Next Mobility
Research Book

Next Mobility Research Book

Contents

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(Performing Arts Market in Seoul)

New International Mobility for the Performing Arts in the Post Pandemic Era: Next Mobility

Sharing the research process of KAMS Connection and Performing Arts Market in Seoul

Next Mobility is a research project on new international mobility and circulation in the post-pandemic era, jointly developed by KAMS Connection, Performing Arts Market in Seoul (PAMS) and Seoul International Performing Arts Festival (SPAF) under the Korea Arts Management Service. The project is designed to be carried out for three years from 2021 while working in collaboration with various international performing arts festivals, theaters and institutions. It aims to explore what's beyond the existing realms of international mobility/circulation by sharing information and dialogues, conducting research, and developing and presenting artworks.

From classic formats to circulate performing arts internationally, to new mobility

If we define circulation as a process in which an artist creates an artwork and that artwork is presented to the audience as consumers, traditional ways of international distribution would include touring, international co-production, and local production and distribution through licensing. However, there have been changes in the format, characteristics and structure of the international performing arts market since 2000. There are two developments behind these changes. Firstly, the increase in the numbers of artworks coming from each country for international circulation has been

accelerating, so has the competition as a consequence. Secondly, the emphasis on the development of local audiences has led to diversifying the way artworks are circulated. It manifested itself in the form of localization such as international collaboration or international co-production. In addition, with people paying attention to the value of diversity in culture and art, there was a strengthening of exchange and mobility in the form of residency, research, and creative lab. In other words, the mobility of the people and artists behind the artworks have been brought to center stage rather than the movement of the artworks themselves.

Therefore, international mobility in today's performing arts sector goes beyond being a simple concept of movement for artwork circulation, and becomes a concept closely related to the sustainability of art. It is a process in which a relationship is established with the local community by the movement of an individual artist, and localization, which moves ideas, thoughts and values, as the transfer takes place in order to continue cultural diversification. And what's at the heart of sustainability is the movement of artistic values that takes place in the process of experiencing and sharing as well as economic sustainability through income generation.

Mobility in the Post Pandemic Era - Next Mobility

Rapid changes in technology, society and environment in the 21st century have had a great impact on the creation, production, circulation and consumption of the performing arts. In particular, the COVID-19 pandemic over the last two years has had a devastating impact on the performing arts ecosystem, international circulation, and mobility. As direct contact with the audience – a fundamental requirement for performing arts – became impossible, the consumption of artworks became restricted. As international travel became more difficult, international exchanges and circulation were hit hard. The pandemic is presenting safety as a new standard in the creation, production and circulation of the performing arts while calling for an exploration of new or different ways of creation, production, circulation and consumption.

Against this backdrop, Next Mobility in 2021 was carried out in the forms of international forums during PAMS, individual research through KAMS Connection, and internal workshops for sharing experience. First, during the 'PAMS Salon & Next Mobility' programs of PAMS 2021, new ways were

explored in which performing arts can be created, produced, circulated, enjoyed and consumed. Based on the results of that exploration, the topic of what new international mobility and circulation is for art, artists and artworks in the post pandemic era was discussed at the PAMS. The key questions are as follows. First, how should international mobility, touring, and circulation change in the post-pandemic era and what are the new formats? Second, what is environmentally aware international mobility that can respond to climate change and climate crisis? Third, what is digital mobility that is making transitions along with the development of digital technology?

Research structure and format

Next Mobility in 2021 was carried out in the forms of international forums during PAMS, internal workshops for sharing and individual research through KAMS Connection – an initiative for supporting Korean performing arts to be presented on international stages. Last year, KAMS Connection had an open call for research, 'A Grant for Next Mobility Research and Development (R&D) Project.' Based on a key phrase, "10 artists and producers bringing changes in creation and production," research was carried out on cases of
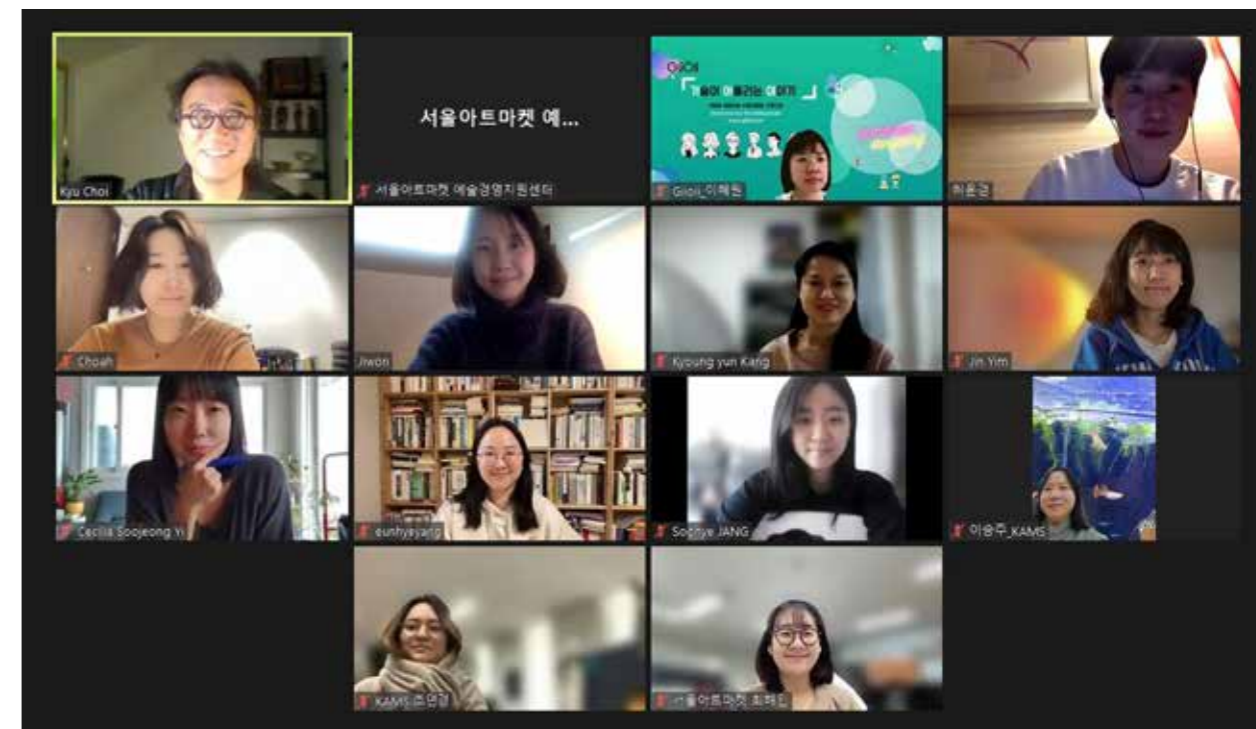
Participants in 2021 Next Mobility development & research project (ⒸKAMS)

contact-free creative activities, gamification theaters, virtual reality, digital performance and physical & virtual creative theater experiments. Another key phrase was "new audience, consumption, international collaboration and circulation." Based on that, there was an analysis of digital audience development of the dance genre, the possibility of collective immersion in a festival held in a non-physical space in the post-pandemic era, and of cases of international co-production. In addition, changes in the trend of international exchange and circulation were investigated from the perspective of green mobility driven by environmental and climate change

Challenges before starting research

In the process of preparing for the series of research above, participants were faced with three challenges as follows. By tackling these challenges, they were able to refine the topics and questions surrounding Next Mobility.

First, the biggest challenge was to remove the confusion caused by the difference in perception among researchers on the concept, or definition of 'Next Mobility'. While there is a generally agreed concept of distribution/circulation formats such as touring and international co-production, the concept of mobility in performing arts was not clarified amongst researchers, let alone that of 'Next Mobility." That was the first challenge.

The second challenge was that artists didn't feel as if Next Mobility was an issue at hand. In 2020, the groups that were participating in PAMS choice – one of the PAMS programs – were asked a question: "What is digital connection in international circulation in the pandemic era? And will technological development and the climate crisis change your creation, production, and circulation?" In response to this question, 50% of artists/organizations said they recognized that they should prepare for change. However, they were confused as to which way they should start this process, and had questions. And 30% of the artists were negative about Next Mobility. They had a clear view of the difference between what contact-free art such as art and technology collaboration, or art moved to a digital space, provides, when compared with the sense of liveness that the

audience will experience from a performance on a physical stage. On the other hand, about 20% of the artists showed interest in new digital mobility, in which various experiments are taking place using technology and art. These challenges have raised the questions of who is the main target of this research, and who is the outcome for? And that readjusted the individual goals and common goals of the research.

Lastly, the biggest challenge emphasized the most important point of this research. It is not the 'mobility/circulation' itself where the new changes and transitions of international mobility have to take place. But transitions have to take place in the entire value chain of creation, production, circulation, audience and consumption all at the same time. Therefore, it was decided that research should be focused on the changing value chain of performing arts in the format of thematic individual research and workshops in the first year of 2021 rather than 'international mobility/circulation' itself.

Research questions for the sustainability of art in response to the impact of the pandemic and changes in technology, society, and environment

Categories	Topics
Creation & Production	**(Artistic and economic sustainability) How are the ways of creating and producing art changing for the sustainability of performing arts? What are the implications and new standards that can be drawn from various examples?**
	• Analyzing various cases of creation • Various creative methodologies by genre • New standards according to the changing production formats explored by reviewing various production cases (new standards for production timeline and a digital & physical hybrid format) • A creative method that considers accessibility and the environment • A call for a transition in intellectual property rights and production credits • A new structure for the support system that needs to be changed.
Circulation	**How are the formats in which performing arts get circulated changing with the development of technology? What are the required standards for the new ways of circulation?**
	• Diversification of distribution formats through digital platforms (OTT, real-time streaming platform, participatory digital platform, etc.) • Changed roles of venues and festivals to present hybrid type of productions • Circulation partnership between Korea and international stakeholders making a transition to digital platforms • Changes in tour format and international co-production circulation networks • What will be sustainable income generation?
Audience & Consumption	**How is the way the audience enjoys theater changing? What is audience development in the digital age?**
	• Expansion and transformation of the audience's role: The evolution of interactivity and participation where the distinction between actors and spectators is disappearing • Changing audience needs and new audience types • Differences in how the audience watches and enjoys theater according to the change and expansion of the venue (Watching a performance online or on a mobile device that goes beyond the realm of physical venue)
Environmental & Climate crisis	**What is eco-friendly creation and production carried out by an artist' practice about the climate crisis? And what is green mobility?**
	• Green Production • Green production for theaters and festivals • International tours and ways of circulation that are eco-friendly • Art policies for environmental sustainability

Kyu Choi
Creative Director, 2021-2022 PAMS
(Performing Arts Market in Seoul)

New International Mobility for the Performing Arts in the Post Pandemic Era: Next Mobility

Next Mobility is a research project on new international mobility and circulation in the post-pandemic era. This article is sharing analysis and findings from individual workshops and research carried out by ten artists and producers.

Changes and transitions in creation and production

① Analysis of VR and digital performances that have gone beyond online space and move into virtual space

Rene Hyewon Lee, producer and CEO of Giioii Immersive Storytelling Studio

Performances used to be recorded as videos. However they are evolving into new virtual experiences as technologies advance. Rene has been focusing on that evolution and new forms of technological performances that have emerged as a result. She studied the cases of Dream by the Royal Shakespeare Company[RSC] and other 'XR immersive plays', which invite the audience to three dimensional stages. By doing so, she analyzed VR and digital technologies and shared the changes she identified in creation, circulation and audience experience.

First, as a key task, she suggested how presence, immersion and liveness can be created during the process of creation and production. Then she

emphasized creating acting-friendly scenarios and scripts, saying that a script has to be tried out many times during creation before it is completed. In terms of developing the audience and changing the way the audience enjoys the show, she proposed making various programs in forms of pre-show and after-show programs so that the performance can provide differentiated and diversified audience experiences. She also emphasized the importance of making audience guidelines in advance and having a pre-show for those who are not familiar with technology. She has previously categorized the existing audience into five type[observer, wanderer, connector, adventurer and rule-breaker] This suggests that more detailed design is needed in order to keep up with audience expectations and roles which change along with the technological advancements.

② Case study and research of contact-free creative activities

Kyoung Yun Kang, Team leader at Human in Unlimited Education, an international theater research institute.

Kyoung Yun Kang conducted interviews and research on a Zoom theater created by ELENA KUZINA, a Russian director, actor and educator. Through Anton Chekhov's <Three Sisters>, she looked into the changes in the creative and production methods of
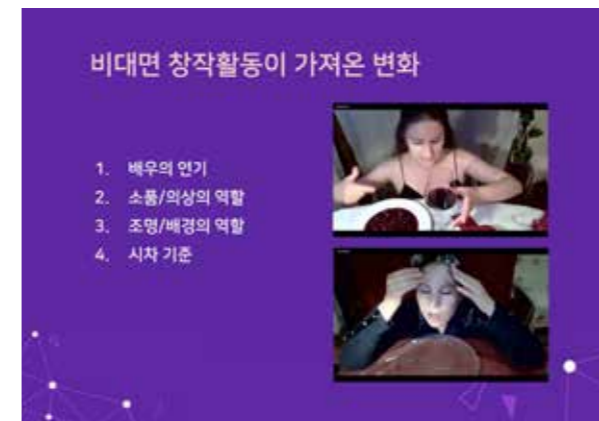
A presentation slide from case study and research of contact-free creative activities (Courtesy of Kyoung Yun Kang)

contact-free theater-making in Russia during the pandemic.

According to her research, a Zoom theater is a genre of its own that is different from a movie or a play. Therefore, she was able to put together a few new rules for 'contact-free theater.' A Zoom performance delivers its actors' performance to the audience on a screen. In that regard, it is the same as a movie. At the same time, there are many differences when compared to virtual reality or eXtended reality, in which movement is a very important element in acting. The research showed that it is very important to figure out how to convey the energy that actors bring to the performance live, and to use props and lighting to give an effect that reveals the meanings and symbols of the work. It also suggests that theater-makers need to have a discussion with technicians that are newly brought into the work in order to agree upon ground rules and ways of cooperation. In terms of audience and audience experience, it emphasized that a manual is necessary for the audience to enjoy contact-free performance, adding that the audience attitude during the performance also needs to change.

③ A Web of Performance

Choah Park, Director of Uechoah

Choah Park has been exploring various games, dance performances, VR performances and visual arts that are based on virtual presence on the web. She wondered what new performance senses are in those genres and began her research on that. She borrowed game and

movie theories for her research to question whether a sense of live performance can be created in a digital media environment.

The research based itself on Miguel Sicart's game theory to analyze the human body in virtual space and unravel the identity of the game player as a body containing a dual existence. According to Miguel, the skin used by a player in a game represents the gamer themselves and the other at the same time. This means that the player plays the game as himself and experiences the game played by himself at the same time. In her research Choah talks about the main agent in digital media who acts as a performer and audience member at the same time. This person carries out the process as a performer, and experiences the performance as an audience member. This duality creates a unique sensation for those who experience the performance. Choah emphasizes that an online performance must be presented at a certain time in order to provide a sense of liveness. If it is made available at all times in an on-demand format, it will be difficult for the audience to experience the same feelings. She also explored the similar feelings the audience gets as a community between when a performance is presented in a physical venue and when it is presented online. Watching and appreciating a performance is an extremely personal experience that varies between individuals. However, the audience members share the same time and space to experience the same content whether they are online or in a physical venue, and that alone makes connection in between them. Furthermore, this experience-sharing translates into a unique sense of community. Therefore, how to create a connection amongst the audience members that translates into a sense of community can be an important task to figure out.

④ New trend of convergence in the performing arts sector at home and abroad: research on gamification theater

Jiwon Hong (Independent producer)

Jiwon Hong researched gamification theater as a new trend of fusion in the performing arts sector at home and abroad. A culture of play has permeated our daily lives. Against the backdrop of that social phenomenon,

she carried out research on gamification, a use of game characteristics in non-game genres, in order to create a deeper sense of immersion for participants. She introduced a case of successful immersive theater created by a theater company, Punchdrunk. She emphasized how success has ushered in the announcement of theater making that combines game mechanics by using digital technology in 2020, adding that "the future of interactive audience experience in theater lies where gaming and theater cross paths."

The research pointed out that users (audience) participating and becoming players is not only a fundamental goal of gamification but a major characteristic in itself. Her particular focus within gamification was on designing game structures to be audience experience oriented. In other words, adopting game characteristics to draw audience participation and create immersion. When the audience enters the immersive structure, in which theater format and game mechanics are combined, they experience a special theater in which a "game dynamic" is embedded, in other words experiencing the theater as players. In this process of experience, various forms of satisfaction may appear. She called this 'game aesthetic' in the gamification structure.

The two big categories of gamification theater are

"partial gamification theater", which uses game elements in a similar way either in part or indirectly and "gamification theater", which directly and generally combines game structure and theater. Gamification theater can also be divided into hybrid type and convergence type depending on the degree of the combination. Hybrid type refers to a gamification theater in physical space, and convergence type refers to a theater style game in virtual space. She introduced various cases for both types.

⑤ Theater of Miniature Spaces - Body as a Station, Mailbox and Venue

Yunkyung Hur, choreographer

Yunkyung Hur is a choreographer who looked into her dance work, Theater of Miniature Spaces for her research. Under the theme of Next Mobility, she looked into what the necessary approaches are for re-creating an online-offline parallel model from various angles.

Physicality is at the center of her research. To find out where the performance is located from the creator's point of view, she looked inside and outside of the screen, and between the technical equipment and the audience's sensory organs. Her question in this research was whether mediating the presence of
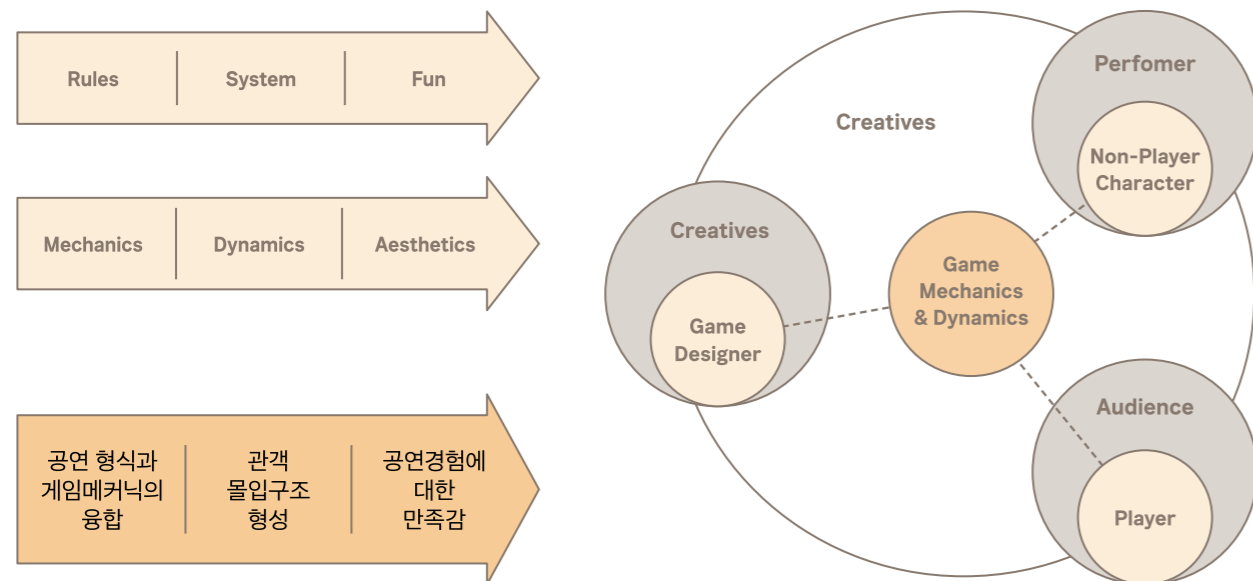
A presentation slide from 'New Trend of Convergence in the Performing Arts Sector at Home and Abroad : Research on Gamification Theater' (Courtesy of Jiwon Hong)

the body can go beyond being a simple delivery; to become convincing as a unique audience experience on its own; to give the audience inspiration about presence of body; or to go even further to become a physical process on its own. Her goal was to discover performance literacy which will allow a site-specific approach to be adopted in the online-offline environment. To that end, she analyzed the following questions that arose based on her experience of premiering the on-offline parallel model of Theater of Miniature Spaces and the experience of creating and watching other art-technology-mediated works.

First, the relationship between body and space, and connection, contact and presence of the body. Second, weakening the hierarchy in the roles of the audience and performers, creating horizontal composition and the status of audience-user. Third, the difficulty in pursuing spontaneousness and improvisation in technology-mediated works. Fourth, what is communication in virtual space? And communication in real space for communication in virtual space. Fifth, in relation to the circulation of choreography scores, performance and subjective interpretation of choreography composed individually after being circulated.

Changes in forms of audience development, audience experience and consumption #Transition in how circulation and international collaboration is done

⑥ Post-Pandemic, Re-Exploration of Digital Audience Development: Focusing on the Dance Genre

Soohye Jang, Director of Connected A, Eunhye Yang, Director of Studio Grace

This research was jointly conducted by Soohye Jang, a producer and Eunhye Yang, a dramaturg. The aim was to analyze the digital audience and to provide a strategic basis for future digital audience development. It categorized the digital audience of dance based on the data collected since the pandemic started. The analysis is done through data surveys and expert interviews on audience development efforts.

The analysis of the audience trend shows a higher level of participation among young audiences, who are quick to adapt to digital technologies. On the

other hand, those who are not accustomed to the digital environment were alienated. It also confirmed that the audience cannot be generalized as their characteristics manifest differently according to the characteristics of each genre or performance. Digital audiences can be categorized according to their eagerness: ① Reader ② Critical Reviewer ③ Casual Talker ④ Technology-based Processor ⑤ Insight Seeker ⑥ Active Learner.

The result of the research showed that there was a big difference in audience experience depending on whether the performance is free or pay-per-view, and whether it is online or in a bricks and mortar venue. One of the positive impacts pointed out by the research is that there are groups of people including the disabled for whom performing arts are not very accessible, and that they can become digital audiences. However, the research emphasizes the need for continuous research and policy support since there is currently no platform that can analyze the outcome from digital audiences.

⑦ A Festival in the Post-Pandemic Era: Is It Possible to Experience a Sense of Collective Immersion in a Non-Physical World?

Cecilia Soojeong Yi, Head of Content, DMZ Peace Train Music Festival

Cecilia Soojeong Yi explored the future of music festivals in the post-pandemic era. According to her, the sense of collective immersion is one of the great characteristics of music festivals. She investigated whether that is also possible in non-physical, online and virtual worlds.

During the pandemic, music festivals tried to make a quick transition to become 'online festivals.' Concert format has merged with various technologies to create spectacular visuals, but in her opinion so far no music festival has been able to deliver wonders that go beyond what is expected from a physical experience. Then she examined, through looking at cases, how each type allows actors to participate and to make relationships. She also categorized festivals that are digitalized due to the pandemic into three types: online concerts[live streaming], virtual reality and online platforms.

There are various actors who usually participate in conventional physical music festivals. These actors are those who used to immerse themselves in the festival together with the performers and the audience while having a closest relationship with them. However, they are not present in an online concert festival. Music festivals in virtual reality can lead to a high level of immersion and provide an enjoyable experience if the organizers pay attention to the details. However, the issues of digital literacy and the instability of technologies remain to be long term obstacles. According to her, network-based festivals on online platforms can be productive considering they can build more efficient and stable personal digital networks. However, there are the issues of time difference and actors' "entertainment experience" being halved. In addition, staying online makes it feel like it is an extension of work, thus it adds fatigue. She calls for a follow-up research on topics including how to make the actors involved in the music festival, such as artists, audiences, and organizers, feel a bond with each other, and how to induce immersion between actors in situations where actual physical encounters are impossible.

⑧ Cases of international co-productions during the pandemic

HeeJin Lee, Creative Producer, Producer Group DOT
Borderline is created by a collaboration between Creative Vaqui and Producer Group DOT from Korea and Residenztheater from Germany. HeeJin Lee selected Borderline as her subject for her research on the trend of international collaboration during the pandemic.

Since the beginning of the pandemic, online video conferencing solutions such as Zoom and Google are being universally used. They have become common tools for international contact-free collaboration. In this, there are many stages including the warm up stage and the production stage. For example, joint research between companies or residences is included in the warm up stage. Therefore, planning and producing an international collaboration requires a long-term commitment that lasts a year or two at minimum, or longer. Therefore, if a part of the exchange is carried out contact-free, the amount of

A presentation slide from 'Cases of international co-productions during the pandemic' (Courtesy of HeeJin Lee)

international travel can be reduced while maintaining the same level of collaboration. According to her, the use of technology in international collaborations ushered in new possibilities. However, budget increases and instability of the technology are the issues that come with the use of technologies. She pointed out that wider use of technology by the company, capacity building and change of technological environment in the theater have to take place at the same time. She mentioned that reducing physical movement allows international collaboration to become more environmentally friendly. She calls for further research on liveness and actors' presence at the end of her research.

#Climate crisis and the mobility of art #Green production and green mobility

⑨ Changes in the Trend of International Exchange and Circulation from the Perspective of Green Mobility
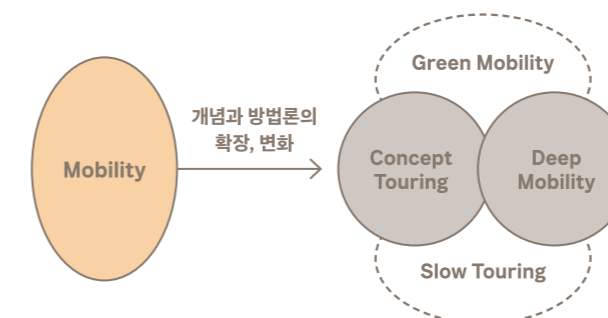
Jin Yim, Independent Producer
Under the title, "Changes in the Trend of International Exchange and Circulation from the Perspective of Green Mobility" Jin Yim, an independent producer researched on 'mobility', an immediate topic that the art sector is facing in response to the climate crisis. It is a challenge about the sustainability of art and environmental impact that arises from movements for production and touring. Against that backdrop, she laid out concepts of concept touring, deep mobility and green mobility. First, she looked into the 'Concept Touring', a new way of international collaboration that goes beyond the limitation posed by mobility.

It explores what is at the core of an artwork and how we can continue international collaboration while fully respecting that. 'Deep Mobility' is a concept that aims to offset the environmental impact of movement and to take a more comprehensive localization approach by designing a thorough exchange that goes beyond being a simple tour. Lastly, she explained the concept of 'Green Mobility' as a trend that urges environmentally friendly actions while focusing on exchange and movement of the artwork. She defined 'Green Production' as a pursuit of environmental sustainability in the production and distribution process.

She introduced The Theater Green Book's toolkit as an example of green production. She emphasized how this toolkit has adopted the concept of green rider as an action to achieve green production while providing instructions that aim to bring environmentally friendly changes on site. She introduced 'Perform Europe Insights: Sustainability Through Innovation', a research report by Perform Europe, an organization that provides mobility support for the performing arts in Europe, in order to show how the policies and trends of touring are transitioning to green mobility by making environmentally friendly efforts.

Lastly, she touched upon the challenges regarding environmental sustainability on a practical level by mentioning that artists, arts organizations and public and private organizations are required to take on creative challenges while fulfilling their respective roles within the arts ecosystem. She added that it is necessary to prepare a new code of practice for the future, to raise public funds, and to provide

support at the policy level.

In 2022, Next Mobility will continue to conduct group research and creative idea development research based on the findings and analysis from the research in 2021. Various performances will be pitched at the Performing Arts Market in Seoul. And Rimini Protokoll's performance will be introduced at the Seoul Performing Arts Festival as an international collaboration that takes the format of Next Mobility.

A presentation slide from 'Changes in the trend of international exchange and circulation from the perspective of green mobility' (Courtesy of Jin Yim)

About Researcher

Currently working as artistic director at Seoul Performing Arts Festival 2022-226. Kyu is a producer, festival director and researcher. Under the themes of 'Diversity and Inclusion, Art and the City' and 'Art and Technology' Kyu has recently developed several research-led workshops and practices including 'Connected City', 'The Korea DMZ Lab' and Accessibility and creative development for arts and disability. Kyu has worked as artistic director as well as creative director for the UK/Korea Season Festival 2017-18, the Chuncheon International Mime Festival, and the Ansan Street Arts Festival. He is a founder of AsiaNow productions and has worked to develop the Asian Producers' Platform and APP Camp 2014-2021.

Next Mobility Project

1

1

Analysis of the cases of VR and digital performances going beyond online space into virtual space

with the focus on RSC's Dream and XR immersive performances

Rene Hyewon Lee

Producer/CEO, Giioii Immersive Storytelling Studio

1. Background

With technological advancement, the performing arts in a physical venue took an online video format as its new medium. Now the sector is going further by taking its three dimensional stage into virtual reality where a new type of performance presents its actors as virtualized avatars. There has been a large-scale movement emerging in which a performance is not just being recorded into a video but evolves into a new virtual experience. As this kind of performance is free of the time and space limitations that a performance in a physical venue have, it has new characteristics related to time and space, and there have been new aspects emerging in the entire value chain process including in creation, circulation and consumption. Technological advancement, such as real-time motion capture technology or 5G infrastructure, has ushered in extraordinary stages that are not feasible in an offline space.

2. Ideas, subjects and topics

The Next Mobility sessions of the Performing Arts Market in Seoul looked into the new digital mobility prompted by COVID-19 and asked a meaningful question of what changes it will bring. The sessions introduced leading groups and artists around the world who have carried out pioneering experiences and experiments. while introducing artists and art groups that have been pioneering the topic. The Royal Shakespeare Company has been exploring the future of theater through years of digital experiments. As Director of Digital Development at the RSC, Sarah Ellis has been leading the company's major art and technology projects and gave an in-depth presentation during the Next Mobility session with her. Kiira Benzing, Director of Finding Pandora X, and Jihyun Jung, Director of Scarecrow VR have explored moving to a new stage through their XR live performances. The two directors have gone beyond forecasting the upcoming changes and carried out pioneering explorations. The session with them shed a light on their findings.

The Next Mobility sessions have looked into the two cases: the case of Dream by the RSC, in which actors and the stage had become virtualized and the cases of XR immersive performances where the

audience participates in the performance on the three-dimensional stage. By looking at those cases, the sessions carried out various analyses on how creation and circulation have changed as well as what changed in how the audience enjoys the performance.

3. Findings

These new perfo.ces are reaching various countries, regions and languages and opening up new possibilities. Also, various types of convergence are taking place between genres, media and creators through communication and dialogues during the process of creation. A VR immersive performance takes place live while the audience uses VR equipment to access it. Therefore, It is considered to be an immersive play brought to a virtual reality stage where the audience is given a role to play rather than being mere viewers. Its dependency on mechanical equipment remains a limitation, but it is being established as a genre and evolving into online or mobile cross-platforms. In the post-COVID era, the number of people who play games and participate in a virtual world has increased as they seek to immerse themselves for entertainment. Along with such a demand of the time, various different cases emerged. The findings from the major cases are as follows.

❶ **Shifts in creation**
- Major elements: presence, immersion, liveness
- The role of actors: transformed into a convergent role that covers the roles of technician and stage manager
- Script and creation: Co-creation involving audience and actors, and the script evolving to become an acting scenario
- Cooperation and operation: transformative leadership essential to technological experiments

❷ **Shifts in circulation**
- New revenue sources: new business model exploring a pay-per-view system
- Differentiation of experience: differentiating performance experience by incorporating preshow and aftershow events
- Circulation through festivals: festivals becoming a premier stage for XR immersive performances

❸ **Shifts in how the audience enjoys a performance**
- Analysis of new audience types: observers, wanderers, connectors, adventurers and rule-breakers
- The importance of social connection and community experience that remains despite the change of media
- Designing a subdivided questionnaire and advanced planning in order to meet the changed audience expectation

4. Challenges

These experiments are explorations for the future of live technology unbound by physical distance. They are also an opportunity to explore the questions about the future of performance. They are re-defining the ways in which relationships are made with the new audience on the digital stage that have been reshaped. Above all, they have emphasized the importance of the audience in their efforts to meet and connect to more potential audiences. However, technological accessibility and literacy remains to be an issue while limitations including digital inequality persist. These series of efforts were made to expand the definition of the stage and reach out to bigger audiences. Therefore, preceding research to respond to the future audience in the era of digital transition has to continue.

About Researcher

Rene Hyewon Lee is an XR, immersive producer who connects stories and mediates technologies with art. She is also the CEO of Giioii Immersive Storytelling Studio and a lecturer at the Korea National University of Arts. She researches culture and art in the digital transition era, based on her experience in the projects where she has brought culture into the metaverse and connected the virtual world to reality.

2

Case study and research of contact-free creative activities

focusing on Russian theater performances

Kyoung Yun Kang

Team leader at Human in Unlimited Education, an international theater research institute

1. Background and objectives

The art and culture market quickly froze up since the global pandemic was declared in 2020. As the airways got blocked, international exchanges in the art and culture sector have come to a halt. The situation that was believed to be over in a couple of months has been ongoing for two years and counting. Amid these circumstances, this research has looked into cases of Russian contact-free theater performance to find out which direction performance creation and international exchange should head for.

2. Research subject and the initial process of how it was created as a contact-free performance

On the 28th of April 2021, an interview was conducted with Elena Kuzina, a director, actor and educator in Russia, who is known for her experiments Three sisters, a zoom performance on her zoom theater, and The 13th Time Zones which looks into the changes that contact-free performances have brought about.

Since the declaration of the pandemic in early 2020 when Elena Kuzina met up with the colleagues and students she had known beforehand for training, she started rehearsing for the performance with 8 actors from 13 different time zones. All rehearsals and performances were carried out on the video platform Zoom, and as it was a play on screen, a goal was set that "it will be different from a movie and bear the characteristics of a play." In achieving that goal, there was one rule to follow, which dictated that the audience and the actors should share the performance in the same time and same space (Zoom space).

3. Changes that contact-free creative activities have brought

In conclusion, a Zoom performance turned out to be a whole another genre unlike a movie or a play. However, several rules were found to be necessary for "a contact-free play" through this experiment.

❶ New creative methods
Firstly, in terms of acting, the roles of props, lighting and backdrops had to be different from when actors perform in a theater. Also, the time difference had to be considered as actors from different time zones met

up. When actors' performances are shown on a screen, even the smallest details show. Therefore, even small effects require attention when deciding what angle to put the lighting, or selecting what props or backdrops to use. And the changes in meaning, symbol and effect that those decisions would make had to be identified. After identifying the most effective method, detailed rehearsals were required to ensure the same effect would be shown in every performance.

❷ Method to communicate with the audience
The most notable characteristic of a play is the real time communication between the actors and the audience. If you want to keep that alive in a contact-free performance, I recommend that you make a "manual for enjoying a contact-free theater performance for the audience" in a detailed and audience-friendly manner and announce it to the audience in advance of the performance. The audience still finds a contact-free performance unfamiliar. Therefore, you have to let them know the appropriate manners needed to attend the performance such as when to turn their screen on or off, and how to come into contact with the actors. I believe that such a process will improve and advance the communication between the actors and the audience in a contact-free performance.

❸ Necessity of new tech human resource
A necessity has emerged for Zoom platform tech human resource and camera directors in order to broadcast a performance. Rules and agreements have to be made with tech staff in order to make the optimized performance in a new environment. It would be best to make steady participation in the rehearsal process a precondition.

4. Future direction for international exchange

Relentless efforts should be made in contact-free international exchange. You need to free yourself from the fear of failure and act first. When facing an issue, you can find a solution accordingly. The important thing is to carry on without stopping albeit in a contact-free manner. Maintaining the connection, the sense of togetherness and unrelenting force to come

together is the energy that creates a performance. Because only when people come together, a performance can be made.

About Researcher
Kang Kyoung Yun works as a theatre educator and creative practitioner as well as a director of international arts and culture exchange, connecting theatres in Korea and Russia. She organizes co-production between Korea and Russia, holds international exchange master classes and facilitates international festival participation.

3

A Web of Performance

Choah Park
Director of Uechoah

1.Background, topics, subjects and questions

This research explores the possibility of the web landscape as virtual space and goes further by imagining future web formats. In doing so, it fathoms in what way a virtual existence based performance can cut across the web. The research looks into the cases of performance that utilize the time and space of the web itself, and analyzes the new senses of the performance that those cases present. Subjects of the analysis are various events regardless of the genre that exist on the web including gaming, dance performance, VR performance, visual art, etc. It partially borrows game theories and film theories to explain its main ideas in progressing the argument. In a digital media environment, can there still be the sensation of a live performance? To examine this question, the research looks into various premises of performance that need to be applied flexibly nowadays: concept of theater that occupies the same space; concept of virtual existence; desire to connect as a sense of community sharing with others; characteristics of the agent of performance. Through this examination, the text suggests the analytic possibility that extending the perspective of realism in the digital media world can go beyond the appearance of technical images, which we can often decide in advance, to create a new sensation unlike others, and that it can be understood as a performance in the context of the performing arts.

2. Main ideas

This research analyzes the issue of the body in cyber space based on the game theory of Miguel Sicart. Miguel, a game researcher, relies on the phenomenology theory of Barbara Becker, a philosopher, to explain a game player's identity as a body with a double existence. Miguel claims that the game player's skin in a game symbolizes the player himself and the other at the same time. According to him, the game player's skin connects the player to the game world and separates him from it at the same time. The skin allows the player to come in contact with the other world so that the player can play himself, and experience the game played by himself at the same time. This research applies Miguel's

theory to Issei Yamagata's web-based work, Blank Screen for an analysis. The research narrates: the digital media agent as a performer who carries out the process, and audience members who experience the performance at the same time; and the unique sensation of performance created by that duality.

• It analyzes the similarity between the sensation that the audience community gets in a physical theater, and the sensation that an online audience gets in the perspective of "connection." It points out that the online performing arts audience connects to each other, not by an online network or a specific content, but by the shared experience of being an audience community member. How a performance is received and felt is an extremely personal and individual audience experience. However, occupying the same space (and time) and experiencing and sharing a specific content together connect the audience to each other by itself. Furthermore, this shared experience will be translated into the sense of community unique to the theater.

• In a digital media environment, the liveliness and presence of an entity that goes beyond mere display of a technological image might be linked to a prerequisite for a performance to take place. The research suggests two questions for an open discussion: what is lively in the current media environment? and in what way can such a realistic sensation be delivered to the audience? Love and Ghost, a recent VR piece by Kim Heecheon and indivisible substance, a new live streaming performance by Hiroaki Umeda are analyzed as case studies. Amid overflowing AR and VR pieces, the research questions the direction of digital image's realism by asking what shape a most lively and real digital media work should take.

• The gamification of digital platforms is a meaningful effort to create artistic experiences suited for digital media. Furthermore, it demonstrates the possibility of expanding the unknown performance area. It is looking into the possibility of the multi-layered digital platform that the König Galerie is building by presenting two exhibitions, The Artist is Online and

Surprisingly This Rather Works. It also analyzes Funeral Play by Ruini Shi, a web simulation project in which a digital funeral of the future was built from imagination, to suggest a possible expansion into gaming, visual arts and performing arts.

3. Direction for continued research

This research focuses on looking into various cases of performance on the web and what new sensations and experiences of performance they present. However, not being able to understand the individual and intrinsic characteristics of each genre in depth, and not being able to list all the cases inevitably remain as a limitation for this investigation. I feel that further research should focus on making more in-depth analysis by making the research scope smaller. Recently there has been a meaningful increase seen in the number of cases of game theory and online performance. I am looking forward to seeing complementary research on those cases so that the characteristics and detailed elements of performances on the web will be systematically and accurately analyzed and organized.

About Researcher

Choah studied astrophysics and performing arts, then started her career in the contemporary dance field in 2008. She worked with the Ahn Aesoon Dance Company, Hanguk Performing Arts Center and the Korea National Contemporary Dance Company. She founded UECHOAH productions and is currently working as an independent producer there.

4

New Trend of Convergence in the Performing Arts Sector at Home and Abroad

Research on Gamification Theater

Jiwon Hong

Next Mobility coordinator

1. Background

This research focuses on looking at the gamification theater as a newly emerging concept or a new trend of convergence in the performing arts market at home and abroad. With the increased interest in fluid and individual self in today's environment of highly developed digital technology, a culture of play has permeated our daily lives. In this trend, 'gamification', a use of game properties at the base of non-game fields, has emerged in order to induce immersive participation of the target audience. Professor Eric Zimmerman of New York University Game Center has predicted that as our information and communication system develops, information will become the object of play in a flexible and organic network, and one-way media will be replaced by media based on game experience. After achieving worldwide success with its unprecedented immersive theaters, the theater company Punchdrunk announced their plan to combine game mechanics to their theater making by using digital technology, saying that "We believe that the future of interactive theater experience lies where gaming and theater intersect." While there has been more research on gamification and its practical use since the 2010s in general, there hasn't been a major research effort seen in the art sector. The performing arts sector can easily and effectively converge with other genres by breaking down its borders. In fact, many cases related to gamification gained public attention after emerging in the performing arts sector at home and abroad. Despite that, there has not been a major consideration on such a phenomenon. In that regard, it is worth discussing gamification in the field of performing arts more actively. In this context, this research based itself on the writer's thesis, A Study on the Gamification Theatre to find out; how gamification in the performing arts sector can be defined; how game elements can be adopted into the theater structure; how gamification theaters can be categorized, and looked into notable cases of gamification theaters emerging as a new concept trend in that category in the last decade at home and abroad.

2. Major Findings

● Users participating and becoming players is not only a fundamental goal of gamification but a major

characteristic in itself. The most important goal in game design is to create a player oriented structure. Therefore, the goal of combining a game structure to a performance in gamification theater is also to design an "audience experience oriented structure." It means adopting game elements when producing and directing a theater performance in order to draw audience participation and immersion.

● If theater producers as game designers and the audience as players constitute the basic structure of gamification theater, actors and performers can function as NPCs. Based on the MDA framework of the game, the operational principles of gamification theater can be summarized as follows. Game elements, i.e. "game mechanics" get combined with the theater format to set up the frame of the entire performance, then performers and the audience participate in that frame. The audience enters the "immersive structure" and experiences a special theater in which a "game dynamic" is embedded, in other words experiencing the theater as players. During this experience, satisfaction can be manifested in various ways which fall into the "game esthetic" of the gamification structure.

● The way that gamification theaters are different from the majority of the existing performing arts works can vary according to what game elements were selected and how they were directed. However, the difference they all have in common is that the audience experiences a special theater as elements used in game design are combined to realize "audience experience oriented structure" while the audience participates as players in part or overall during the performance.
Based on this premise, the categorization in this research focused more on the cases that stood out until 2021. Therefore, not all cases fall precisely into the types set by this research, nor did it include all types of gamification theater. However, it looked into the way gamification is visibly and practically taking place in the performing arts sector.

● The two big categories are "partial gamification theater", which uses game elements in a similar way either in part or indirectly and "gamification theater", which directly and generally combines game structure and theater in a narrower sense. The sub categories are decided according to the characterizations of the performances.

● The sub categories are divided into hybrid type and convergence type depending on the degree of the combination. The cases of the hybrid type the research looked into include The Game Theatre, gamification theater in a physical space and Adventure Lab, a play-like game in a virtual space. For the convergence type, the research looked into cases from Machina eX, a renowned German theater company that makes gamification theater.

3. Conclusion and Future Research Direction

This research anticipates that the future of the theater experience will preserve the way of the current mainstream in one area while evolving into various forms of 'audience-oriented play experience' in another. And it hopes to serve as a basis for building such experiences. Therefore, the analysis of gamification theater was a process that confirmed; the expectation of theater becoming a space for individual adventure and the audience becoming a player and adventurer who walks into an extraordinary life called theater; and the potential of gamification theater spreading and advancing.

However, there hasn't been in-depth research or research that can be used practically in the future in the perspective of performing arts studies due to lack of sufficient number of related cases and prior research.

Therefore, I am hoping to carry out more in-depth case studies and subsequent analyses rather than research in the future.

About Researcher

Hong Jiwon works as a freelance producer and researcher mainly in theater and the musical. She is currently working on her master of arts in arts management at the Korea National University of Arts

5

Theater of Miniature Spaces

Body as a Station, Mailbox and Venue

Yunkyung Hur

choreographer

1. Background

This research is looking into Theater of Miniature Space, a dance performance recreated 5 times for each venue at which it was performed, to examine its potential and implication as we are facing the challenge of the time, i.e. Next Mobility. It is also investigating the potential for development of the work accordingly. It analyzes the Theater of Miniature Space series while focusing on three major pillars of its characteristics and directions: use of a score; natural participation of audience or no distinction between the stage and the auditorium; composing the work with the thematic understanding of the body imbedded while being based on the interpretation of the space in the venue. In that process, I took various angles to examine what approaches are necessary in order to recreate an on-offline parallel model, which I am intending to carry out in the future.

2. Major Findings

❶ **Where does the performance exist?**
  - making the question concrete with physicality in focus

This research was carried out more in the perspective of the creator looking at the overall process of work, which inevitably includes the process of creation, production, circulation, audience consumption. In other words, it prioritized the legitimacy and internal causality of performance elements with emphasis on thematic relevance.

  Mediating the presence of the body is an unavoidable task for a dance work creator. When facing that task, the creator stands in between possibility and impossibility. Can a communication process through an interface be more than an unreasonable imitation of the presence? Or can the tendency of experiences being translated into and replaced by signs ('let's say I did it') go beyond functioning as simple broadcasting? Can it go further to become a 'physical' process in itself that provides an inspiration of presence or convinces people with a unique audience experience? These questions must be the challenges that many creators are facing as they are exploring the new literacy for the performances in the venues of Next Mobility. Where does the

performance exist now? On the screen? Outside the screen? Between the equipment and the sensory organs of the audience? Is the particular place shown there the boundaries of the performance? Or is it what is reconstructed inside the mind of the audience? Or does it lie dormant in time like a file you saved to watch later when you have time?

❷ **Discovering performance literacy**
  - building a frame of analysis for adopting a site-specific approach in the online-offline environment

Finding new performance literacy naturally led to fundamental questions about the performance, the media and the body, and concept and practice could not be easily separated there. In addition, I felt that more stereoscopic reality exists, which is different from the recent one-sided demand made by many governmental or official organizations asking the performing arts sector to quickly adopt highly sophisticated technologies, learn and understand them. Rather, the issue of digital-physical hybrid was about looking back more on the understanding of the performing arts and the audience, and imagining a wide range of media and the relationship between them.

  This report is my first effort as a creator to touch upon how the perception of the body and the space in Theater of Miniature Spaces changed every time. I am also looking into how it can be developed in the communication on new media while leaving the possibility open for its position in the thematic hierarchy to change by meeting a new medium. "Body as a Station, Mailbox and Venue" in the title of this research can have many metaphors added depending on how we interpret the time and space given to us.

  The questions brought up from the experience of premiering the on-offline parallel model of Theater of Miniature Spaces and the experience of creating and watching other art-technology-mediated works are analyzed as follows.

1	Creator's own interpretation of body and space, presence of the body, contact, connectivity, and time and space
2	Immersing oneself into the world on the screen vs somatics of body outside the screen
3	Roles such as audience and performer, weakening of hierarchy, horizontal composition. The status of 'audience-user'
4	Improvisation, 'spontaneity' – challenges in technology-mediated work The issue of integrated space-time and deconstructed space-time
5	통합된 시공간과 해체된 시공간의 문제
6	Minimum performance- What are the conditions?
7	Circulation of scores - execution, subjective interpretation, exchange, recording -> individually composed choreography
8	Communication in virtual space, communication in virtual space for communication in virtual space, communication in real space for communication in virtual space

❸ **Discovering performance literacy**
  - what metaphors are the units from the body of the audience to the body of the venue converted to?

Theater of Miniature Spaces is based on the perception of the body as pace and the space as the body. It unfolds organic body images without making a distinction between the audience and the performers. For such a work, the situation of the time and space that dictates using on-offline interpace as medium became a subject of interpretation by the creator in itself, just as site-specific approaches have done so far. Different layers of elements exist in a performance where the audience and the performers share the time and space. There are various temporal as well as spatial layers such as the body of the audience who encounter the performance on a screen and the body of the audience who face the performers in a physical venue. They get dismantled, then get recombied again under the name of a performance. The concept of participatory audience, which remains to be a core element of a performance, brings in 'miniature' movements in a performance. Regarding that concept I intend to evoke the movement of each audience member's imagination by using a score and the presence of other bodies as medium. The question of

what and which unit will be choreographed is more
valid in a performance that goes through many
interfaces. And the level of communication required to
establish choreography becomes more diverse.

Meanwhile, as an example of interpretation for the
next stage of Theater of Miniature Spaces, I have
presented the possibility of using images of 'looking
glass' for an online performance or presenting
'theater of imagination' which is related to the
physicality of empathy. While technology and art are
changing each other, the journey of discovering the
metaphorical relationship between space and body and
finding a new way of expression for performance will
continue for our 'next'.

About Researcher

Yunkyung Hur works for various
dance-works as a dancer,
choreographer, and performer.
Based on the trust that
sympathy can grow in a physical
encounter involving different
bodies, her interest has
continued in identifying the
diversity that stage language can
have. She focuses on movement
as a world view and the body as
an integrated fundamental
medium.

1

Post-Pandemic, Re-Exploration of Digital Audience Development

Focusing on the Dance Genre

Soohye JANG
Independent Producer/
Founder, Connected A

Eunhye Yang
Director, Studio Grace

This research aims to lay the foundation for establishing a strategy for future audience development by categorizing the digital audience of dance after the pandemic through data research and interviews with experts, and by analyzing the experiences of audience development efforts.

Background

While expectations and concerns about the digitization of performing arts coexist, some speculate that it will allow us to find new audiences. However, development of digital audiences and communication with them are still sluggish in performing arts markets around the world. Despite much effort to reach audiences in new ways their response to digital performances is a silent one. while silent echoes are repeated for unspecified people.

Audience Analysis

The analyses of audiences in Europe, the US, the UK, and Korea since the start of the pandemic have all shown that young audiences, who are quick to adapt to digital technology, have a high level of participation in the digital environment. However, the transition to a digital environment causes social alienation. Also, it cannot be generalized because the characteristics of the audience are different according to the characteristics of each field or performance.

Audience Categorization

Due to personal differences and preferences, it is not possible to categorize the audience into clearly defined types. However, most of the previous studies categorized the audience according to their eagerness. According to Noval & Brown[2011] there are 6 categories: ① Reader ② Critical Reviewer ③ Casual Talker ④ Technology-based Processor ⑤ Insight Seeker ⑥ Active Learner. Other studies presented similar categorizations.

Case Study

In this study, The Respond Platform from Scotland, Re:Rosas!, a YouTube clip created by Anne Teresa and the Unlimited Festival from the UK were examined. Also, interviews were conducted with managers of Arts Council Korea's A to Z Dance Film Platform and organizers of Seoul International Dance Festival 2019 which took place online. By doing so, it focused on learning pros and cons of online audience development.

Findings

When implementing audience development strategies, it is difficult to deepen the relationships with the audience whilst expanding and diversifying the audience at the same time. However, depending on the goal, one can refine the strategy.

Characteristics of each genre manifest differently in a digital environment. The dance genre has a strong fan base and receives a high level of trust from the audience. Therefore, there is an inevitable gap in audience experience between the people who have seen many previous in-venue performances and the ones who are seeing dance performances for the first time online.

Digital audience development can be used for various purposes, such as communication with audiences and information exchange, as well as appreciation of works. However, communication between the audience still takes place at a superficial level.

There are differences in how the audience watches a performance depending on whether it is free or pay-per-view.

There is no platform where results can be analyzed. Independent artists often struggle to find out how or where an analysis can be made.

People who didn't have access to theater before emerged as a new group that can be proposed as an audience for online performances.

Suggestions

Theaters, institutions, festivals, government bodies and public organizations can come together to share and discuss past mistakes made, and data collected, in the last two decades, and conduct practice-based research for digital audience analysis.

By interviewing governmental, public and private groups that are performing for digital audiences, planning to do so, or doing an online-based production, ways for building a relationship with a wider audience and creating an inclusive environment can be devised.

About Researcher

Soohye Jang is an independent producer and researcher. As a producer, she was in charge of international exchanges for performing arts festivals such as the Seoul International Dance Festival and the Seattle International Dance Festival. In 2021 she founded Connected A to establish strategic partnerships with arts companies and culture & arts organizations, and continues the work needed in research, international exchange, translation, etc. to support partnerships. Since 2013 she has been practising inclusive arts and culture education through the Chaeknuna project, a social arts and culture education group that promotes reading.

Eunhye Yang is the CEO of an agency for artists Studio Grace and a publishing company Choreography View. She produces performances, exhibitions and education programs that connect arts, urban architecture and the humanities. She also publishes archives that focus on process and does research that lays the foundation for production. With an academic background in contemporary dance, literature, culture and architecture, she is currently working on her thesis for a doctorate degree in architecture that focuses on the relationship between body and space.

PART 2

#AUDIENCE #CONSUMPTION

2

A Festival in the Post-Pandemic Era

Is It Possible to Experience a Sense of Collective Immersion in a Non-Physical World?

Cecilia Soojeong Yi
Head of Content, DMZ Peace
Train Music Festival

1. Background, topics, subjects and questions

The field that has been most affected by the pandemic in the music industry over the past two years, is the performance field. From it, the festival is in the most vulnerable situation with many around the world going through a series of postponements and cancellations. In the early days of the pandemic, when long quarantines were imposed across Europe and the Americas, festivals were quick to try digital reproduction. However, now after two years, the momentum for the "online festival" has been lost as quickly as it came around, while no festival is moving ahead. The proscenium concert, where the audience watches a show on the stage for about 2 hours, has adopted various technologies to create a visual spectacle. However, in the music festival scene, there has not been a case in which a sense of wonder, beyond a physical experience, was delivered. Against this backdrop, I started wondering, as a festival producer, whether the helpless situation we had gone through for the last two years was inevitable, and whether digitizing festivals was impossible. A belief that there is nothing impossible in the world leads mankind to the future. Based on that common belief, I decided what perspective to take when examining the nature of the festival. I chose mobility, and immersion as the perspectives. In those perspectives, I tried to look into how the mental shift as a process of immersion is affected, in an environment where physical movement is impossible. To this end, I put pre-pandemic music festivals into three different categories, depending on the format: music performance festival; camping festivals; and showcase festivals; and examined how each format engages and establishes relationships with actors. Then I looked into the three types of digitized festival the pandemic has brought: online concerts (live streaming); virtual reality; and online platforms; And I examined relationships with changed actors, and changes in mobility.

2. Findings

❶ Music Festivals before the Pandemic

A music festival allows not only creators and the audience, but also various actors, to establish relationships within the platform of the festival. It very much serves as a medium that allows people to experience immersion together in a single-event.

It requires much effort for the audience to move to a medium that is a physical location, but it means it will be difficult for them to simply go back to where they came from. And this effort works as a catalyst that heralds the entry into an extreme world, and becomes a part of a wonderful immersion, and a fantastic experience.

In addition, a music festival builds a community of visitors, artists, and organizers alike. It also serves as a platform that brings what you currently do not experience in daily life to the daily life of the future.

However, it is characterized by a very high risk that a return cannot be guaranteed in planning and operation due to climate change, pandemics, etc.

❷ Music Festivals during the Era of Coronavirus

• Many actors who participated in previous festivals are not present in online festivals. Most of these actors immerse themselves in the festival together with the audience while having the closest relationship with them. Their absence makes it more difficult to establish a relationship with the audience.

• Building virtual reality can create a higher level of immersion and provide an entertaining experience depending on the details of how it is composed. However, obstacles such as the digital literacy gap and technology commercialization hinder its competitiveness.

• These obstacles prevent the efforts made by the audience to become part of a process of immersion, and cause the audience to power off their devices, and give up quickly and easily on the show. Network-based festivals on online platforms can be productive considering they can build more efficient and stable personal digital networks. However, there are the issues of time difference and actors' "entertainment experience" being halved. In addition, staying online makes it feel like it is an extension of work, thus it adds fatigue.

• In the case of the hybrid type, it seems to require effort to prepare and operate two festivals rather than one festival with two aspects.

3. Challenges or Direction for Continued Research

The conclusions and challenges drawn from the cases above are as follows.

• First, in a non-physical world which is optimized for convenience, how can we have the audience go through the experience of effort-taking movement so that they can walk out of their daily life and into the festival?

• Second, how can we provide a bonding experience amongst actors? How can the process of immersion amongst actors, who cannot meet in person, be displayed and shared?

In order to tackle these challenges, in-depth research and exploration regarding topics including immersion, relationship building and digital literacy in the field of festivals are needed in the future.

About Researcher
Peacetrain is a non-profit private incorporated association founded in 2019. Its main event is a popular music festival called the DMZ Peacetrain Music Festival. It sends a message of peace that says music can resolve various conflicts and agendas facing the world and allows everyone around the world to coexist.

3

Next Mobility

case of international co-production during the Post-Pandemic Era

HeeJin Lee

Creative Producer,
Producer Group DOT

Movement between countries has resumed and the borders have reopened. However, as the number of infections rises, with mutated viruses continuing to emerge, it is becoming ever more difficult to predict how the situations around the pandemic will unfold. Nevertheless, the creators are making meaningful achievements while continuing their international exchanges. In what way will the international collaboration of the performing arts continue? This research has looked into the cases of projects that have continued their production until completion during the time of COVID-19, while examining the process of new collaboration methods that each artist explored.

Three cases were selected for this research. The selection was made in consideration of factors including diversification of collaboration methods such as the use of digital platforms and concept touring, and mobility in international exchange. The process and achievements were summarized along with a list of points to consider from the interviews with the people behind the projects.

Major Keywords for each case

Borderline — by Creative VaQi [Korea], Producer Group DOT [Korea] and Residenz Theater [Germany]
- A process of responding to a pandemic in the existing international co-production method
- An experiment on linking theaters in Korea and Germany online through a performance
- A study on the presence of the actors and the liveness of the stage

RE(W)RITE! — by Cantabile 2 [Denmark], Den Frie Centre of Contemporary Art [Denmark] and Elephants Laugh [Korea]
- 35 works by 23 creators presented over the same period of time in one space
- A study on the process of collective creation

All the Sex I've Ever Had: Gwangmyeong Editioin — by Mammalian Diving Reflex [Canada], Elephants Laugh [Korea], Gwangmyeong Cultural Foundation
- How is the public nature of a local theater put into practice?
- Community work during the time of COVID-19

Based on the interviews of the above cases, the trends of the international collaboration process during the pandemic were examined. In addition, some tips to be considered when carrying out international collaboration are put together below.

Trends in International Collaboration

❶ Contact-free exchanges on the rise

In order to prevent the spread of Corona 19, the domestic creative scene has also adapted to the online communication method naturally. The pandemic has made the use of online video conferencing solutions such as Zoom and Google Meet a commonplace, which has brought many changes to international collaboration. Many international co-productions were inevitably carried out over a long period of time. It takes at least one to two years or longer to go through the warm-up stage, such as intergroup research and residency, before reaching the production stage. However, if you take advantage of the contact-free exchange, you will be able to carry out an international collaboration more densely in a shorter time.
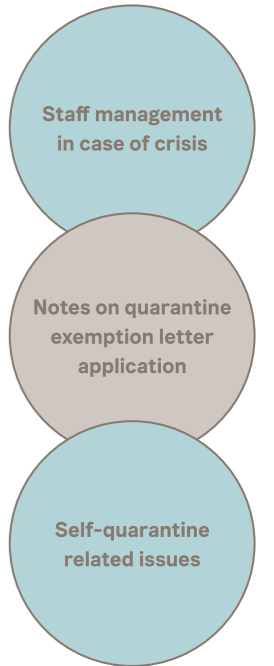
❷ Exploring the use of technology in creation

In recent years, works using technology have been continuously created. However, since the start of the COVID-19 pandemic, the creative scene rapidly changed and the issue of artistic activities' sustainability emerged. Due to such a development, technology is being used more actively. And in the process, new possibilities of interaction between the audience and the artists are being experimented.

❸ Tips to consider in international collaboration

Amid much uncertainty of the pandemic, the prevention and control measures of each government are constantly changing. Therefore, international collaboration must proceed while preparing for more contingencies than it did in the past. There are inevitable situations that can only be dealt with an impromptu response. However, it is better to prepare for manageable risks. Some of the risks that actually had a major impact on the production management are shared in this research as follows.

International collaboration in the time of COVID-19 pandemic has to be prepared for unpredictable situations and the constantly changing social distancing measures of each country. In such a time, one cannot help but question the sustainability of international exchange. Nevertheless, the new ways explored to tackle issues have shown a glimpse into the possibility of continuous exchange through the expansion of new creative methods. Many scholars are warning that there will be another new virus causing another pandemic after COVID-19. The current crisis is an opportunity to prepare for the future. We can carry out various experiments to build a basis with the results from them, and use them in order to establish an agile and flexible response mechanism to the ever-changing creative environment and to future crises.

Staff management in case of crisis

Notes on quarantine exemption letter application

Self-quarantine related issues

About Researcher

HeeJin Lee is an independent producer who founded Producer Group DOT with her colleagues to explore new ways of collaboration and creative survival methods for performing arts producers. She has been producing projects such as overseas touring and international co-productions while promoting Korean performing arts to be presented on the global stage.

1

Changes in the Trend of International Exchange and Circulation from the Perspective of Green Mobility

Jin Yim
Independent Producer

About Researcher
Jin Yim is an independent producer, festival programmer and international exchange coordinator. She has been working in the field of international exchange and production on platforms such as festivals. Part of her work has been producing street arts projects and organizing their overseas tours.

1. Background, Topics, Subjects and Questions

The restrictions on exchange and movement imposed since the beginning of the COVID-19 pandemic have made the art sector face a number of 'mobility' related challenges. People in the sector are thinking about ways to reduce the environmental impact of travel for performance and tours, as Concept Touring, Deep Mobility and Green Mobility are emerging as major concepts. The goal of this research is to look into how the international exchange of performing arts is changing from the perspective of environmental sustainability. It identifies and analyzes cases where the sustainability of performing arts can be assessed, and uses the findings to explore how they can be applied to creation and circulation. The main goal of the research was to examine changes in international tour support policies since the beginning of the COVID-19 pandemic, and cases and trends of creation and circulation that incorporated sustainability.

2. Findings

'Concept Touring', first used by the London International Theater Festival, received much attention from the art world. It explored what's at the heart of an art work, while searching for the possibility of continuing international exchange while respecting its inherent nature. Since then, various works that go beyond the limitation of mobility were commissioned under the concept. 'Deep mobility' is a concept that makes the design of international exchange and movement of art more dense so it can go beyond being a simple tour. By doing so, it aims to offset the environmental impact of movement, and to make localization or regionalization more dense. The concept has been established as an artistic methodology as it vigorously combines physical and digital domains, and it has been one of the pivotal challenges we have seen. In the stages of production and circulation of works, more face-to-face meetings are being substituted by digital elements when possible. And we see an aesthetic development of digital media, which is going beyond merely functioning as a technological tool, to become a creative element as well as a method of expression. These changes in mobility suggest the limitations of existing mobility in art are being recognized as more emphasis is put on movements toward transition. In addition, increased awareness of various environmental impacts caused by international movements is also reflected in the concerns of the artists who are exploring the above approaches.

In this research, cases that pursued environmental sustainability in the process of production and circulation are defined as "Green Production." And the trends of urging eco-friendly practices while focusing on exchange and movement of works are defined as "Green Mobility."

Green Production

A study on the environmental sustainability of the production and distribution process of works
As awareness of the global climate crisis is increasing, more people are joining the movements towards sustainability by making joint responses in order to reduce environmental impact. From this point of view, The Theatre Green Book examines what kind of effort can be made throughout the production process, and makes a practice suggestion in the form of a toolkit. In the same context, the theater has introduced the concept of Green Rider as an element for practicing green production. The concept is a part of its movement to compile and share guidelines for creating eco-friendly changes on a production site. It is currently working hard to share the concept more widely.

Green Mobility

Tour policies and trends transforming themselves with eco-friendly experiments
Perform Europe provides mobility support for the performing arts in Europe. In its research report 'Perform Europe Insights:Sustainability Through Innovation', it has looked into the crisis contemporary art is facing, and pointed out many challenges we have to explore in our pursuit of sustainability. The report also emphasizes the importance of cooperation between countries. In addition, Green Art Lab, GALA, published its support policy guidelines for culture and art that incorporates environmental sustainability, emphasizing the timeliness of the policy changes.

Incorporation of environmental sustainability into practice on site

Along with policy changes, the art world continues to examine and study the role of art in the era of climate crisis through various approaches. Various attempts are being made to incorporate environmental sustainability into practice, including residency programs with the theme of climate change and sustainability, as well as having experimental production commissions designed to minimize the impact on the environment as one of the award requirements.

3. Challenges and direction for continued research

Concerns about environmental sustainability in art practice are changing the customs and norms of the art ecosystem. Artists, arts organizations and public and private organizations are required to carry out their creative challenges while fulfilling their respective roles within the arts ecosystem. For the future of sustainable touring, further steps should be taken other than just establishing new codes of practice. It needs public funding and policy support. However, the norms for sustainability are defined from various perspectives rather than standards applied in the same way to all projects, and methods of practice should be creatively explored. Recently, there has been heated discussion in the European performing arts sector on the size of the budget required to achieve environmental sustainability, and the responsibility of financial procurement. And many conversations are taking place in order to put the outcome from these discussions into action. For followup research, feasible methodologies for cooperation and solidarity amongst members in the ecosystem should be put into practice as an experiment. By doing so, the research can explore how international connections can be maintained. Rather than making a microscopic and rushed decision on the future of international exchange, it is a time to think about the sustainability of art and to explore the role of art in society together.

PAMS
NEXT MOBILITY

2

#POST_PANDEMIC
#NEXT_MOBILITY
#CONCEPT_TOURING
#DIGITAL_MOBILITY
#GREEN_MOBILITY

1

Artists' Creative Actions on Climate

Jisun Park
Creative Producer,
Producer Group DOT

This year's Performing Arts Market in Seoul put forward 'Next Mobility" as its main theme. For nearly two years, since the beginning of last year, mobility has been severely affected. Restrictions on what used to be taken for granted increased distance between people while the range of their movement contracted. Before, it was unimaginable for creators to rehearse without moving, to meet the audience or to present the performance to the audience without them moving. We've also seen many experiments during the pandemic such as online theater, contactless theater, etc. As we are on the cusp of entering the phase of so-called "living with COVID", we have to start a new exploration about mobility. What do we have to think about when we are exploring new mobility for artists and artworks in the performing arts? Out of a variety of topics discussed during PAMS, I am recapping "Artists' Creative Actions on Climate Crisis" which focused on the concept of green mobility in this article.

The sustainability of the earth, human lives and the art ecosystem are the major topics of our era. The call for us to change our perspectives and take action is more urgent than ever. Why is climate change important to art and artists? And what role can art and artists play? 5 artists from 4 art groups from Seoul, New York, London and Halifax in Canada joined the session as panelists to talk about creative actions and practices.

First presenter
Borahm Kim of Untitled Road

She focuses on game theater, which uses many characteristics of games in order to allow the audience to experience the story in various ways and reflect on it. She became more interested in climate change when she participated in the Hwacheon Climate Change Residence in 2020, and started feeling a bigger responsibility as an artist. Last year, she created a board game called Movable Forest. The trees are in danger due to the current climate crisis. They need to move 6.4 km to the north in a year in order to survive the rapidly rising earth's temperature. There are four human characters in this game. A politician, a researcher, an activist and an entrepreneur. They all need to achieve their goal while moving the trees to a

sanctuary in the game at the same time. It is important to achieve one's goal to win. However, if the players don't reduce the carbon emission adequately, disasters such as wildfire will occur and destroy the trees, and the players will lose.

A live art exhibition created by Borahm Kim based on this board game is currently on display. It is called "Movable Forest: House on Fire." The forest in the board game was recreated in a larger scale so that the audience can walk through it while acting as an activist, one of the game's characters. With the help of a researcher provided via chat, the audience takes on a mission to save trees. In this 20 minute-long game format exhibition, sounds, lighting and web intertwine in real-time.

Borahm's original concept for this exhibition was entirely different. However, she faced an obstacle in electricity. She learned that converting electricity to heat consumes a tremendous amount of electrical energy while the electrical capacity of the exhibition space was 10 kilowatts at maximum. She looked into the option of renting solar power equipment as an additional power source. However, it was not easy for an individual to generate electrical power in a large volume because electricity generation is fully controlled by the government in Korea. In addition, the intermittency issue of solar generation posed a technical challenge for the stable provision of power. These issues rendered the original design unfeasible, so Borahm made overall modifications to her design and set up new goals along the way.

"Commitment to creating a zero-waste exhibition with minimum electricity consumption."

Borahm contacted people who collect recyclable papers to rent cardboard boxes for three weeks so that she could create an objet that symbolizes trees. And she flipped the boxes so that whatever is printed on the boxes would not show. She only used LED lights, and they were a mixture of lights for performance and commercially sold LED lights for indoor use. Everything that consumes electricity has a small power consumption measuring device. As a result, the exhibition only consumes 5.85 kilowatts. Although the

exhibition waste was minimized, tapes were used to fix electrical wires on the floor for audience safety, for which she had not found an alternative.

When she first encountered numerous data on the climate crisis, she thought perhaps doing nothing was the answer. But she now believes not doing anything will not change anything. However, she left the audience with a question whether her work is worth more than a piece of toast made in an oven that consumes 5.85 kilowatts.

Second presentation
given by Blooming Ludus, an art group made of two artists from Korea and Canada

They are working with various communities to respond to the gigantic issue of the climate crisis. Haeweon Yi and Francine Dulong co-presented the session.

The two artists are making participatory theater pieces with a focus on climate justice and building an environment for a sustainable future. Through theater, they aim to make climate issues more visible and tangible for the audience. To that end, they researched relevant local communities, academic journals and policies and met various stakeholders for interviews. They dove deep into their selected topics with the participation of all the stakeholders including community members, policy makers, politicians, etc. They created their theater pieces to have a structure in which the audience can directly engage. They say leaning together is also one way to make an action.

Power story is a theater piece using the game format. It explored the issues of fracking and sustainable energy through questions and discussions. Those two issues were the hottest topic in the UK where It was presented back in 2017. The two artists researched production and consumption of energy and met experts in water resource protection as well as people who were against hydraulic fracking. Hydraulic fracking became illegal in the UK in 2019.

Do Rivers Have Mouths is a piece created together with youths and seniors. They also created a piece in which they explored the idea of sustainable urban living space. Salt and Vinegar is a musical comedy that discusses ocean sustainability from the perspective of fish. The pandemic didn't allow the two

to develop the piece together in person, so they created it as a puppet show on YouTube.

During the pandemic, they started Green Connections. An online program, Climate Justice Tea Time, provided an opportunity to examine artists' responsibilities in the context of the climate crisis. The Blooming Ludus Green Forum allowed participants to create a language of solidarity under the topic of the climate crisis.

This year, Haeweon Yi is participating in the Climate Change Theater Action with a piece called the Last Apple Pie. It examines the impact of climate change on farming food including apples.

Third presentation
made by a UK based artist, Bea Udale-Smith from Pigfoot Theatre

Pigfoot Theatre is explicitly carbon neutral. They embrace global connectivity in their response to the climate crisis. They carry out various workshops for youth in schools and participate in protests. In one of their shows, they used bike generators in the show to provide electricity for it. According to a study in the UK, 56% of young people said that humanity was doomed due to climate change. 75% of young people said the future is frightening due to climate change. And 83% of young people said they would have less opportunity than their parents because of climate change. Another study recently done in the UK showed that young people feel a personal responsibility to reduce climate change, and don't believe that enough governments will take action to tackle climate change. They found their answer to the question of why artists have to respond to climate change from these surveys.

The Pigfoot Theatre allows the audience to participate in their works directly so that they communicate with each other and support each other. Their work, Hot in Here, is a carbon neutral dance party that brought together people from 23 countries. In particular, many participants were from countries near the equator that are most affected by climate change. They produce their own energy in this piece as well by converting the audience's steps into electricity.

They produce electricity with bike generators. They carefully consider how much energy they consume when using public transportation or even papers. They also created a carbon emission checklist. To keep track of their own carbon footprint, they considered their lighting and sound design, and they mostly use public transportation. A study shows that, within the UK 78% of touring theater shows' carbon footprint comes from the travel of the audiences to see the show. Therefore, they try to make an impact on local audience behavior. For example, they can offer a discount on tickets if they use public transportation.

Buying second hand products is also a good idea. Most props are rented too. Carbon neutrality is in their minds even from the design phase. They think of the lifecycle of an item before purchasing it. They ask questions about where it goes after they use it.

The Pigfoot Theatre measures their carbon impact every month and shares the data in a bar chart. From the data, they keep track of the carbon emissions from not only their movements but also their energy use from laptops, video conferences, etc. Based on that data, they plan their next work.

Bea emphasized on the importance of sharing. According to her, many people are already making actions, but it is not being shared very well. If everyone shares their own actions, we can bring changes and tackle environmental impacts. She also talked about the necessity of workshops for the audience members who are not interested in climate change at all. Making activities that the audience can participate in after the show can start a conversation, which can be the beginning of a journey.

Last presenter
Chantal Bilodeau, the founder of Climate Change Theater Action and a playwright

Her focus is on science, policies, arts and climate change. As Artistic Director of The Arctic Cycle, she is in charge of the Climate Change Theater Action project. CCTA began in 2015 and takes place every two years. 50 playwrights from all over the world participate in it and submit a short play about five minutes long about an aspect of climate change based on a theme. Those plays are made available to anyone around the world who is interested in presenting an event in their own community. The presentations take place between mid-September and mid-December.

The important thing is to add an 'action' to this event. This action brings people together and encourages greater engagement with climate change. So far, the performances have taken place in theaters, schools, parks, cafes, bars, libraries, community centers, yoga centers, museums and even on a kayak. There were radio shows and podcasts that presented a performance. The text of a play travels, but the performances take place locally. Therefore, local contexts get combined to expand the narrative.

Examples of an 'action' include donations to environmental groups, e.g a donation to the relief campaign responding to a disaster caused by a hurricane in the US in 2017. There was a tree planting campaign. Letters were sent to politicians. There were also marches and signature collection campaigns among other various actions.

Among several goals CCTA wants to achieve, one is to create alternative narratives about the climate crisis. Mainstream media focuses on covering natural disasters and policy failures, and it creates a sense of powerlessness among young people. CCTA is oriented towards the positive through its short plays. Another one of its goals is to bring audiences together around shared values. When people with the same values come together, it creates a sense of community that makes them feel that they are supported by each other. It strengthens community bonds.

The climate crisis is not only about facts, but also about our feelings on how we are impacted from where we are in the world. Theater deals with all of those things. It covers logical and rational aspects as well as emotional issues. Another one of CCTA's goals is to invite people so that they can engage in a collective action.

In 2019, 225 events were carried out in 25 countries. Three thousand artists and art groups organized events and participated in them directly. Those events attracted 25,000 audience members in total.

Q&A

Why does art have to respond to climate change? What is the power of art, and what can it do in response to climate change?

Francine Dulong ● We are the ones who created the system. We are the ones causing climate change. We have to deliver narratives about how we have to make changes again. We need ideas and imagination. We're surrounded by very negative stories or ideas that reinforce that this is the way it is, but theater really has the power for us to imagine a new future. I can initiate that conversation, the spark that comes from inside to imagine something different. It has to start there.

Haeweon Yi ● We experiment with plays at theaters and provide experiences to the audience. It is important to imagine a new world. The theater offers new and different experiences. We all have different cultural backgrounds, but we share a common narrative as people who share the same planet. Art is an excellent communication tool. A safe space where everyone can come together is what art is about.

Chantal Bilodeau ● Art is an active imagination where we take something that doesn't exist and we bring it into existence. Art has a big role to play in calling on everybody's imagination to imagine what we want to see in the future and not just fixing what's here now and what's broken, but also how we make our world better.

Borahm Kim ● During the development stage of my work, I thought a lot about what compels me to work on the climate crisis. While doing so, my sense of responsibility grew. It was because I realized it is my behavior and consumption that made the earth the way it is now. Compared to the previous generation, my generation is more consumer-centric. The sense of responsibility weighs heavy on my shoulders.

About audience engagement

Bea ● We are carrying out various workshops. We do workshops in schools so that the kids can participate in our workshop which explores points on the school curriculum. When we develop our works we focus on actions that the kids can take themselves. Art can be the voice for a change. It can be a way to take action, and that is the message we deliver. Together with local partner educators and activists, we are planning to organize events which can encourage the public to engage more. We are also thinking about encouraging local residents to participate. We work together with

activists, and sometimes we connect to people overseas via Zoom. Through workshops, we are building various communities, and fostering climate warriors.

Francine, Haeweon ● We take various approaches to encourage audience participation. We organize community workshops before and after the performance, and even during the performance. We tried to make our work more immersive by making it participatory. We think of the audience as people who are going through the journey of climate crisis together with us. When creating Power Story, we invited the audience to take a role in the performance as power plant employees. Because they were power plant employees, they went through training and had community meetings. Another version of the show is set in a town in the future where it was experiencing constant blackouts. In this version, the audience took the role of town residents. They were given a mission to infiltrate the powerplant to reclaim energy for themselves. They also explored the topic of sustainable housing in one of their works, in which the audience had a chance to think about what's essential for living while building a house out of cardboard boxes for 90 minutes. In the end, we have to ask ourselves what kind of people the audience is to us. And by doing so, we have to find out what they are asking of us.

Chantal Bilodeau ● We did a kickoff event for CCTA in September in Central Park, and it was a performance that included audience participation. The performers began with storytelling, then encouraged the audience to participate so that they could bring the story forward together. There was a small piece of paper on which a dialogue was written, and that was passed around and read by the audience. At the end of the event, we

offered the audience climate ribbons for a ritual. The climate ribbon ritual started in 2014. We asked the audience to write down what they love and hope to never lose to climate chaos on the ribbons. They wrote their responses and flipped the ribbons to hang them on an arch so that people could read each other's ribbons and have an image of hope.

Ultimate goals and challenges

Borahm Kim ● The biggest challenge for me at the moment is to figure out what artistic sophistication is. Visual elements are very important in an artwork, so I am currently trying to figure out what my desires are and what artistic sophistication means to me.

Haeweon Yi ● My challenge and my goal at the moment is to keep doing my work with hope. So, how to hold on to my hope and how to be resilient in this moment of climate crisis is my question. And I'm trying to find more connections with our body and our connection to the planet and making the sensory experiences wider so we can be engaged with more diverse audiences together.

Francine ● Finding ways to continue working together with Haeweon and hopefully seeing each other within the next 12 month are the challenges for me. I have many questions about the future. It's very easy to put things in your head sometimes and understand something intellectually but then how is that connected to the body and to space? That's very important in your everyday life. So, connection and discovering connection through ritual and art making are both the challenge and the goal.

Bea ● The vast majority of audiences who go see the performance will be interested in climate change. We try to view challenges as opportunities for

growth. Rather than working only with people who are interested in climate issues, we tried to go directly into schools and work with local communities. Making connections with other organizations is another one of our goals. In the UK, there are so many disparate climate groups that are all doing very cool things. But no one talks to each other, so no one learns from each other. So, our goal is helping to contribute to a way we can all communicate with each other more easily.

Chantal ● One challenge is taking art and theater about climate change and putting it into a box, just like some years ago when women's theater or black theater were put into a box. I would like that to be open up. Climate change is our reality. We're all experiencing it in different ways. It doesn't need to be this highly specific thing. I think it should be part of theater in general. And that's a way where we're going to reach different kinds of audiences. In terms of vision for the future, I'm thinking about healing, how we can help people heal. The last two years have been very hard socially, emotionally and environmentally. And everybody has a lot of anxiety and carries a lot of pain. And I'm wondering how with the theater, while addressing these really difficult issues, how we can facilitate healing for everybody.

About Researcher

박지선은 연극, 무용, 다원, 등 다양한 예술 분야에 걸쳐 활동하는 크리에이티브 프로듀서로, 축제, 레지던시 기획, 공연예술작품 제작 및 국제 네트워크(아시아 프로듀서 플랫폼/APP)를 기획, 운영하고 있다. 최근에는 도시, 경계, 기술과 예술, 기후변화 등 다양한 주제를 중심으로 예술가와 새로운 탐험을 하며 예술의 동시대성을 탐구하고 있다.

2

How is XR immersive theater different?

Rene Hyewon Lee
Producer/CEO, Giioii

The previous article, 'The Circumstance Calls For XR Immersive Theater' gave us a chance to look at the similarities between XR story experience and immersive theater, as well as the chronicle of its short history. Live theater is the oldest form of entertainment. Therefore, it is perhaps natural for the theater and virtual reality to come together. Major developments in immersive performance were seen in the UK from the 2000s, so its history is not long. However, the impetus behind the development were the theater's efforts to stay connected to the changing audience, and that is still very much the case now, when technologies are combined with theater.

Kiira Benzing, Director of Finding Pandora X, and Jihyun Jung, Director of Scarecrow VR are the two directors who have explored the new stages of theater through their live XR immersive performances. At the Performing Arts Market in Seoul that took place last December, I had a chance to speak with them and hear about their productions and the stories behind them. I also spoke to Sarah Ellis from the Royal Shakespeare Company, who has been exploring the future of theater through digital experiments. She told us in depth about why they are carrying out these experiments.

This is the second article in the "XR immersive theater" series. In it, we look at how the 4 elements of the theater play, i.e. actor, script, audience and stage get dismantled and redefined. We also look into how the genre is currently changing as it is interacting with various different genres and technologies.

1. Actor
a multiplayer who is also a tech expert
Actors play the most important role in bringing theater to life. The same goes for the XR immersive theater, so actors are what's most important. To quote Jesse Schell, a professor at Carnegie Mellon University and author of the book, Art of Game Design, has said "the power of the VR lies in the fact that it is a technology for bodies rather than for eyes." adding "There's a power of presence, and that's why acting is so applicable to VR. There are endless opportunities for acting and performing in this format."

In performances that explore transitioning to digitized formats, the audience can see actors' faces.

In an XR immersive theater however, the audience can hear actors' voices and feel their presence, but cannot see actors' faces. James Cowan who participated in the performance of The Under Presents said in an interview that he found that body language is more important than verbal language in the live XR immersive performance, and that there was something new in the communication. Having to communicate with the audience by showing delicate movements of avatars is different from making eye contact with the audience members who are sitting in the auditorium. It is also different from immersive theater in which actors perform while having a direct conversation with the audience in the same physical space.

Pamela Winslow Kashani, the actor who performed as Hera in Finding Pandora X, points out in an interview with XR Scout that the biggest difference when compared to the live performance is how avatars are used as an extension of actors. She made comparisons to Kabuki-style theater and Greek theater which both use masks or large gestures for communication, emphasizing the elements of puppet theater or mask theater which create new entities. Actors who put on masks express their characters more with their movements. For example, they change the tone of their voices or pose by making more exaggerated gestures in order to convey emotions.

VR actors improvise according to how the performance unfolds or how the audience responds, and sometimes that makes the acting take a conventional format. However, that actually can make expression and delivery clear and impactful. The acting format may vary, but the fact that credible characters are created to make the audience immerse themselves in the story is the same. The fact that the audience remains curious about the next story and that it takes the audience on a journey where they experience the narrative is also the same.

VR actors perform while wearing an HMD and carrying a controller. They have to learn menus and functions until familiarized with them for each performance. Therefore, naturally they become technologists. When they reach a point where they are used to the technologies sufficiently enough that they do not need technicians to operate them, the performance runs more smoothly. That's when they assume an additional role as tech experts. Not only have they reached a level where they can respond to technical difficulties during a live performance, but also they play an additional role as a stage manager. Actors also become navigators who lead interaction with the participating audience and allow them to play a role.

Creating an XR immersive theater requires additional new roles such as technical producer, UX designer, etc. However, existing roles inevitably have to learn new things. For example, a costume designer has to learn how to design costumes virtually, and a stage designer has to learn how to create a stage in the virtual world. During this process in which everyone is building new capacity, actors not only expand their media but also their roles.

The team behind Scarecrow VR spent 3 years on its development. They also had difficulties casting actors 3 years ago. Back then, everyone said they felt dizzy just by using VR equipment for the first time. However, now the equipment is advanced enough that even a novice actor can easily use it. This genre used to be a tough challenge for actors who are used to a conventional form of acting, but now there are more actors auditioning for a role in it. When the technology was immature, less experienced actors were more biased. Therefore, what was a new experiment back then was not welcomed. However, a small number of creators have been carrying on with the effort vigorously, and devices are more widely used. With COVID-19 accelerating the digital transition, we are now finally in a new chapter. Actors are an essential element of theater that create 'liveness.' Therefore, we are expecting to see more actors and creators as technological barriers get lower and fundamentals grow.

2. Script
Co-created scenarios that evolve to become a storyliving from being a storytelling
Language changes when medium changes. And when that happens, it requires a new directing method. Just as immersive theater gets mixed with various other genres such as dance, movie, etc., the narrative of an XR immersive theater also combines with elements from different genres. In the case of Jihyun Jung, Director of Scarecrow, she adopted theatrical elements into her work as a former film director. In the case of Kiira Benzing, director of Finding Pandora X, she has a traditional performance background, and absorbed video and XR to expand her scope.

When asked about her new directing technique, Jihyun Jung said that it is a combination of the cut of the film and the liveness or spatial composition of the play. Although there is no concept of the cut in VR space, use of sequence can make transitions and create a magical environment. Unlike a screenplay for a movie which is written to tell a story, a VR script requires a rehearsal in advance in order to predict the audience's reaction because the audience has to be placed in the middle of the story. It is essential to categorize audiences by doing repeated rehearsals and use accumulated data collected from those rehearsals to continue developing scenarios.

Jihyun trained actors through this categorization and spoke with the actors about how to induce improvised reactions as she continues to develop an acting scenario. And that means steps or ways of scenario writing changed. In a movie, actors are directed to focus fully on their emotions and express them in a scene. However, actors in a real-time VR environment are directed so that they know who to face in the audience when acting and moving, and how to improvise in response to the audience.

Just as Scarecrow evolved while talking with the actors, Finding Pandora X established its own fundamental direction for its storytelling. They thought experiencing a story could be different when participants form a community, and explore how it can be formed. She adopted a 'branching narrative' in which the audience sees different endings according to the choices they made throughout the show. Therefore, each group becomes a community which experiences their own unique story as a group. In the process of solidifying such a scenario, many people participated in the narrative design, and a narrative director such as a dramaturg was appointed to oversee whether this was going in one direction.

Kiira Benzing made the script for XR immersive theater for Finding Pandora X based on improvisation, liveness, presence, interactivity and community or community characteristics. She reiterated the importance of social connection saying that she prioritizes it when creating or developing her work because community is formed when people gather even in a VR space, which in reality one accesses alone. It is important to produce extraordinary results that exceed the audience's expectations, to spark their imaginations, and to explore more possibilities. However, containing in the script a wide range of emotions the audience feels from having each other's company, should not be overlooked.

3. Audience
from 'observers' to 'rule breakers', new audience types and audience roles that have changed
In Finding Pandora X, the audience has to take on the role of a Greek choir member. The audience participates in a journey to regain hope in Pandora. Various interactions are intertwined in the performance, such as solving puzzles together to help the story progress, and even choosing to follow either Zeus or Hera. Keira identified different types of audience after a few performances.
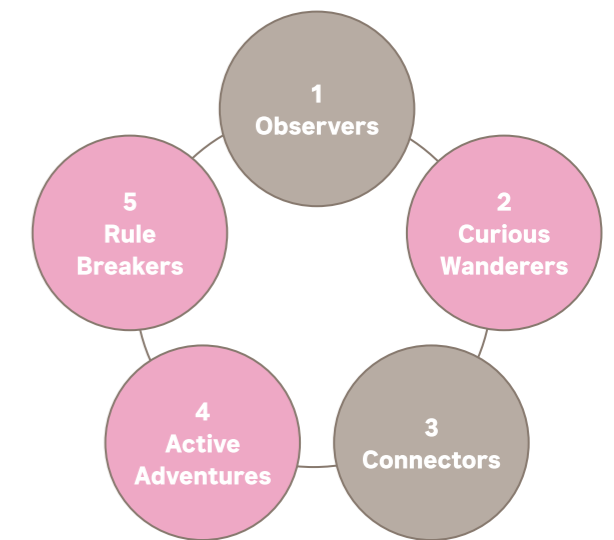
Various types of audiences identified in Finding Pandora X

'**Observers**' observe the show without actively participating. They simply look at other participants or actors' performances while maintaining the audience attitude seen in traditional theater.

'**Curious wanderers**' are people who like to participate. They sometimes look for hints, and

constantly explore the space to see what they can't bring back from the underworld.

'Connectors' are people who try to help others who are experiencing technical issues. They are well trained in using platforms such as VR, VRC, etc. They help those who are new and encourage those who are at risk of being isolated. Those with an active personality and social skills become an important axis that serves as a bridge between observers, wanderers, and adventurers. As it is a performance where audiences from all over the world with different languages and cultures gather at random, it is difficult to predict what will happen. So, there will always be people who fall behind, and people try to help them. In that dynamic, a community naturally functions as it is supposed to as the show proceeds.

Compared to the wanderers who merely like to explore the space, **'active adventurers'** like to solve the puzzle, i.e. the mission of the show, more than anyone else. They actively touch or push objects spread out in the space, look for clues, and actively experiment with what actions users/audience can take in the space.

The last and the most unexpected audience type are the **'rule breakers.'** These are people who destroy the established worldview and take unexpected actions.

In addition to these five types, the audience can be further subdivided, but has a similar structure in terms of participation and activeness. Therefore, the audience scenario is written more elaborately, and the performance is inevitably different each time as the type of audience accumulates with each episode.

What expectations do the audience have?
The level of participation is different because the audience actually experiences a story rather than watches someone else's story. Therefore, they expect something different than ordinary theater goers. That's why theater makers have to figure out how to satisfy that expectation, how to readjust the audience relationship and how to redefine audience roles.

Even the Royal Shakespeare Company[RSC] had to think about what to do for the audience and embodied the understanding of the audience's needs through audience surveys when they performed Dream, a reinterpretation of A Midsummer Night's Dream. They said they tried to figure out what they could do to be welcomed by the audience.

To this end, the 'Finding Pandora X' team actively asked questions to the audience and searched for answers. Through preliminary surveys asking questions such as 'what are you afraid of', 'what are you inspired by', and 'what would you like to do if you had superpowers?', a magical environment and 'flying superpower experience' that are only possible in virtual reality got included in the show. Flying superpower appears as a reward from Zeus in the story. It allows the audience to fly when they flap their wings. By giving such a superpower to the audience and allowing them to experience something fantastical makes them feel like they are reliving their childhood.

We keep asking what we can do and what our audiences are looking for and desire in digital storytelling and in a digital or virtual environment. As we continue our efforts to surprise the audience, we strive to become closer to the audience. The multi-connection XR immersive performance, which expands globally beyond the regional audience, guarantees the possibility that a single story can continue to evolve as long as there is a different audience each time.

4. Stages and venues
site-specific performances that moved to virtual reality

Conventionally site-specific performances dismantle the concept of venue or stage. When they are moved to digital space or virtual reality and become an XR immersive theater, time space limitations disappear and imaginations can be brought to life. Therefore, figuring out how virtual space is different from physical space and establishing what is to be made possible is important.

In a performance that values audience participation, both introverts and extroverts can participate in the show using different routes. It means that the background space should be designed according to how you intend the experience to be like. It should be designed in consideration of the movement of the actors who lead, while predicting the movement of the audience, who now have 'free will' in a three-dimensional space wider than the physical space.

In Sleep No More, there were about 90 rooms in a six story building. In The Great Gatsby, there was just a single story but different rooms where the story unfolded. They are two immersive theaters, both taking place in VR space, but there are similarities and differences in the vertical and horizontal spatiality. In Welcome to Respite, the story takes place all over a house from its exterior to the porch, living room and 2nd floor bedroom. In Finding Pandora X, the story takes the audience starting from the underworld all the way up to Olympus. Just like that, the space becomes an element of a story, and the actors and the audience meet live to share the same space in the experience.

Therefore, the selection of a platform that enables performances becomes very important. VR Chat, which allows you to create your own virtual space, is actively used. In addition, avatars can be created in that space. Because of that, the stage is becoming more diverse. In addition to having the audience participate in the story, avatars can be created for the audience as a reward and given to them as souvenirs. I myself received a Greek chorus avatar as a gift from Finding Pandora X and a teddy bear avatar from Welcome to Respite.

The lobby space where the pre-show takes place became essential in an XR immersive performance. It is a space for onboarding during which the audience can learn about the necessary functions in the show. Also, ice-breaking can take place here so that audience members can say hello to each other. Sarah Ellis emphasized the importance of the lobby space in virtual reality saying that it provides the same experience as the lobby space in a physical venue does and therefore, the conversations that take place here are important. The spatial setting that allows the audience to acquire the necessary knowledge, and naturally melts it into the performance in order to optimize the performance experience, becomes a space that is connected to the temporal experience. And the space where the 'after show' takes place is also important. The audiences have a chance to meet the actors to have a casual conversation rather than being with them in a story as a part of the setup. And to meet the production team in an exhibition space connected to virtual reality for the performance. This space is connected to virtual reality, so it can also be designed to be even more fantastical so that the audience will leave the show with the most memorable image.

Kiira Benzing said in her presentation that audience expectation is important. However, she also emphasized the importance of safety during development. The rules agreed upon by society are also needed in the virtual space. If someone speaks loudly when they are expected to stay silent, the XR immersive theater experience would be disrupted. To this end, the same behavioral norms are needed in the virtual space. The way people interact in virtual space has to change undoubtedly, and the ethical norms must be learned anew. Reminders for this can be given during the pre-show, but most of them can be shared on community platforms such as discord so that the audience can familiarize them with the rules. That may be a part of the preparation.

In other words, a performance in a physical venue used to begin from a poster, a flier then the venue. In virtual space, it is replaced by email announcements, the digital invitation, the digital platform then the digital lobby. Therefore, we can say the design of the performance venue and stage also takes place outside the platform.

Due to COVID-19, many audiences moved to digital performances and XR performances.

However, the audience wants a lot more than just connecting with other people. That desire is a call for an exploration to search for more meaningful connection. We are trying to figure out what XR immersive theater should connect besides connecting performances and theaters. As Sarah Ellis emphasized, there are many rituals taking place when you participate in a performance. The performance is a ritual, and so is people interacting and conversing with each other. A social experience takes place, and we need to be aware that such an experience can continue even after the performance ends.

Traditional performances make emotional connections with actors and create meaningful experiences. However, Immersive theater goes one step further by removing the wall between the audience and the actors and placing the two in the same space, while breaking down the fourth wall and forming a stronger bond. XR immersive theater also creates an 'emotional connection.' Just as the real-world immersive theater experience is full of fun, with the audience wandering and exploring the space with actors, we have to consider interactivity, and make the audience a part of the story and not an observer in XR immersive theater. In order to do that, we have to think about how the theatrical experience and the XR experience should be both harmonious and different. When delivering and designing a new narrative, eventually what evolves comes from what's connected to its inherent element.

In a conversation with the two directors who have been leading the XR Immersive theater, I could see that there have been many questions around it including how it should connect to the audience, what it should deliver to them and how it should differentiate itself from digital or VR performance. Through the process of trying to find answers to those questions, it has been established as a new genre of art after being dismantled and transformed many times, and I could see that clearly. The two directors both said that they enjoyed making their works so much that they want to make more XR immersive theater. They think this genre will last as a part of XR immersive entertainment or as a sub-genre of the performing arts.

The possibility of XR immersive theater evolving even further is growing with haptic equipment or new technologies, new offline or hybrid formats and new materials. Even if the physical stage is revived after the COVID-19 pandemic is over, I reckon the theatrical experience through XR, which the world is connected to and enjoys together, will continue to evolve through hybridization and experimentation. I expect it will become an essential entertainment and artistic experience in the embodied digital world that the metaverse is leading.

3

New 'Connection' among Audience, Performance, Theater and Technology

with Sara Ellis, Director of Digital Development at Royal Shakespeare Company

Rene Hyewon Lee
Producer/CEO, Giioii

Even the Royal Shakespeare Theatre, one of the most prestigious in the UK with an audience of around one thousand per night, could not avoid the impact of the pandemic. Its impact required a major transition to the use of digital technology which allowed the theater to reopen doors that had remained closed for the last two years. In March 2021, the Royal Shakespeare Company (RSC) carried out the Dream Project. It was an opportunity for the RSC to explore the future of the performing arts by examining future technologies that enable live performances without the limits of physical distance. At the same time, it was a creative experiment involving various technological approaches to how the theater should adapt in the digital world and how the performing arts can adopt interactions enabled by digital technologies. This innovative experiment has yielded encouraging results in attracting an audience of 65,000 from 92 countries for only ten performances, 76% of whom being first time visitors to the RSC and 40% being a young audience.

Digital technology has prompted a new form of mobility. The next mobility sessions of this year's PAMS have foreseen what changes it will bring, and seek to ask meaningful questions in the era of digital transition. To this end, the sessions were joined by leading groups and artists around the world who have carried out pioneering experiences and experiments. As Head of Digital Development at the RSC, Sarah Ellis has been leading the company's efforts to bring arts and technology through years of digital experiments. During the Next Mobility session with her, she shared the lessons she learned throughout the pioneering experiments to shed light on important issues and upcoming changes.

She shared two cases in which innovative technologies have ushered in new forms of the


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performing arts: first, the Dream project which tried to change the value chain of the performing arts throughout creation, circulation and theatre experience, and second, the Tempest which adopted cutting edge technologies such as real-time motion capture technology for physical performances. What kind of leadership is called for in the era of technological changes? What is the future of the theater, and who is the audience? How is digital technology changing the interaction with the audience? These are the most important issues that everyone is facing now that I had discussed with her, and I realized that eventually they all point toward the same conclusion, i.e. 'connection'. What is indeed the meaningful 'connection' in the era of disconnection?

Initiatives for the Audience of the Future: Performance that comes to the audience's homes

Dream, a reinterpretation of A Midsummer Night's Dream, was originally planned as an in-person performance to be presented on a physical stage using real-time capture technology. COVID-19 has interrupted the production process, but RSC was looking to make new changes and took this as an opportunity to redefine connection with the audience. This initiative led them to ask questions such as, what does the audience need now that they are away from the theater? Or, what are their expectations? They started from these; coming to the homes of the audience where they live, rather than leaving the door open and waiting for them to come to them; thinking about how to approach the audience's space and what
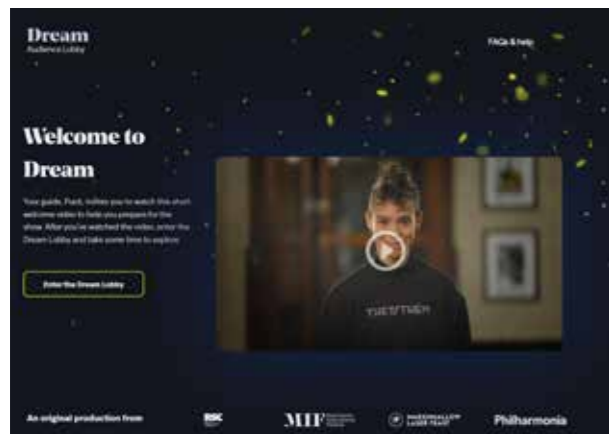
RSC Dream 웹사이트 화면 (출처: https://dream.online)

they must do in order to be welcomed into it; fundamentally transforming the online performance by changing the ideas about the links with the audience.

How to connect to the people who cannot come to the venue? Above all, the RSC did not overlook the fact that the audience is a community. The performance is not something to merely watch or attend, but it is a communal and social experience in which all of the members share time and space. The moments, such as when the audience excitedly enters the venue, or when they leave their coats at the cloakroom, receive programs, or share their excitement with friends, are all recreated digitally, and this shows how much thought the RSC has put into designing the digital experience. The digital theater built on their website also visualizes thousands of others accessing it in order to give a sense of belonging. A talk with the audience that usually comes after the performance was moved to the pre-Show event so that it helps the audience understand the technologies. It gave the team a chance for a tech rehearsal as it prepares the audience for a new digital performance experience. This shows the RSC's effort to realize the links that the theater makes as a cultural and social space connecting people and performances as much as possible.

Other than designing the experience, what else did the RSC have to consider in order to have everyone around the world enjoy their performances and not just the audience from the UK? To make their work innovative creations that embrace the changes of the era, rather than making a video recording and 'copying' it to digital media, the RSC considered three things: togetherness, liveness and digital inequality. Technological accessibility is the biggest barrier when making a new technological approach. In terms of experience and proficiency, there is disparity in the audience's digital literacy and equipment, and in the infrastructure for connection they can access. The more carefully you predict what factors you must consider, the wider the audience you will be able to reach. However, if you want to maintain the quality of the experience at the same level throughout different environments including tablet, mobile phones and desktop, it will increase the scope of development.

However, the RSC noted that the future has to have diverse connections at its center and be more inclusive. Therefore, it excluded the HMD which is not as widely used. Instead, the performance was developed to allow the audience access it online using mobile gadgets. As the RSC expanded its target audience to everyone around the world, it presented a performance at 2 a.m. UK time as a bold experiment to adjust the time of performance in consideration of other local time zones. In order to make the environment more inclusive, the audio description, subtitles, and sign language had to be considered, but it was not easy to incorporate everything into the performance. Considerations that need to be made for the digitally isolated communities remain a question for the RSC as it moves on to its next project.

The RSC has collaborated with tech experts in order to reach a bigger audience, and created an R&D consortium with various art companies, festivals and schools including the Manchester International Festival, the Philharmonia Orchestra. As a cooperative body sharing a common vision and goal, the consortium explored what needs to be done for the audience of the future not as a lone project of the RSC but as a community. It also explored how a community made of groups for a large-scale collaboration can move and work organically under a shared vision. To fully serve its purpose as an R&D project, it aimed to share its experiments, challenges and results with everyone working on site in the performing arts sector. Therefore, the surveys done in advance of the performance to find out about audience needs were detailed and lively in their language, and the surveys for feedback were elaborate and thorough with almost 100 questions.

Prerequisites for a technological experiment to become a creative collaboration
the importance of transformational leadership

In 2016 the RSC's performance, the Tempest, used the most cutting-edge technologies as an experiment to present a digital character of Ariel at an enormous scale on the stage. The RSC was preparing to present Shakespeare's last play, The Tempest, to mark the

RSC Tempest (출처: https://www.rsc.org.uk/the-tempest/)

400th anniversary of his death, and it wanted to encapsulate the magic and imagination of Shakespeare by using technologies. During the technological development it carried out for around two years with tech companies such as Intel, the RSC tried to use experimental technologies that enable an avatar of enormous scale to move around as a part of the performance in real time by using 27 projectors, rather than recording a performance to edit it in post-production. These technologies were unprecedented on the physical stages of the performing arts. They are ahead of their time even in the current digital environment that new technologies such as metaverse have ushered in, where we see digitally created avatar characters perform.

During these technological experiments, the RSC always wanted to go back to its roots. It started from the documents of Shakespeare from 400 years ago. They found out that there was an experiment back then, in which the audience were asked to use jewelry or mirrors to reflect lights on the stage as an effort to find ways to provide a more immersive experience for them. This tells us that technology has always coexisted in the theater. It also emphasizes that, just as the audience goes beyond being individuals to exist as a community, the performance needed an approach in which it seeks a technological partnership to transform itself because performing is not something you do on your own but is a creative collaboration.

Sarah Ellis thinks that the most important principles for collaboration are as follows.

Firstly, she emphasized the attitude of respecting technological partners you work with and acknowledging their expertise, saying that "artists have to become engineers, and engineers should learn to become artists." She doesn't mean that everyone has to learn coding and technologies themselves, but rather emphasizes respect for each person's field of expertise and attitude to learning. Secondly, she sees the importance of the cultural change that breaks hierarchy. A digital performance or technological experiment has to provide new time and space. To do so, both artists and engineers have to run tests and wait to see the outcome while working under unconventional conditions and environments. This requires careful consideration, respect and patience. She said that one mustn't keep demanding results in a coercive manner or criticizing in a cynical tone, and that a change of perspective to ask constructive questions is what's truly necessary. Thirdly, she emphasized the importance of transformational leadership in order to drive technological cooperation. Open minded leadership is essential in order to; stay on top of the current trend flexibly; adapt to the rapidly changing environment; and add motivation to bring changes. She also underscores the importance of learning from the future generation who are more technologically capable as well as staying alert to remain connected.

History has always shown that art and society keep evolving through innovation and technology. Technology has been developing even before the start of the pandemic, but the traditional performing arts were slow to adopt it. However, even they are compelled to think about digital mobility once again by the new era of the transition we are facing now. The RSC's digital experiments tried to; develop the audience of the future who spend more time in the digital world; connect performances and actors to the audience; and create a live atmosphere, community experience and presence. They are suggesting that eventually new mobility will lead to more connections.

The discussion I had with Sarah Ellis has brought up a topic that we need to keep exploring, learning, and asking questions on. It reminded us that it is time for us to redefine the audience that it is at a distance. Adding that we need to communicate with the audiences of now who want to see and participate in the digital interaction in their daily lives, in order to find out what they want from the digital stage and performing arts scene. It also made us realize that we need to accept and communicate with technological experts under a shared vision and goal to see if technology can evolve the performing art scene while continuing small and meaningful experiments. Sarah Ellis started her discussion with David Bowie's quote, "tomorrow belongs to those who see it coming." I want to conclude this article with that quote, hoping to see creators, audiences and technological experts coexist and explore the future in solidarity, and to see the new mobility continue to be innovative while moving forward with the community.

About Researcher

Rene Hyewon Lee is an XR, immersive producer who connects stories and mediates technologies with art. She is also the CEO of Giioii Immersive Storytelling Studio and a lecturer at the Korea National University of Arts. She researches culture and art in the digital transition era, based on her experience in the projects where she has brought culture into the metaverse and connected the virtual world to reality.