work

"My four-year-old is really into it! He records all three satellites and then plays them back simultaneously. Sometimes we record one voice each, and he connects it to space by singing the Star Wars theme, daaa-daa-da-da.... ."

1

2

3
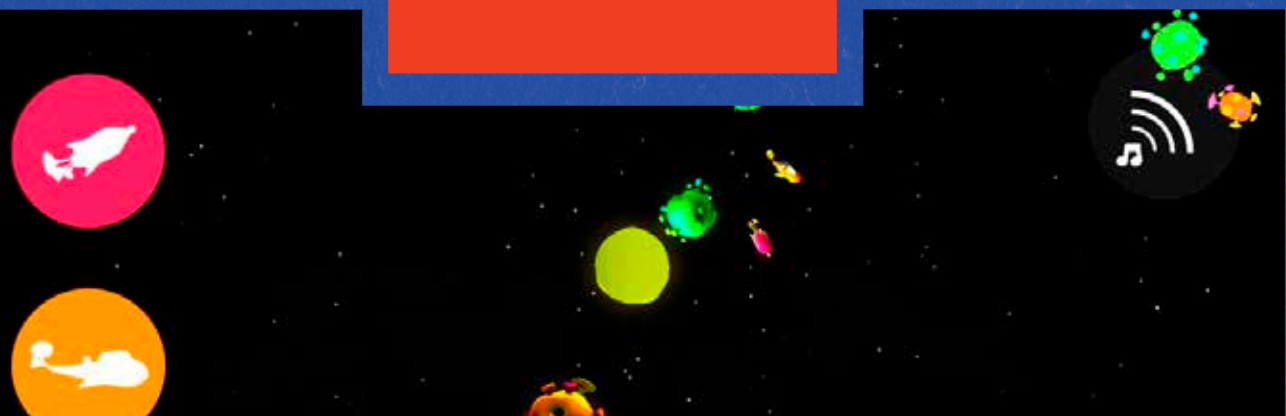
"My older grandchildren loved the concert, and everyone appreciated the concept as a whole. It was great that they could use their teddy bears and I think that the activities in the foyer really spoke to them. They were ecstatic to the point where they did not want to go home."

- the Teddy in Space app that encourages musical exploration and basic composition, where you can turn sounds on and off, as well as add and play with your own sounds (figure 1)

- workshops and user tests of two interactive installations, where groups of children tried out different concepts to inform the students of what concepts to technically implement

- Teddy's Magic Hoops, where children triggered music by throwing their teddy bears through colorful rings hanging from the ceiling (figure 2)

- Teddy's Space Program, where children could trigger and affect the behaviour of lights and sounds by interacting with tangible objects such as large buttons and wheels (figure 3)

Making music through children-centred activities

The Teddy concert was extended in space through the designed activities in the concert hall's foyer. These activities ranged from physically active to very calm, and it is clear that this was a successful combination since most children found an activity they enjoyed.

The activities in the foyer were designed so that the children could engage in a different form of listening and recomposing parts of the performed music. One of the interviewees described how her youngest child had a hard time focusing on the concert, but how the space theme and the music became more relevant when it was appropriated to conventions and modes of interaction the child was used to. For example, through interacting with the Teddy in Space app and throwing a teddy through Teddy's Magic Hoops.

The primary tool for extending the concert in time was the Teddy in Space app, which could be played in the foyer both before and after the concert. It could, of course, also be brought home by downloading it to your personal smartphone or tablet, which further extended the experience in time.

In the app, children could engage in co-creating classical music by turning sounds on and off, by playing sounds backwards and by 'throwing them away', and by recording their own sounds, which when played were integrated into the composition. The children sometimes played alone, and sometimes took turns playing with siblings, friends, or parents.

The recording of sounds proved to be the most popular feature of the app. Some children made faces and gestures while recording, which suggests that they were trying to dramatize their play, and perhaps connect to the experience they had just had in the concert hall where they had first heard the music.

Evaluations show that the app was used at home several days after the concert, but it was reported that children who had been introduced to it at the concert

had an easier time to understand what it was about. Through the evaluation, many parents and grandparents also gave feedback on both the app and the content and form of the concert, such as choice of music and duration. Given the opportunity, the members of any audience have many insights to share.

Extending the concert and the overall experience in space—from the stage into the foyer—proved to be a great platform for social interaction, and thus for deepened audience engagement. The foyer was a much appreciated contact point for the visitors to meet and have a dialogue about the concert. It became evident that the audience appreciated being able to express their opinions about the concert, previous concerts, as well as talk about their relationship to Malmö Symphony Orchestra. For example, one grandmother said proudly that she had been bringing her grandchildren regularly for about ten years.

A need for greater musician involvement

The most obvious take-away from these experiments is the need for both temporary and more permanent meeting platforms to support and facilitate dialogue between the audience and Malmö Symphony Orchestra. These platforms may be digital, but they need to be combined with face-to-face meetings, such as those experienced in the foyer after the Teddy in Space concert. These offline social platforms are crucial to establish mutual trust and are the basis of long-term engagement.

The Teddy in Space app had several design flaws, which would need to be addressed if trying to promote the app to a wider audience. For example, it wasn't clear that you had to touch and manipulate the 'Sun' in order to progress forward, and the explorative and compositional possibilities were quite limited. Further, the app didn't have so-called multi-touch (that is, when you can do two things or more simultaneously on a screen), which made the app hard to play with in a more collaborative way.

The visual aesthetic in the concert hall and the foyer were not harmonized, as the many partners had too little communication in between them.

Last, the production team agreed that musicians should have been involved to a greater extent, both in the production of the foyer installations but also by simply being in the foyer to talk to and play with children and parents.

CREDITS

Malmö Symphony Orchestra, researchers and students at Malmö University, students at the Royal Danish Academy of Fine Arts—School of Design, composer Nicklas Schmidt, programmer Rikard Lundstedt, and super-users Sam, Esmeralda, Klara, Minna, Hedda, Ebba, Nils, and their parents.

THIS TEXT IS BASED ON A REPORT BY MARIE EHRNDAL AND ERLING BJÖRGVINSSON, MALMÖ UNIVERSITY. THE FULL REPORT IS AVAILABLE AT CMEC.MAH.SE.

TITLE

SHADOW PLAY:

CHILDREN CO-CREATING SCENOGRAPHY

ON STAGE

ROYAL DANISH ORCHESTRA

KEYWORDS

ADULTS, AESTHETICS, ANALOGUE, ANIMALS, CHILDREN, DIGITAL, DRAMA, EMBODIMENT, GRANDPARENTS, KINECT, PARENTS, PROJECTIONS, SCENOGRAPHY, SET DESIGN, SHADOWS, SILHOUETTES, USER-MADE CONTENT, WORKSHOPS

GRANDPARENT:
"In the foyer, our boy started playing in front of the lion he had made. Later at the concert he whispered 'Grandma, that's my lion jumping right now!'".

PARENT:
"We weren't sure our niece would want to participate, but she did. And it was great that we could bring the shadow figures home. She was quite engrossed in them afterwards!"

BOY:
"I saw my lion on stage! I knew it was mine because it moonwalked".

Supporting co-creation and musical exploration

How can you support musical exploration and co-creation among children before, during, and after a classical music concert? Through Shadow Play workshops, the project explored how children can engage in co-creative activities where, in this case, the music of Prokofiev (Peter and the Wolf) and Saint-Saëns (The Carnival of the Animals) was in focus. The idea was to combine pre-produced visuals, made in workshops with design students and children, with short video recordings of 'shadows' that had been made by children and their parents a few hours before the concert. The pre-produced visuals and the children's recordings were then mixed together by a visual artist during the concert.

Audience engagement activities

A few weeks before the family concert, workshops with kindergarten children were held where they made silhouettes and animated shadow figures.

FIGURE 1
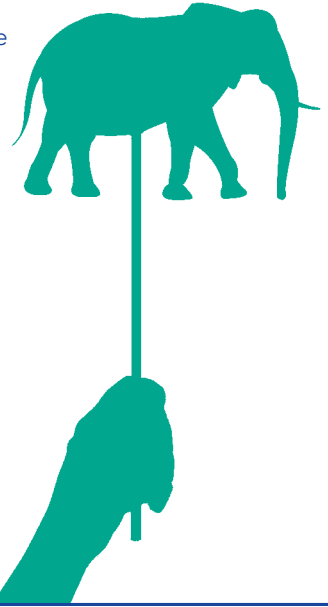
Workshops with kindergarten children.
© JAKOB ION WILLE.

At the Copenhagen Opera House, just before the concert, Shadow Play workshops consisting of several stations were run:

FIGURE 2

A music-choreography station where the children listened to parts of the music and, with assistance, tried how to move to the music.

FIGURE 3

A station for making paper shadows where children cut out silhouettes from cardboard paper and put them on sticks to be used in the analogue animation station.

FIGURE 4, 5

An analogue animation station where the children could 'perform' by wearing props or dramatizing their shadow figures.

FIGURE 6

A digital animation station where the children could animate animals that were part of Prokofiev's and Saint-Saëns' musical pieces—this by moving in front of the motion-sensing device Kinect.

FIGURE 7

The concert, where children and their parents could see their work being used in the scenography.
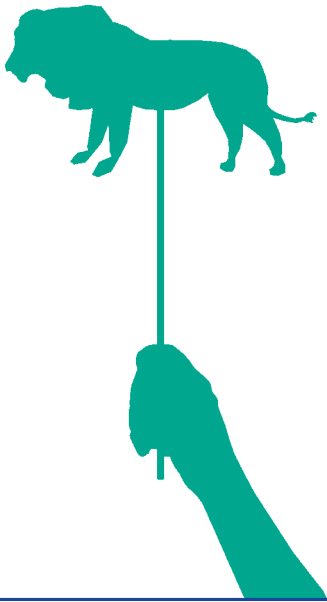
Diverse activities make room for diverse participants

The Shadow Play experiment shows that it is possible to 'stretch' a concert to include engaging experiences where most concertgoers can participate. Having several and quite different activities enabled both small and large groups to take part. The diverse nature of the activities led to that most of the children were able to find an activity that they enjoyed.

Evaluations show that taking part in activities before the concert affected the children's experience of the concert. The children were loaded with anticipation and excitement as they waited for their animals to appear on stage, which increased the feeling of being part of the concert. At home, during the days after the concert, many children also re-enacted the experience by playing with the stick-figure silhouettes, which they were encouraged to bring home.

The evaluations also show that the children's and the adults' views of the concert and the Shadow Play are quite different. The adults emphasize the importance of 'schooling' their children into classical music, while the children highlight how the Shadow Play allowed for creativity, playfulness, anticipation, and togetherness. In a similar vein, the adults who were happy with the Shadow Play workshop emphasized the experiential value and not so much the pedagogical value. Even though the children did not to a great degree talk about the value of learning or gaining deeper understanding, some of the children expressed how the Shadow Play increased their understanding of the music.

What divides the adult concertgoers the most is the usage of visuals during the concert and the aesthetic language of the Shadow Play. Some found the visuals distracting and stealing too much attention from the music. Others found the aesthetic language too primitive. According to some of these adults, the concert did not play up to their expectations: The Royal Danish Theatre stands for refinement, which the 'crude' shadows wavered too far away from. Most of the children were not, however, critical to the aesthetic language—only a few adults reported that their children had found it too simple or boring. A certain difference in attitude between 'heavy users' and 'casual users' of the Royal Danish Theatre can be detected. Heavy users are more satisfied with the Shadow Play, while the casual users to a larger degree want the concert experience to confirm their expectations of what the Royal Danish Theatre is, namely professional, stylish, and refined.
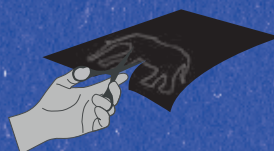
SKYGGESPIL

1. Klip dyrene ud af programmet
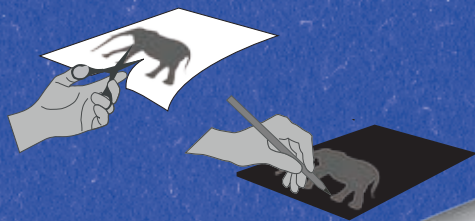
2. Tegn dem over på sort karton

3. Klip dem ud

4. Sæt dem på en pind

5. Hold dem ind foran en tændt lampe i et mørkt rum og lav en historie

6. Optag det med et kamera og lav på den måde din egen skygge-film. Det er kun skygger-ne der skal filmes.

At the station for making paper shadows, children cut out silhouettes from card-board paper and put them on sticks. They were then used in the analogue an-imation station where children dramatized their shadow figures. These figures were also printed in the program notes of the concert, and could thus be brought home—extending the concert experience in time.

How can children engage in the whole creative process?

Many things could be developed further. The narrative and the dramaturgical framing could be given a more cohesive shape. The pedagogical format could be explored further; children could be given more time to learn and explore both the music and what is possible to do with shadows. The Kinect station would need considerable development to allow for greater expressivity and for collaborative play.

On a more general level, it would be interesting to explore how the children to a larger degree could engage in the whole creative process. With the Shadow Play, the creative work is 'refined' by professionals. A question worth addressing is if the Shadow Play could become a more direct representation of the children's creativity. Further, the Shadow Play format did not at all attract new audience groups to the Royal Danish Theatre. It would therefore be necessary to explore how such a format could be developed so as to establish relations with groups that the Royal Danish Theatre does not reach.

CREDITS

Royal Danish Theatre, researchers and students at Malmö University, researchers and students at the Royal Danish Academy of Fine Arts—School of Design, visual artist Thomas Romlöv, production designer Tine Lylloff, children, parents, and grandparents.

The Shadow Play concept built upon previous productions developed and run by the Royal Danish Theatre, who had already engaged school children in making drawings used as scenography. A participatory and aesthetical framework for the Shadow Play concept was then developed by the Royal Danish Theatre and researchers at Malmö University. The detailing of the framework was done in collaboration with design students from the Royal Danish Academy of Fine Arts—School of Design, who made the visual schemas for both musical pieces, the shadow-animation film for Peter and the Wolf by using silhouettes made by children, and produced the visual backgrounds for The Carnival of the Animals. An interaction design student from Malmö University conceptualized and programmed the Kinect animations in near dialogue with the Danish design students. Silhouettes for Peter and the Wolf were made by a group of children at a school in Valby, which were later animated and filmed in black and white by design students from the Royal Danish Academy of Fine Arts—School of Design.

3

THE WORLD ORCHESTRA:

ONLINE, OFFLINE, AND ON-SITE

COPENHAGEN PHIL

Launch WorldOnlineOrchestra.com and you will meet more than 50 members of Copenhagen Phil performing their individual parts of Beethoven's Symphony No. 7. You'll meet Gunvor Sihm playing the violin in front of a huge aquarium, and Tage Christensen playing the clarinet in his biking gear at Copenhagen Central Station. You'll also meet Richard Krug playing the cello in his attic, and Viveca Löfgren playing the flute in a park that really makes her proud of living in Copenhagen. They are all part of World Online Orchestra, an experiment where Copenhagen Phil brings classical music to the people in a new way.

An invitation into the machine room of classical music

World Online Orchestra (WOO) is an interactive platform where you can watch and listen to the members of Copenhagen Phil playing their individual parts of Beethoven's Symphony No. 7. You can play them all together or create your own ensembles. In its current state, WOO is a classical-music remix tool, but the future will bring in musicians from all over the world.

The spirit of WOO was set free in 2010 when Copenhagen Phil began to rethink what a philharmonic orchestra is—and how you can reach audiences beyond the concert hall. Through workshops where all parts of the organization were involved, hundreds of ideas emerged about how to make Copenhagen Phil relevant in the 21st century.

After successfully pulling off two flashmobs in the Copenhagen Metro and at Copenhagen Central Station, the orchestra embarked on a journey of re-creating themselves through a new vision, a new image, and a new orchestra culture. This was a 'new' Copenhagen Phil that decided to be provocative and challenge the traditional idea of quality, but who always made sure to be in dialogue with the musicians—to listen to their fears of losing control over the artistic quality of a performance.

Every orchestra member was onboard and their individual parts were to be video recorded during spring 2013. This is when doubts began to surface. Some musicians were suddenly not keen on the idea of performing alone since this was the opposite of how you make a great performance: You perform best when you play together with others, when you hear how much pressure they put on the strings,

VIVECA LÖFGREN

"Østre anlæg
is one of those places
in Copenhagen
that make me proud
of living here.
I can walk around
and discover
new beautiful spots
every time I'm here,
even during recording."

BROWSE THE
ORCHESTRA

RICHARD KRUG

*"From the attic
of my house,
you can enjoy
a great view
over the rooftops
of Copenhagen.
This is my work space,
preferably when
daylight is
disappearing."*

WORLD ONLINE
ORCHESTRA BETA

BEGIN

how much vibrato they use, how they breathe. The need to discuss alternative ways of measuring quality was evident.

The quality of WOO is not about artistic perfection, but rather about inviting users into the 'machine room' of classical music. This new take on what quality may be was accepted. The musicians were recorded in settings they chose themselves—at coffeehouses, in an amusement park, on a boat, or at home. The ambience sounds (or background noise as some would call it) was not filtered out but was rather a fundamental part of the performance. Also, through the musician's choice of location for the recording, the user gets an impression of the individual musician's personality and how different the musicians actually are to each other.

Building new versions of a symphonic piece is enlightening

Voices about WOO have been mostly positive. People think it is exciting and enlightening to step into the 'machine room' of a philharmonic orchestra and to be able to build new versions of a symphonic piece. It is fun to create an ensemble where you, for example, only hear the percussionists and double-bass players perform, or to listen just to the string section.

Reactions from musicians have been more diverse. They think it is interesting, but they tend to listen to details such as how well an individual instrumentalist performs, or how well the musicians play together. They measure WOO according to the traditional notion of quality. Non-musicians, on the other hand, haven't had any comments on how well different voices are performed.

The fact that WOO is performed online through an experimental interface also explains why 'normal' listeners' expectations on the performance quality is lower than it would have been in the concert hall: An 'Internet performance' doesn't need to be perfect in the traditional sense of perfection.

The online orchestra goes offline and on-site

In its current form, World Online Orchestra is based on individual recordings made by professional musicians performing Beethoven's Symphony No. 7. The next step is to open it for musical contributions from other musicians, both professionals and amateurs. The original Beethoven recording will be built upon by others, who might just as well play an improvised kazoo or electric-guitar solo instead of following the score. With more and more user contributions, the Symphony No. 7 will take on a new character. A few of these new versions will also be transcribed, put into a score, and performed live. And, more symphonies will be recorded by both Copenhagen Phil and other philharmonic orchestras and uploaded to the platform.

Another potential development of WOO is a physical installation where users can

60

experience and tinker with music in a more physical manner. The idea to this installation is inspired by work made by Malmö University students who experimented with ways people together can play and reinterpret parts of a symphonic piece by regulating the volume of five sound pipes. The development of an installation is currently carried out by students at the Royal Danish Academy of Fine Arts, School of Design.

There are also ideas about creating an application for mobile devices where the user can situate the orchestra at a specific location, such as a schoolyard or the town square. This World Orchestra thus aims to be both an Online, Offline, and On-site orchestra.

CREDITS

Copenhagen Phil, Makropol, Helios Design Labs, researchers and students at Malmö University, and researchers and students at Royal Danish Academy of Fine Arts, School of Design.

THIS TEXT IS BASED ON AN INTERVIEW WITH UFFE SAVERY (CEO) AND STINE THOMAS LARSEN (HEAD OF COMMUNICATIONS), COPENHAGEN PHIL.

TITLE

JOYSTICK:
CO-CREATION WITH A GAMING COMMUNITY

ON STAGE

MALMÖ SYMPHONY ORCHESTRA

KEYWORDS

BEADS, BLOG, COMMUNITY ENGAGEMENT/ MANAGEMENT, DIY, FOYER ACTIVITIES, GAME MUSIC, GAMERS, PIXEL AESTHETICS, SCENOGRAPHY, SET DESIGN, SOCIAL MEDIA, STICKY-NOTE ART, VIDEOGAMES, WEB, YOUNG ADULTS

CREDITS

MALMÖ SYMPHONY ORCHESTRA, MEGA, RESEARCHERS AND STUDENTS AT MALMÖ UNIVERSITY, AND MEMBERS OF THE JOYSTICK AUDIENCE AND THE GAMING COMMUNITY IN MALMÖ.

FULL REPORT CMEC.MAH.SE

The audience in Malmö Concert Hall is waiting for the game-music concert Joystick to start. Some tinker with self-made bead motives of Mega Man bosses, others with pins they have made with the button-badge machine in the foyer. On the screen behind the orchestra, stop-motion films where a few of the audience members are making art with sticky notes are projected. Quite many of the audience members are really looking forward to hear the Classic Nintendo Medley, this because they have suggested what songs it should include. The conductor enters the stage, and the grand theme of the multi-console game Wing Commander starts.

A long-term and collaborative design process

Joystick is a concert format where Malmö Symphony Orchestra (MSO) plays computer-game music. The format, which started in 2006, is highly popular and well visited, drawing mostly male gamers between the ages of eighteen and forty. In the Joystick project, we wanted to explore how the relationship between MSO and the gaming community could be deepened and broadened. More specifically, we wanted to explore what community-engagement processes such deepened relations demand.

The research into how to broaden and deepen the engagement was done through a long-term and collaborative design process that stretched over a year and a half. It involved MSO, the gaming community MEGA, and Malmö University researchers and interaction design students.

The design process focused on three steps. We first met to talk about what values and motivations that drives the gaming community's engagement in Joystick. Based on the outcome of these discussions, we developed new media and communication formats for Joystick—and we together started sketching concepts for how to create satisfying and engaging holistic experiences. By 'holistic experiences' we mean how different elements can work together and strengthen each other; elements such as the concert, the communication, the scenography, the graphical profile, and other side events such as seminars and competitions. As for many other experiments in the *Designing Classical Music Experiences* project, we strived to create an experience that included activities before, during, and after the concert.

Gamers' values and motivations of being involved in Joystick

Literature on audience engagement stresses the importance of getting to know the social and cultural values and motivational factors when building relationships with new communities or groups. This 'getting to know each other' takes time and requires you to meet in person, and these meetings should be seen as mutual learning opportunities.

The collaborative design process—involving MSO, MEGA, and university researchers and students—pointed out central values and motivational factors pertaining to the gaming community:

- Gamers view gaming as a serious art form, equal with classical music, and that it should be respected as such.

- Gamers want a collaboration to start early in the process, else their input simply becomes a badly organized add-on, resulting in a bad outcome.

- Gamers are willing to share their knowledge, as well as become ambassadors that 'spread the word' and connect the cultural organization to gaming communities.

- Gamers want that communication about an event should happen over a long time, and it should be transparent and adjusted to their way of expressing themselves. Communication should be less formal and instead be more bi-directional and frequent.

AN ONLINE GAME-MUSIC COMMUNITY IS BUILT

The above values and motivational factors led to a unanimous vote: A person from the gaming community should take on the responsibility of communicating about the concert and about game music in general. The Joystick Blog (joystick.mso.se) was quickly set up.

The objective of the blog was to establish an online community where game-music lovers could gather to read about and discuss game music. Through the blog, the gaming community was invited to influence the concert set list through requesting songs they wanted to hear. The blog was also the place where the gaming community was invited to take part in other events, such as helping create the scenography. The overall aim was to build momentum up to the Joystick concert, and thus expanding and extending the concert experience, but also to acknowledge that game music is a serious art form.

DIY PIXEL ART

Other results from the collaborative design process was that:

- Gamers see gaming as an active (not passive) cultural expression, and, to them, engagement with a concert format means active participation.

- Gamers want a consistent and holistic experience, and they want a 'folk'-festival experience rather than a formal concert.

The above values were guidelines when designing the side events and the scenography. The concert set list was divided into two quite distinct themes, where the first half of the concert was dedicated to music from retro games played on 8-bit and 16-bit game consoles such as Nintendo, Super Nintendo, Amiga, and Commodore 64. These games have a distinct visual expression, and it was decided that 'pixel aesthetics' should inform the scenography. One of the reasons for this was also that MEGA has a tradition of working with the pixel aesthetics of early videogames. For example, they used beads to build the first level of Super Mario Bros.

Given the size of the concert hall, it was not an option to work with beads, and it was decided to work with sticky notes instead. A Do-It-Yourself Pixel Art concept was designed. Gamers had an active role in both planning and executing the concept, and the aim was to decorate every window of the concert hall. This resulted in a dynamic scenography that slowly grew into existence. It was a scenography created by the audience, expressing their passionate engagement with computer games. The motives ranged from simple Pacman figures made by families with children that were waiting for the concert to start, to very complex motives that took several days to make. The scenography was thus created through the involvement of many concertgoers, which contributed to the feeling that it was 'their' concert hall and that they were part of a larger community.

Producing a set design built on audience engagement needs to be arranged differently than a traditional set design. It demands that the production team is comfortable with the uncertainties that handing over some of the ownership to the audience entails. The set-design team also needs to have the skills to engage and facilitate other people's creative engagement. It also demands that the team can connect to the right people, and that the 'invitation to participate' is made in the right way. The co-creative framework also needs to be such that participants find it inspiring and challenging. MSO working with MEGA and university staff, and having the Joystick Blog as a gamer-to-gamer communication channel, made the DIY Pixel Art a success.

Joystick actions

There were many audience-engagement activities that took place during the months leading up to the concert, and at the event. Here are a few:

SONG REQUESTS

At first, an exclusive group of people were asked to request videogame songs from the Golden Era of videogame music, that is, until 1995. This opportunity was later opened to the general public and 49 individuals requested and motivated 81 songs they would want MSO to perform. It is worth noting that there was no prize for giving a motivation.

POLL ON WHICH MEDLEYS TO PLAY

The song requests were vetted by the concert producers, and six medleys/suites were put online to be voted upon. 118 people cast their votes and, yet again, gave motivations to why this particular medley/suite should be included in the repertoire.

DIY MERCHANDISE — THE BUTTON-BADGE MACHINE

Workshop participants had expressed the will to bring a token (a souvenir) from the concert. The standard t-shirts and baseball caps were discussed, but what better way could there be than letting people make their own souvenirs with a button-badge machine? Old videogame magazines, scissors, and some help from the production crew

allowed everyone to bring with them a free, personal badge. And, the machine and the material may be used again for any concert.

PLAYING A VIDEOGAME WITH IMPROVISED MUSIC PERFORMED LIVE

Students from Malmö Academy of Music performed music to live-playing of a game they themselves had composed the music to. The performance of the person playing the game was interpreted and put into improvised music by the instrumentalists (drums, clarinet, and bass guitar).

DIY PIXEL ART

Gamers were invited to decorate the foyer with Pixel Art.

PEGBOARD ART

The sprites—that is, the pixel blueprints of videogame artwork—that were used for doing sticky-note art were re-used as templates for making pegboard artworks.

QUICK 'N DIRTY INTERVIEWS

The two soloists and the conductor were interviewed during Three short videos were shot with a smartphone, edited with a simple (and free) video-editing tool, and published on the Joystick Blog. The videos took about six hours to produce and received several hundred views over a few days.

The community is willing to share

More than one hundred concertgoers answered a survey about their experiences from the event. Many respondents gave long and detailed accounts, which is often difficult to achieve through online surveys. Given the amount of time many respondents must have spent on answering, it can be assumed that they believe that they are listened to, and that they can influence the event. Many of these accounts reference particular gaming knowledge, and it is as if they take for granted that the receiver (MSO) has a broad and deep knowledge of the gaming culture. MSO is seen as credible and knowledgeable.

   The concert and the overall event was considered to be one of the most successful Joystick events ever. But, there is room for improvement. Almost half of the respondents said that they engaged in social activities prior to going to the concert hall. By offering the right context, and making sure that the information reaches ticket buyers in time, MSO could be the facilitator of these social activities.

   It is also clear that the audience is willing to become involved in a mutual learning process. Many respondents say that they have attended other MSO concerts, and surprisingly many express a willingness to learn more about classical music. The conditions to create concert formats where the audience and MSO meet in a mutual learning process seem very good.

   One of the questions in the survey was: According to you, what would the ultimate concert format be? Many answers relate to formats where classical music meets popular culture in various ways. Others are more concrete: They want to hear themes from television drama series, concerts where symphonic- and electronic music meet, combined film- and game-music concerts, science-fiction themed concerts, and music from arthouse films.

   Given that Malmö is a stronghold for computer-game companies, large and small, another future development could be that MSO helps write and record music for independent game producers—this as a way to promote the artform of classical music in games that rarely use live-performed music.

CREDITS

Malmö Symphony Orchestra, MEGA, researchers and students at Malmö University, and members of the Joystick audience and the gaming community in Malmö.

THIS TEXT IS BASED A REPORT BY ERLING BJÖRGVINSSON, MARIE EHRNDAL, RICHARD TOPGAARD,

AND EVA WENDELBOE KUCZYNSKI, MALMÖ UNIVERSITY. THE FULL REPORT IS AVAILABLE AT CMEC.MAH.SE.

ALEXANDER CEDERHOLM,
EDITOR OF THE JOYSTICK BLOG AND THE NICHE-
CULTURE BLOG MSO VOLYM,
AND LONG-TIME MEMBER OF THE GAMING
COMMUNITY MEGA:

"*We shaped the concert
and the event
according to the wishes
of the community.
People could request songs
they wanted to hear,
and later vote
on which medleys
and suites that should
be performed in the retro act
of the concert.
And I must say that this
resulted in the best
Joystick concert
I have ever been to!
And possibly one
of the best
overall events!*"

1. Pick a sprite that in the number of horizontal and vertical pixels is smaller than your surface.

2. Exact colors are rare. Be pragmatic!

3. Find the center of the window and mark it with a pen or a string.

DO-IT-YOURSELF PIXEL ART IN 6 SIMPLE STEPS

An idea that came up in workshops with the gaming community was to use the windows of the concert hall for retro-style art. We decided to experiment with Pixel Art, an art form that requires little to no training!

Co-creating a concert experience can be very simple. Here's a manual for how to create Pixel Art with sticky notes:

EXTRA BONUS!
You can also reuse sprites to make pegboard art!

This is a lot simpler than using sticky notes on windows.

But the view from the street will not be as grand!

4. This guy is almost doing it right. Note how some of the sticky notes bend away from the window.

5. If you're really hard-core, you can spend two full days to make sure your Pixel Art will be the best in show.

6. If you don't feel like posing for a selfie in front of your Pixel Art, someone else will.

1. Find a good sprite on spriters-re-source.com. A sprite is a pixel-by-pixel blueprint of videogame graphics. Or, make your own pixelated image from any photo with heavymural.com.

2. Go buy a lot of sticky-note pads in different colors. Note that black is hard to get by!

3. Find a suitable surface where the sticky-note glue actually sticks. Windows are perfect.

4. Tear sheets from the back of the sticky-note pad. This makes them bend towards the surface you're working with, not away from it.

5. Spend an hour or two on putting up sticky notes.

6. Open Instagram and snap a selfie with your work of art in the background.

TITLE

A CONCERT WITH STRIKING FORCE:

LEAVE YOUR MARK ON THE MUSIC

ON STAGE

ROYAL DANISH ORCHESTRA

KEYWORDS

BODILY SOUNDS AND MOVEMENTS, COLORS, FOYER INSTALLATIONS, INSTRUMENTS, LIVENESS, PERCUSSION, PROJECTIONS, RECORDINGS, USER-MADE CONTENT, VISUALS

CREDITS

ROYAL DANISH THEATRE, RESEARCHERS AND STUDENTS AT THE ROYAL DANISH ACADEMY OF FINE ARTS—SCHOOL OF DESIGN, MUSICIANS MATHIAS FRIIS-HANSEN AND MADS DREWSEN, AND VJ THOMAS SANDBERG.

FULL REPORT CMEC.MAH.SE

An hour before the percussion concert, members of the audience are already filling the foyer of the Copenhagen Opera House. Something special is to happen before the doors to the concert hall open. Percussion instruments—bass drums, bongos, and even a marimba—are exhibited, and people are encouraged to play them. Besides playing the instruments, the audience is invited to record sounds and movements (clapping, stomping, finger snapping, etc.) that can be produced using their own bodies. Later, people were pleasantly surprised when they experienced that the movements they had made were incorporated into the concert by being projected on a large video-screen. The VJ on stage linked the recordings live to a composition written by one of the percussionists.

Concept, Prototyping, Production & After the Concert

For the *Musik2Go* percussion concert, the School of Design delivered concepts and prototypes and was responsible for the production of visuals connected to this concert. This percussion concert was planned ahead of our involvement through the Interreg project.

CONCEPT

Arthur Maria Steijn and Jakob Ion Wille, artistic researchers at the School of Design, drew a chronological structure showing the connections between visual design, experiences and activities for the audience before, during and after the live concert (see figure 1).

In an early phase of the project, contact was established with one of the per-cussionists, Mathias Friis-Hansen, through a meeting organized by Dorte Grannov Balslev from the outreach department. At this meeting Arthur and Jakob present-ed the basic concept for the percussion concert in which bodily sounds as well as analogue, hand-made visuals would serve as a basis for the mediation before (1) and during (2) the live concert. Mathias, Arthur, and Jakob discussed possibilities and ways of connecting pre-recorded 'bodily' videos and sounds to live performed
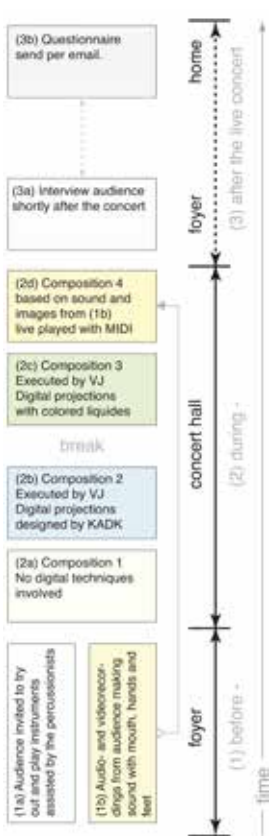
FIGURE 1

Left: Chronological structure for visual design, experiences and activities linked to the concert.

© 2014 ARTHUR MARIA STEIJN.

FIGURE 2

Above: Concept sketches by students Glenn A. B. Lange and Jonas D. Hasselmann. A meeting in the classroom with musicians Mathias Friis-Hansen and Mads Drewsen.

© 2014 ARTHUR MARIA STEIJN.

FIGURE 3

Below: Image of colored liquids in motion. Video recordings of bodily sounds in the studio.

© 2014 EWA MOSKALA AND ARTHUR MARIA STEIJN.

FIGURE 4

Above: Playing and recording in the foyer, and video projections during the concert.
© 2014 EWA MOSKALA, JAKOB ION WILLE AND ARTHUR MARIA STEIJN.

FIGURE 5

Below: Illustration of the workflow from recordings before—toward execution during the concert.
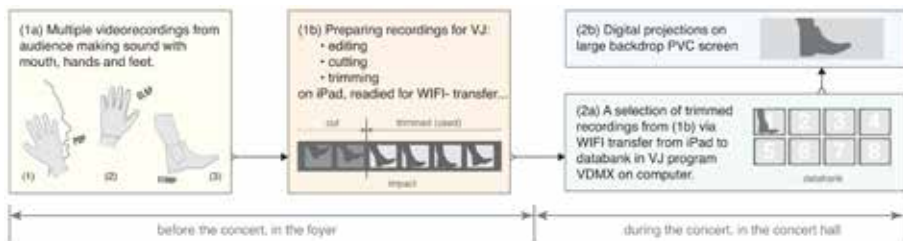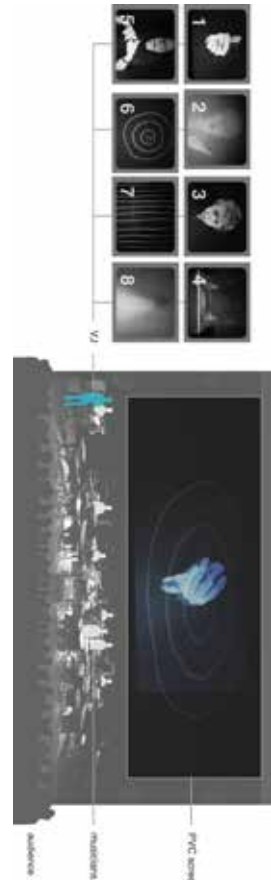© 2014 ARTHUR MARIA STEIJN.

FIGURE 6

Right: Illustration of the databank with image sequences. The VJ placement at the live performance.
© 2014 ARTHUR MARIA STEIJN AND GLENN A. B. LANGE.

NOTES: THE PRODUCTION PERIOD FOR THE SCHOOL OF DESIGN WAS AROUND FOUR WEEKS. THE ONLY OPPORTUNITY TO TEST AND TWEAK THE VISUALS AND THE LIVE MUSIC WAS DURING THE DRESS REHEARSAL THE DAY BEFORE THE PREMIERE, WHICH WAS ON APRIL 12, 2014.

(1a) Multiple videorecordings from audience making sound with mouth, hands and feet.

(1) (2) (3)

(1b) Preparing recordings for VJ:
· editing
· cutting
· trimming
on iPad, readied for WIFI- transfer...

(2b) Digital projections on large backdrop PVC screen

(2a) A selection of trimmed recordings from (1b) via WIFI transfer from iPad to databank in VJ program VDMX on computer.

before the concert, in the foyer

during the concert, in the concert hall

music. Shortly after, another percussionist, Mads Drewsen, expressed ideas for visualizing with colored liquids for a piece by composer Steve Reich, which was played at the same concert. These ideas were in line with our direction of deploying analogue means for visualizations. In cooperation with the authors and the musicians, our students further developed, sketched, and outlined concepts for visuals during the live concert (see figure 2).

The concept phase was followed by a laboratory for testing and prototyping in the classroom and our film- and photo studio at the design school.

PROTOTYPING

Here we made test video-recordings for bodily sounds defined by Mathias, Arthur, and Jakob. We worked with three basic sounds related to bodily actions:

1. A 'pop' sound produced by hitting the cheek while the mouth is open.

2. The 'clap' sound from hands clapping (and also the sound of hands flicking).

3. A 'stomp' generated by a foot stomping on the floor.

Several tests and video recordings reminiscent to the 1970s style of colored acid slide projections were made, by mixing colored liquids in a glass bowl filled with water. A style percussionist Mads suggested would be appropriate with Steve Reich's music and ideas. See figure 3.

The idea and principles of the bodily sounds and recordings from the colored liquids were used in the final production.

PRODUCTION

Before the live concert (1), as illustrated in figure 1, two stations (1a and 1b) were established in the foyer of the opera. At station (1a), the audience was encouraged to try out and play various types of percussion instruments ahead of the concert under the guidance of the instrumentalists. At station (1b), audiences were invited in creating audio and visuals that were used in (2) during the live concert under (2c) and (2d), after the break, see figure 4.

The audience was invited to arrive one hour before the percussion concert to meet musicians and their instruments.

A recording station with a direct link to the VJ's (Video Jockey) computer was installed in the foyer to capture images related to the three 'main body sounds'. The feed was edited into sequences and projected to 'fit' Mathias' live performed composition. Figure 5 schematically illustrates the flow from recordings to execution by the VJ, Thomas Sandberg.

A decision was made to place the VJ station on stage as a visible 'actor' taking part in the live performance. This placement had two advantages. (1) The VJ had direct contact with the musicians, and could therefore cue video sequences with precision. (2) The audience could experience the link between the live performed music to the live executed and remixed video sequences projected on the large PVC backdrop behind the drum ensemble, see figure 6.

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AFTER THE CONCERT

After the concert there was time to interview the audience. Those involved in recording in the foyer were positive about their bodily movements becoming visible on the large projection screen during the live concert. Furthermore, a questionnaire had been prepared to be sent to the audience. This questionnaire, including questions on, for example, the relationship between activities in the foyer and the video projections during the concert, was unfortunately never distributed.

FUTURE PERSPECTIVES

The collaboration between the musicians, the artistic researchers, and the design students turned out to be very fruitful. The musicians hope to find ways of realizing future projects together with the School of Design, in which experiments with new music compositions and visuals can be developed simultaneously, potentially resulting in high quality experiences.

CREDITS

Royal Danish Theatre, researchers and students at the Royal Danish Academy of Fine Arts—School of Design, musicians Mathias Friis-Hansen and Mads Drewsen, and VJ Thomas Sandberg.

TEXT: ARTHUR MARIA STEIJN, LECTURER, PHD FELLOW, AND ARTIST (MFA), AND JAKOB ION WILLE, LECTURER, PHD FELLOW, AND DRAMATURGE (MA). BOTH ARE AFFILIATED WITH THE ROYAL DANISH ACADEMY OF FINE ARTS, SCHOOL OF DESIGN IN COPENHAGEN, DENMARK.

TITLE

LOTS OF BRASS, LOTS OF COLORS

ON STAGE

ROYAL DANISH ORCHESTRA

KEYWORDS

BRASS, COLORED PARTICLES, FOYER INSTALLATIONS, INSTRUMENTS, PROJECTIONS, SHAPES, USER-MADE CONTENT, VISUALS

CREDITS

ROYAL DANISH THEATRE, RESEARCHERS AND STUDENTS AT THE ROYAL DANISH ACADEMY OF FINE ARTS— SCHOOL OF DESIGN, AND STUDENTS AT MALMÖ UNIVERSITY.

Those entering the foyer ahead of the brass concert find several installations on the ground floor of the Copenhagen Opera House. Each installation explores the relationship between music and color, and there are musical instruments (trombones) available for people to play. On a large TV screen, streams of colored particles represent the musical sounds that are picked up by a microphone when playing the trombone. People are also invited to take their own 'particle LED light' into the concert hall and use them to accompany the music. When seated, the link becomes obvious: Music and colors become one during the concert.

Concept, Prototyping, Production & After the Concert

Researchers and students from the School of Design, joined by two students from Malmö University, delivered concepts and prototypes for the *Musik2Go* brass concert. They also took responsibility for the production of visuals connected to this concert. This brass concert, a specialized concert with the eldest of the Royal Danish Theatre's ensembles, was planned ahead of our involvement through the Interreg project.

CONCEPT

Arthur Maria Steijn and Jakob Ion Wille, artistic researchers at the School of Design, drew a chronological structure showing the connections between visual design, experiences and activities for the audience before, during and after the live concert (see figure 1).

For this concert Arthur and Jakob decided to work with color as related to music. There were two reasons for doing so. (1) Historically, colors and music have been linked in many ways. Many people, from philosophers to musicians and composers, have explored this connection. (2) Color is the first visual experience the brain registers; color is perceived slightly ahead of forms and shapes.

Several ways in which colors might relate to musical tones and music and how these could be presented were considered during the development phase of the concept for the brass concert. The researchers and students from the School of Design, joined by two students from Malmö University, worked on the manner

1 Isaac Newton (1704)	2 Louis Bernard Castel (1734)	3 George Field (1816)
4 D.D. Jameson (1844)	5 Theodor Seemann (1881)	6 A. Wallace Rimington (1893)
7 Bainbridge Bishop (1893)	8 H. Van Holmholtz (1910)	9 Alexander Scriabin (1911)
10 Adrian Bernard Klein (1930)	11 August Aeppli (1940)	12 I.J. Belmont (1944)	15 Steve Zieverink (2004)

home

(3b) Questionnaire send per email.

foyer

(3a) Interview audiences right after the concert

concert hall

(2c) Nielsen (composer) Visuals in "mixed graphics & filmed/photographic(?) style " using "airflow narrative" and coloured particle streams. Also interactive audience involvement during the 3rd movement where LED initiate coloured particles and light.

(2b) Nørgaard (composer) Visuals in "film/photographic style" using "airflow narrative" with coloured particle streams

(2a) Hartman (composer) Visuals in "graphic style" using "airflow narrative" and our coloured particles

(1d) Colour to Colour station Interactive LED to create coloured particles streams

(1c) Music to Colour station Play instruments and create coloured particle streams

foyer

(1b) Colour to Music station Interactivelly create music with our "Colour - Music" scheme

(1a) Sound - Colour Poster Historical overview of Colour-Music relations & synaesthetics

FIGURE 1
Left: Chronological structure for visual design, experiences and activities linked to the concert.
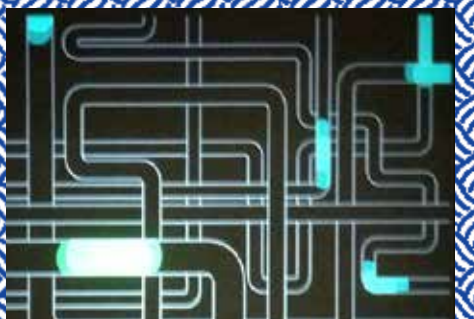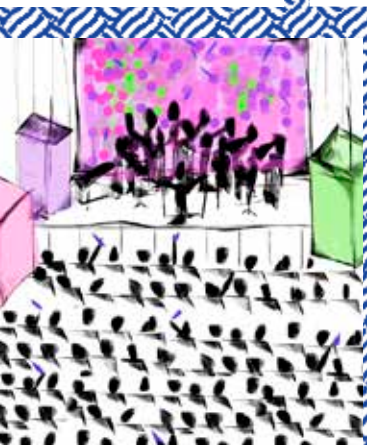© 2014 ARTHUR MARIA STEIJN.

FIGURE 2
Above: A meeting in the classroom with the students and a color-music concept illustration.
© 2014 ARTHUR MARIA STEIJN AND MORTEN KANTSØ ANDERSEN.

FIGURE 3
Below: Drawing and video stills from the prototyping phase.
© 2014 HALFDAN H. JENSEN AND MAJA FAGERBERG, GLENN A. B. LANGE, MORTEN KANTSØ ANDERSEN.

FIGURE 4

Above & Right: Activity at the 'color stations' (1a–1d) in the foyer, in advance of the concert.

© 2014 ARTHUR MARIA STEIJN AND EWA MOSKALA.

FIGURE 5

Below: Stills depicting video projections and interactive light lanterns during the live performance.

© 2014 ARTHUR MARIA STEIJN.

NOTES: THE PRODUCTION PERIOD FOR THE SCHOOL OF DESIGN AND MALMÖ UNIVERSITY WAS AROUND THREE WEEKS. THE ONLY OPPORTUNITY TO TEST AND TWEAK THE VISUALS WAS DURING THE DRESS REHEARSAL THE DAY BEFORE THE PREMIERE, WHICH WAS ON MAY 11, 2014.

in which color-music relations could be explored by the audience in the foyer in advance of the concert, and how these could be unfolded through, for example, large screen video projections during the live concert. Some discussions and ideas are depicted in figure 2.

In order to create a narrative as well as a sensory connection between the music produced by the brass instruments and the planned color-oriented video projections in the concert hall, the authors of this chapter developed the Airflow Narrative—the story of how airflow is produced. How it begins in the lungs, then flows through and is shaped by the mouth, and then 'blown' into the mouthpiece of an instrument where it circulates through tubes, controlled by mechanical frequency-regulators before finally generating musical tones.

The concept phase was followed by a laboratory for testing and prototyping in the classroom and our film- and photo studio at the design school.

PROTOTYPING

Under a short prototyping phase the activities and visualizations for the time before (1), during (2) and after the live concert (3) were further defined:

1. The period before the live concert would provide the attending audiences with an opportunity to gain insight into the history of the various systems of the connection between music and colors. At four stations, the music-color relations were represented—either in text, motion graphics, and/or interaction (see 1a–1d in figure 1). It should thus be possible to investigate these relations, as well as playing the instruments while being assisted by musicians.

2. During the concert, the music-color relationships would be further displayed using video projections, interactive light and other interactions linked to aspects previously introduced and experienced in the foyer.

3. The time period after the live concert would be dedicated to gathering feedback from the audience and technicians.

In order to portray color, we chose to use colored rounded, soft edged particle shapes throughout the event.

Researchers and students from the School of Design focused primarily on visualizations for the *before* and *during* periods, and on audience interactions for this *during* period. The students from Malmö University focused on audience and light interactions *during* the concert. Figure 3 shows drawings and stills from the prototyping.

Several ideas and principles tested here were used in the final production.

PRODUCTION

Before the live concert, as illustrated in figure 1, four stations (1a–1d) were established in the foyer of the opera. The audience could explore color-music relations in the foyer in advance of the concert (figure 4).

1a. *The Sound-Color Station* was a billboard comprised of texts and images that informed the audience of some of the central theories regarding the relationship between music and color—for example, Aristotle's ideas, Isaac Newton's concepts, and Goethe's thoughts on the subject.

1b. At the *Color to Music Station,* the audience was invited to make sounds based on a historical color scheme. Here, one could use a so-called trackpad to control an on-screen color wheel that, in turn, generated brass-like sounds.

1c. At the *Music to Color Station,* the audience—under guidance from musicians—could play musical instruments. The music played was then visualized interactively in the form of colored particles on a screen. The shape and direction of the particles was depending on the music's frequency and volume.

1d. The *Color to Color Station* gave an introduction to the LED light interaction, which was to be used to generate colored particles during the concert.

During the live concert, several color-particle related video projections—as well as interactive light lanterns—could be experienced (figure 5).

AFTER THE CONCERT

The time after the concert was to be used to gather feedback through interviews, and a questionnaire was to be sent to the audience. The questionnaire, including questions on how the activities in the foyer and the video projections during the concert were experienced, was unfortunately never distributed.

FUTURE PERSPECTIVES

The musicians from the brass group were, for various reasons, not actively involved in the process. However, the students from Malmö University worked very well together with the students at the School of Design, as well as with the outreach department and the technicians at the Royal Danish Theatre. Future collaborations seem very likely.

CREDITS

Royal Danish Theatre, researchers and students at the Royal Danish Academy of Fine Arts—School of Design, and students at Malmö University.

TITLE

OPUS LUX:

AN EXPERIMENT WITH AUDIENCE PARTICIPATION AT CLASSICAL CONCERTS

ON STAGE

COPENHAGEN PHIL, MALMÖ SYMPHONY ORCHESTRA, ROYAL DANISH ORCHESTRA

KEYWORDS

APP, COLLABORATIVE, COLORS, EMOTIONS, FEEDBACK, GRAPHS, INTERACTIONS, INTERPRETATION, LIGHTS, MOODS, PROJECTIONS, SMARTPHONES

CREDITS

MALMÖ UNIVERSITY, ROYAL DANISH THEATRE, MALMÖ SYMPHONY ORCHESTRA, COPENHAGEN PHIL, ØRESUNDSKOMITEEN, PORTAPLAY, JASON DA PONTE, CHRISTIAN BADSE, AND MADS HØBYE.

It's a Friday in November at Malmö Concert Hall. 1200 people have come to listen to Malmö Symphony Orchestra perform the music of John Williams. The concert is sold out. But, something is different at this concert. The program leaflet reads:

"Opus Lux, be part of the concert. Create a live light-scenography together. Listen to the music and choose the color it makes you feel. The light will respond to you."

The hall goes dark. The theme to Superman starts. As the music soars, the members of the audience—inspired by the music—choose colors through a 'color compass' on their phones. As more and more of the audience responds, a red light grows on the sidewalls and on the stage. The light surrounds the musicians and changes to yellow as the audience makes a new emotional choice. At the end of the concert, 700 audience members (59 percent) have participated in the Opus Lux experiment, the live co-creation of a light installation.

Communication between audience and performers— without words.

Opus Lux experimented with enabling co-creative music experiences at classical concerts. The goal was to explore how digital technology can enhance a concert, this by reaching out to the audience and making them an active part.

Opus Lux is a collaborative tool that enables the audience to make a collective, realtime impact at a concert—or any event—beyond mere applauding and cheering. This is achieved by collecting feedback from the audience and transforming it into an augmented layer that expands the concert experience.

Opus Lux has been developed over a period of 1.5 years and has been tested

in different contexts. The biggest challenge has been to find ways for meaningful interaction between the audience and the music: What makes sense to do, and how do the audience want to do it?

The first test was at a Musik2Go concert, with the Royal Danish Orchestra. By choosing a color that corresponded to your emotional state, you could influence the color of the light in the concert hall. The Musik2Go experiment also had an analogue feedback mechanism: Glow sticks in three colors. This was added as the team was not sure how comfortable the audience would be to use their phones at a classical concert.

The second test was at a media-industry conference in Malmö. By choosing a color that corresponded to your mood, you were part of creating a color-based score for percussionists from the Royal Danish Orchestra and Malmö Symphony Orchestra to improvise from.

The third test was at Øresundskomiteen's conference Ø-tinget. When a particular political topic was discussed, the audience member chose colors according to whether he or she supported that notion or not. The aggregated choices were turned into a graph-based score, which musicians from Copenhagen Phil used as a guide to interpret and perform a musical piece.

The final test was at a concert with Malmö Symphony Orchestra, where the final technical platform and interactive experience had its premiere.

Interaction and participation can enhance a concert experience

The results of the Opus Lux experiment show that technology can support mass interaction and make it a valuable addition if a meaningful context and emotional experience can be created around an event.

The first test at the Royal Danish Theatre explored the willingness of the audience to participate, and the basic value of the concept as an addition to the traditional classical music experience. Did it make sense for the audience to feel and to respond? Would they actually do it?

General insights:

- The audience was ready for a new type of experience.

- The basic concept of sharing emotions and transforming them into a collective installation was effective and enhanced the concert experience.

- The audience was not afraid of using mobile phones in the concert setting, not even the older generations.

- It was a positive experience to be an active part of the concert.

Test at Øresundskommiteen's conference Ø-tinget, and at a media-industry conference in Malmö.

DORTE GRANNOV BALSLEV,
OUTREACH MANAGER, THE
ROYAL DANISH THEATRE

*"It was great to see
what 'negotiations'
the audience members
were involved in.
I think some people
chose red to signal love,
while others chose it
to signal passion or
'high energy'. It was a huge
emotional impact on both
the audience and the
musicians. They felt
they had a conversation.
I also noticed how people
used the glow sticks
rhythmically. It was almost
like BBC's Last Night
of the Proms!"*

Test at the Royal
Danish Theatre.
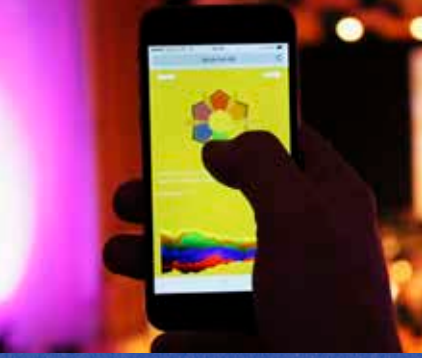
HARALD LEANDER,
ACTOR AND PRESENTER AT
THE JOHN WILLIAMS CONCERT

"*The experiment broke the 'wall' between the audience and the performers. I would like to use the tool in the theatre world and see what happens.*"

The final test at the John Williams concert.
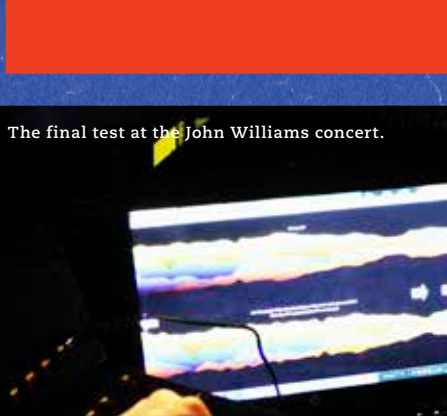
General experience barriers:

- The audience needs an introduction from the stage to be able to trust and participate in the experience.
- The audience must be able to see both their own contribution and the collective result, else it makes less sense to them to participate and they are less active.
- To the musicians, the light installation should not be too visible and disruptive, this for them to feel 'safe' and give a good performance.

The first test proved that Opus Lux could facilitate a meaningful experience. The two following tests gave the opportunity to go outside the concert setting to explore design issues such as how to keep the audience active over a longer time-span, and how to show the connection between the individual choice and the collective result. The latter issue had made some of the audience members at the first test to stop participating, as they did not see a direct result of their individual choices.

ITERATIONS AND EXPLORATIONS

At the second test, we created a more complex visual feed to test what happened when the personal input became more visible. The visual feed was made out of many individual inputs from the audience, instead of a single collective result. This visual navigation made the audience give many inputs very fast, but the bigger collective experience and the relation to the music got lost. The audience was more interested in seeing their own choice than in exploring the emotional engagement and its connection to the music.

   We ended up creating a new visual solution: A graph made of the realtime data, showing the overall result of the whole concert and your individual input over time. This solved the problem of the connection between individual input and the collective result, and also called for more emotional choices and reflection about the choices of the other audience members.

   For the second and the third tests, we experimented with giving the colors 'definitions' to see if this was better for the audience to respond to. This worked well in a setting with concrete feedback—such as 'like' or 'don't like', or 'feel inspired' or 'not inspired'—but it was not as emotional as the individual choice of what the colors meant.

   These two tests explored and experimented with different possibilities and challenges in the concept and it equipped the team with ideas for the final design.

   The last test took the project back to the concert hall and the core experience: To create an augmented, collective experience to enhance emotional impact and the feeling of participation in a classical concert. In short, to ask the audience to be an active part and to create something together in response to the music. Still, a couple of questions remained: Could we get the audience to keep reacting over long time—the 2.5 hours the concert lasted? Would it be engaging and emotional? Could we make sure the experience did not interfere with the musicians and their needs as performers?

The test had an astonishing result. The audience engaged continuously, and they together created the light-scenography during the whole concert. 59 percent participated and they gave more than 4500 individual inputs.

GABRIELLA BERGMAN,
PRODUCER, MALMÖ SYMPHONY ORCHESTRA:

"What impressed me was how you can have two quite different types of audiences in the same concert hall, and yet satisfy both their needs for how they want to enjoy classical music. First, the more 'traditional' concertgoer who wants to be able to immerse him- or herself deeply into the music. Second, the more outward-looking concertgoer who wants to share his or her experience with others. Opus Lux enables this and it is only your imagination that sets the limit of what you can use it for."

Opus Lux has the ability to create a bridge between your inner experience and your presence in the concert hall. At classical music concerts, it is easy to 'disappear into your head' and the inner scenarios the music evokes. With Opus Lux, you may be both in the 'inner world' and in the concert hall, as the rhythmic reoccurrences of your emotional choices make you stay attentive to the room and to follow the music in a much more physical way.

Opus Lux is now free for all to experiment with

During the development process, several questions arose in the team. What does it take to make a large audience interact and 'measure' their feelings? What content is meaningful to interact with? How can the collecting of inputs from the audience be used to create new forms of large, collective audience experiences in the future, be that musical, political etc.? We believe that there are many possible routes for the project to take. We have thus decided to release Opus Lux as an open tool to the rest of the world and we look forward to see how others will use it and how new experiments can explore these questions. Go to opus-lux.dk to start experimenting.

CREDITS

Malmö University, Royal Danish Theatre, Malmö Symphony Orchestra, Copenhagen Phil, Øresundskomiteen, PortaPlay, Jason DaPonte, Christian Badse, and Mads Høbye.

TEXT: ASTA WELLEJUS, INTERACTIVE DIRECTOR AND PRODUCER, MALMÖ UNIVERSITY, AND EVA WENDELBOE KUCZYNSKI, PROJECT LEADER, MALMÖ UNIVERSITY.

TOGETHER WE KNOW AND CAN DO MORE THAN ALONE

Just like a game of Cat's Cradle, this project has been all about weaving together. It has been a two-year process of exploring new forms of relationships, knowledge, and experiences between the project partners and the audiences we have worked with. This process has been characterized by a mutual interest and mutual learning when developing and testing new concepts.

The result of our work has shown that new forms of collaborations between different types of stakeholders, and engaging the audiences in the development processes, have great potential. The partner constellation—philharmonic orchestras, universities, audiences, and external partners—has contributed to new knowledge and experiences that would not have been accomplished without engaging in co-production. To return to the Cat's Cradle analogy, many figures can be made on your own, but developing more interesting, complex, and challenging compositions demand more hands. Together we know and can do more than we can alone.

There have been many challenges working in co-production between stakeholders with quite different internal cultures and practices. Reorganizations, personnel shifts, and organizational priorities have in various ways influenced the project.

I would like to thank the steering committee for constantly trying to find solutions to problems, and for your devotion to bring the project forward. Thanks to all project economists who have struggled with hourly reports

and spreadsheets. Thanks to the European Union Interreg IVA ÖKS, Region Skåne, and the Danish Arts Foundation for believing in and funding the project.

I would also like to thank all the musicians, producers, outreach developers, communication managers, stage technicians, and frontline staff at the cultural institutions. Without your competence and dedication, this project would not have been possible. Thanks to all researchers, developers, and students at the universities—you have been invaluable. Thanks to all external actors: Organizations, companies, and individuals for your engagement and will to explore. And, not least, thanks to all the audiences, the approximately 24,000 people who have participated and engaged in our tests.

Finally, I would like to conclude with a personal reflection. Cultural institutions are not funded to give the audiences precisely what the audiences want. This is one of the differences between being a cultural institution and a commercial organisation—a cultural institution needs to make room for disparities and conflicts. Audience engagement and experience design should not be reduced to a marketing strategy for selling more tickets. Working collaboratively across institutional borders and knowledge domains, on a long-term basis and with a diversity of stakeholders and audiences, can create more sustainable methods. It could be the modus operandi for any cultural institution that sees itself as a reflective contributor to society.

KAROLINA ROSENQVIST
PROJECT MANAGER

ANETTE VEDEL CARLSEN,
SENIOR ADVISOR, ORESUND COMMITTEE.

The Oresund Committee sees the *Designing Classical Music Experiences* project as a successful and necessary partnership-project for innovation. The project is a good example of how cross-border cooperation in the Øresund Region among cultural institutions, research institutions, and creative actors is useful for strengthening cultural life in the region. One of the strong achievements of the project is the building of new relationships and alliances in the processes of creation, performance, and business-model thinking.

ACKNOWLEDGMENTS

THE END

HOW THE LION LEARNED TO MOONWALK
And Other Stories on How to Design for Classical Music Experiences

Designing Classical Music Experiences—Musikalsk Oplevelsesdesign
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