



THE UNIVERSITY
of EDINBURGH

THE SOUNDSCAPE OF A CITY

Exploring how Soundscape Technologies are Reflective of Edinburgh
as a 'City of Festivals'

Rebecca Marriner

s1748782

Music Technology BMus (Hons)

ABSTRACT

Exploring how Soundscape Technologies are Reflective of Edinburgh as a 'City of Festivals'

Edinburgh is known as a cultural hub for the arts across the world and since the inception of the festival scene in 1947, it has expanded into an identity that claims the city all year round. With eleven major festivals hosted every year, they have each adopted new technologies in the realm of sound to captivate their audience and engage them with the city surrounding. The aim of this dissertation is to explore these technologies regarding two types – immersion and spectacle – and explore how they are reflective of Edinburgh's identity as a 'City of Festivals.' Through interviews with festival directors and artists, it is possible to investigate the inspiration behind the events that utilise soundscapes and discover how they connect to trends within festival programmes. The first chapter explores the evolution of Edinburgh's identity as a 'City of Festivals,' and the trends that have appeared from this progression. These distinctions can be explored through the use of soundscape technologies of the two types, and how they represent the wider festival context. Chapter two explores the role of immersive soundscape technologies within the festival landscape and in contrast, chapter three looks at soundscape technologies that create a spectacle within the city. The research concludes that Edinburgh itself plays a role as a technology within each event, even if not a central theme. It places sound related technologies as an integral part of each festival programme to enhance the features of a city of festivals.

ACKNOWLEDGEMENTS

I would first like to thank my interviewees; Richard Slaney, Roy Luxford, Tim Vincent-Smith, Amanda Tyndall, Raymond MacDonald and Samantha Woods, for giving up their time and sharing their invaluable insight with me. Expanding on that, I would like to acknowledge all the organisations that communicated with me and provided extra information about the festivals and performances. I also wish to acknowledge the University of Edinburgh and the city that it is a part of, for inspiring this research from the moment I arrived.

Over the past four years, and specifically when writing my dissertation, I have received a great deal of support from my family, friends and boyfriend which has been invaluable to me. I cannot thank you all enough.

Finally, I would like to acknowledge myself and all the hard work I put into this project. I have a habit of downplaying my efforts and I want this dissertation to serve as a reminder that I should be proud of my achievements and to stop underestimating myself.

CONTENTS PAGE

Abstract	i
Acknowledgements	ii
Contents Page	iii
List of Figures and Tables	iv
Introduction	1
Chapter One – ‘City of Festivals’	3
The Beginning of the Festival Scene	3
Three Stages of Festivalisation	4
The Current Impact of the Festivals	6
Edinburgh as a Festivalscape	9
Edinburgh as a Soundscape	11
Conclusion	12
Chapter Two – Immersion	13
Defining Immersion	13
Night Walk for Edinburgh	14
The Encounter	17
Conclusion	20
Chapter Three – Spectacle	21
Defining Spectacle	21
The Edinburgh International Opening Events	22
The Pianodrome	29
Conclusion	33
Conclusion	34
Appendix A – Interview Transcripts	36
Bibliography	48
Videography	51

LIST OF FIGURES AND TABLES

Figures

<i>Figure 1.1: Timeline of the three stages of festivalisation</i>	5
<i>Figure 2.1: The Night Walk for Edinburgh follows a female character in a red coat</i>	15
<i>Figure 2.2: McBurney interacting with the silicon head for binaural recording</i>	18
<i>Figure 3.1: The visualisation of what it means to be a singer in the chorus</i>	24
<i>Figure 3.2: Deep Time projects a volcano erupting onto Castle Rock</i>	26
<i>Figure 3.3: Bloom taking over St. Andrews Square</i>	27
<i>Figure 3.4: Audience Figures of the EIF opening events</i>	29
<i>Figure 3.5: Vincent-Smith (violinist) and his band performing in the Pianodrome</i>	30
<i>Figure 3.6: The building materials of the Pianodrome</i>	31

Tables

<i>Table 1.1: Outcomes of Edinburgh Festivals Impact Study 2015</i>	7
<i>Table 1.2: Common Impacts of the Edinburgh Festivals</i>	8

INTRODUCTION

Many landmarks are noticeable when glancing at the Edinburgh skyline: Arthur's Seat, Edinburgh Castle, St. Mary's Episcopal Church and the spire of the Hub, the highest building point in the city. The Hub sits atop Castle Rock, overlooking the UNESCO World Heritage Sites of the Old and New Towns, and hosts the Edinburgh International Festival, the first festival to be founded in Edinburgh in 1947. The city is also home to the Scottish Parliament, the Church of Scotland and four universities. With an abundance of museums, art galleries, theatres and concert halls, Edinburgh is a hub for culture in Scotland and the United Kingdom. These features also make it the perfect place to host a large number of festivals.

The year-round festival calendar is one of the main draws of Edinburgh, as it is unmatched anywhere else in the world. The range of events celebrate everything from music and theatre and film to science, magic and storytelling. Edinburgh is a self-proclaimed 'City of Festivals,' and broadens the view of what is seen as a typical festival by hosting niche performers and audiences from across the world. There are eleven major festivals represented by *Edinburgh Festivals* with the most notable (and largest) being The Edinburgh International Festival, the Royal Edinburgh Military Tattoo and the Edinburgh Fringe.

Actor Brian Cox says, "Edinburgh, to me, represents everything that is best about all the arts," but whilst not every festival has a central theme of art, each embrace how different forms can be used to connect with their audiences.¹ Music and sound in particular are used in different forms across the festival programmes. The digital age has paved the way for new sonic possibilities, encouraging engagement in and across different genres of event and creating an evolution of the festival scene. Sonic landscapes (soundscapes) enhance the ambience felt by each festival patron as they knowingly (or unknowingly) consume the sounds around them. They are a way to use technology in performance to elicit different responses from a diverse audience. As part of my research on festival soundscapes, I have interviewed creative and festival directors on their experiences with them as well as involving myself in these events as much as possible.

This dissertation will begin by looking upon Edinburgh as a city of festivals. By going back to the origins of the festival scene, it will provide a point of comparison to identify how practices have

¹ "Edinburgh's Festivals: An Overview," YouTube, uploaded April 12, 2019.
<https://www.youtube.com/watch?v=jMHCZqaYTIY&t=138s>

evolved since the beginning. From there, the chapter will follow Edinburgh's three stages of festivalisation and investigate some of the motions that influenced the additions to the festival scene. Impact reports from the 21st Century, will quantify some of the changes that have occurred and identify common practices that have allowed it to become such a success. By analysing Edinburgh as a festivalscape, the application of soundscapes becomes clear and from the identified characteristics and practices of Edinburgh as a festival city, a further exploration can begin.

The following chapter will open by investigating the idea of immersion. By establishing key criteria of what makes a performance "immersive," the features can be applied to different examples of soundscapes. Specific events from festivals will serve as the basis for an exploration into how the soundscape has been utilised, what are its immersive features and how do they relate to Edinburgh as a city of festivals? The third chapter will be similar in structure but instead with a focus on spectacle. Again, establishing what it means for these soundscapes to be spectacular and why they exemplify the characteristics and trends of Edinburgh's festival culture.

CHAPTER ONE

‘City of Festivals’

The Beginning of the Festival Scene

After the devastation of World War II, there was an idea that “the arts would reinstate civilised values, promote peace, and bring people of the world together...”¹ Salzburg and Munich, the homes of old festivals, had been bombed during the war after Nazi occupation, thus sparking a search for the new host of the world’s greatest artists. In a proposal created by Rudolf Bing and Henry Harvey Wood of the British Council, Edinburgh was proposed to be the very place. The idea was welcomed by the Edinburgh City Council and Lord Provost, and a festival committee was created in 1945 led by Rudolf Bing, appointed as Festival Director.² From these decisions, the Edinburgh International Festival (EIF) was born; the inaugural festival of what would become a culturally rich scene of art and celebration.

EIF first welcomed audiences in 1947 with the aim to “provide a platform for the flowering of the human spirit,” and therefore created opportunity for the arts to be showcased once again.³ The programme was curated upon an invitation-only basis that welcomed world renowned performers from genres of dance, theatre and particularly music to appear in Edinburgh. Sound and music were a prominent feature of the programme from the get-go, inviting distinguished artists and composers of the contemporary music scene to perform. This included Bruno Walter, known as one of the world’s greatest conductors of the 20th Century.⁴ In September 1947, he conducted the Vienna Philharmonic Orchestra in their first collective performance since before Nazi colonization in an emotional performance at the Usher Hall.⁵ EIF is still known for being a festival of contemporary and classical music with around 50% of its programme consisting of these genres.⁶

¹ Angela Bartie, *The Edinburgh Festivals: Culture and Society in Post-war Britain* (Edinburgh: Edinburgh University Press, 2013) 42.

² “Plotting a New World Festival,” Edinburgh International Festival, accessed April 21, 2021. <http://70years.eif.co.uk/history/#plotting-a-new-world-festival>

³ “History of the Festivals,” Edinburgh Festival City, accessed April 21, 2021. <https://www.edinburghfestivalcity.com/the-city/history-of-the-festivals>

⁴ “Bruno Walter,” Edinburgh International Festival, accessed April 27, 2021. <http://70years.eif.co.uk/history/#bruno-walter>

⁵ “Bruno Walter.”

⁶ Roy Luxford, interview by the author, Edinburgh (Zoom), February 5, 2021.

Whilst Walter's appearance with the Vienne Philharmonic was a triumph in transcending barriers that had been placed during the war, features of Scottish music and theatre were noticeably sparse across the programme, despite Scotland being the host. There was a public outcry that Scottish arts particularly theatre, were snubbed by the International Festival after being deemed not of a high enough standard to perform.⁷ In response, the Glasgow Unity Theatre Group proposed a theatre season in Edinburgh at the same time as EIF and arrived in the city "uninvited and unheralded" to put on their own shows in performance spaces arranged by themselves. Seven other theatre groups (five of which were Scottish) joined them, likely to challenge the International Festival and support the protest of Unity. These eight companies performed "on the fringe of the official programme," a term that would soon catch on as the Edinburgh Fringe Festival was born as a more accessible festival.⁸

Independent from these two festivals, another was welcoming its own audience to Edinburgh. The Edinburgh International Film Festival was also founded in 1947 under the name of "First International Festival of Documentary Films." Named as such because it was the first of its kind in the United Kingdom and is now the longest film festival running the country as well as the longest continually running in the world.⁹ The incarnation of these three festivals in 1947 were the first steps in Edinburgh's transformation into becoming a city of festivals.'

Three Stages of Festivalisation

Historically, festivals are one way of encouraging cultural participation as they are used to "articulate and communicate shared values, ideologies and mythologies central to the world view of relatively localised communities."¹⁰ These short-term and ritualistic like events punctuate Edinburgh's calendar throughout the year and communicate the city's self-adopted identity as a 'City of Festivals,' as well as presenting an opportunity to explore diverse entertainment.¹¹ As seen from the origins of the Edinburgh International Festival, to create a new home for art and culture was a motivation from the very beginning. The term 'festivalisation,' applies to Edinburgh because it

⁷ Bartie, *Edinburgh Festivals*, 42.

⁸ Bartie, *Edinburgh Festivals*, 52-53.

⁹ "History," Edinburgh International Film Festival, accessed April 22, 2021.
<https://www.edfilmfest.org.uk/about-us/history>

¹⁰ Andy Bennett, Jodie Taylor and Ian Woodward, *The Festivalisation of Culture* (Farnham: Taylor & Francis Group, 2014) 1.

¹¹ Kirstie Jamieson, "Edinburgh: The Festival Gaze and Its Boundaries," *Space and Culture* 7, no.1 (February 2004): 65.

describes the process of introducing the different festivals that became intertwined with the city's character. It also implies a volume of celebrations that each have a concentrated time frame.¹²

Due to the abundance of concert halls and theatres in Edinburgh, the city had the physical infrastructure to accommodate an international arts festival in 1947 and subsequently, many more in the years following.¹³ Heritage and popular culture have been growth sectors in Edinburgh since then, with the festivals supporting this growth as well as providing economic stabilisation. Cliff Hague has suggested the process of festivalisation in Edinburgh happened in three stages as outlined in *Figure 1.1*.¹⁴ The first stage included the three festivals founded in 1947 and the Royal Edinburgh Military Tattoo (founded in 1950) that are arguably the most significant in the city due to their size and imposing nature.¹⁵ This stage of festivalisation was consistent with the cultural revival of Europe that was instigated soon after the war.

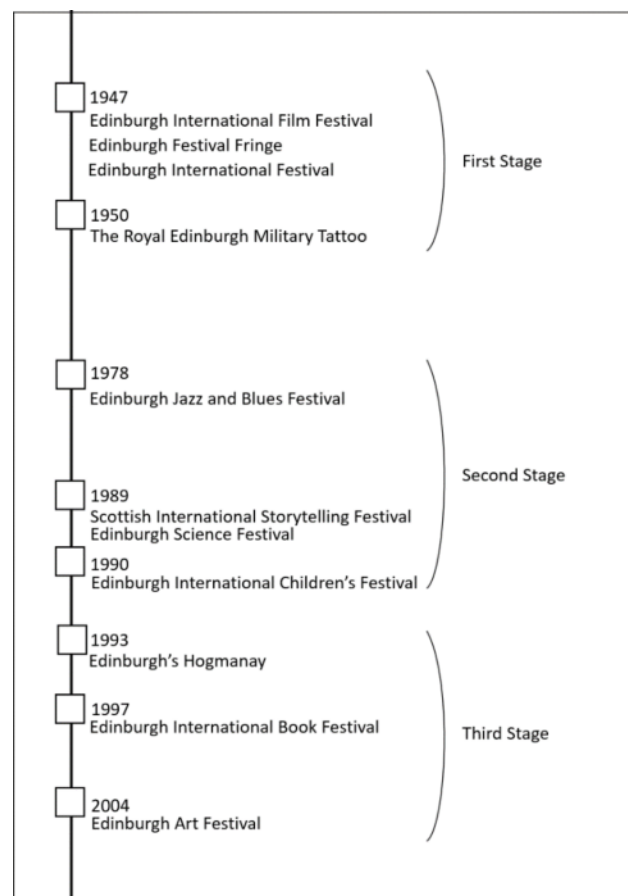


Figure 1.1: Timeline of the three stages of festivalisation

¹² Gerard Delanty, Liana Giorgi, and Monica Sassatelli, ed., *Festivals and the Cultural Public Sphere*, (Florence: Taylor & Francis Group, 2011) 18.

¹³ Cliff Hague, "The Festivalisation of Edinburgh." In *Scottish Affairs*, 30, no. 1 (February 2021) 34.

¹⁴ Hague, "Festivalisation," 38.

¹⁵ Hague, "Festivalisation," 38.

The second stage of festivalisation started 30 years later, when the Jazz and Blues Festival of Edinburgh was founded. It was accompanied by a small cluster of festival beginnings in the late 80s and early 90s. Hague suggests that the city's governing body was perhaps intimidated by the newly introduced UK Garden Festivals, and by Edinburgh's sister city, Glasgow as it was appointed the title of 'European Capital of Culture,' in 1990. The final stage started in the mid-90s when Edinburgh's Hogmanay celebration was ticketed for the first time. This was partly due to crowd control but also helped to, "achieve global TV exposure and branding." Hogmanay and Edinburgh's Christmas helped to establish a year-round festival calendar, and not just a Summer Season.¹⁶

These three stages of festivalisation determine a timeline as shown in *Figure 1.1* on how Edinburgh developed its self-proclaimed title of a 'City of Festivals.' In each of these stages, features of sound and music can be identified amongst the crossovers of genre and discipline; whether it is a festival such as Jazz and Blues that revolves around a particular musical style or Hogmanay that is accompanied by bagpipes and ceilidhs in Edinburgh's massive street party. It establishes a desire to maintain the city as a home for art and culture and keep ahead of the game in the UK. Whilst the festivals may not be directly related in terms of origin or mission, they are each better for each other's presence and hint at a collaborative nature to maintain global standing.

The Current Impact of the Festivals

Soon after the turn of the century, during the third stage of Edinburgh's festivalisation, there was a growing interest into what impact the festivals were having. As a result, research reports were commissioned to investigate the festivals for two reasons. One, was to identify their current impact and the second, was to aid in their future planning.¹⁷ With the desire to maintain Edinburgh as a world leader of festivals, the reports provide invaluable insight into their impact and goes beyond economical discourse.

The *Thundering Hooves Report*, of which there are two (2006, 2015), fulfil the latter mission of aiding future planning of festivals. They are, "metaphorically named after the sound of the competition catching up with Edinburgh."¹⁸ This metaphor alone highlights how Edinburgh as a city of festivals, is determined to maintain its social standing.

¹⁶ Hague, "Festivalisation," 38-39.

¹⁷ "Research Reports," Edinburgh Festival City, accessed April 16, 2021.

<https://www.edinburghfestivalcity.com/about/documents/156-research-reports>

¹⁸ "Research Reports."

In 2011, BOP Consulting, a company that specialise in culture and creative industries, were commissioned to create the *Edinburgh Festivals Impact Study* to quantify the different areas of impact. As with *Thundering Hooves*, the report was updated in 2015. The 2015 *Edinburgh Festivals Impact Study* (released July 2016) explored five core outcomes as listed in *Table 1.1*.¹⁹

1	Economic Impact
2	Cultural Impact
3	Social Impact and Wellbeing
4	Placemaking and Identity
5	Environmental Impact

Table 1.1: Outcomes of Edinburgh Festivals Impact Study 2015

In the Executive Summary, it was described that the Edinburgh Festivals delivered an “unrivalled international platform,” with 92% of respondents to the survey describing them as a must-see event.²⁰ This point of cultural impact was furthered as 76% of respondents believe that the festivals gave them the opportunity to discover new talents, styles, or genres as they were more accessible by being performed in the same location.²¹ The exploration of arts and cultural objects is at the very core of the Edinburgh festival programme. With so many events overlapping with one another, specifically in Summer, it provides opportunity to discover many new genres.

Actor and author, Simon Callow, summarised the festivals crowds as, “there’s no audience like it.”²² Whilst he was likely referring to the diversity of the attendees and the resulting buzz in Edinburgh’s city centre, it can also be used to describe the audience size. Across the (then 12) festivals (represented by *Festivals Edinburgh*) in 2015, there were 4,537,937 attendances, up 6% from 2010.²³ This not only has huge, positive impact on the hospitality and tourist sectors, but with approximately 40% of attendees being local to Edinburgh, it furthers the idea of the city’s festival identity and the joy brought to residents from having such cultural access.²⁴

¹⁹ Richard Naylor, Caterina Brazanti, Bronwyn McLean, and Douglas Lonie, *Edinburgh Festivals: 2015 Impact Study*, Edinburgh: 2016. Accessed April 16, 2021, 6.

https://www.edinburghfestivalcity.com/assets/000/001/964/Edinburgh_Festivals_-_2015_Impact_Study_Final_Report_original.pdf?1469537463

²⁰ *2015 Impact Study*, 1.

²¹ *2015 Impact Study*, 8-9.

²² “Edinburgh’s Festivals: An Overview,” YouTube, uploaded April 12, 2017.

<https://www.youtube.com/watch?v=jMHCZqaYTIY&t=138s>

²³ *2015 Impact Study*, 13.

²⁴ *2015 Impact Study*, 13.

With a high attendance rate from locals, Scottish businesses and organisations are often included in the making of the festivals, as identified by *The Network Effect*. *The Network Effect* was a study released in 2018 that “identifies five common impacts that the festivals have collectively in the Scottish ecosystems of cultural and event production.”²⁵ They are identified in *Table 1.2*. Whilst having a similar theme to the previous Impact Studies, this report had a stronger focus on the role that the Edinburgh festivals had in a wider, national context.

1	Scottish creative talent gets high profile promotion
2	For the event production sector, the festivals create stability
3	The festivals support sectoral lead bodies
4	Formal and informal training initiatives are built around the opportunities the festivals present
5	Gives cultural organisations and audiences pride and confidence across the nation

Table 1.2: Common Impacts of the Edinburgh Festivals

In the executive summary of *The Network Effect*, the report discloses that 89% of spending on event production was directed to Scottish based companies and 56% of the money spent on creative talent was on Scottish individuals and organisations.²⁶ This is a far cry from the inauguration of the Edinburgh International Festival that was publicly criticised for not showcasing the Scottish arts enough on their home stage. It highlights a development from the first stage of festivalisation, where new events help contribute to the support of the Scottish creative industry. These statistics are the perfect example of the fact that collaboration between creatives is key for a desirable outcome.

The third stage of festivalisation was speculated by Hague as a move to make Edinburgh a desirable candidate for media coverage, particularly on television. This report from 2018, notes that there were 30.1billion views on online articles relating to the festivals globally in the 2016-17 season.²⁷ This astronomical number cements Edinburgh’s worldwide identity as a ‘City of Festivals,’ and that its global scale, “is the foundation of all the Festivals’ impacts on the Scottish cultural and

²⁵ BOP Consulting, *Edinburgh Festivals: The Network Effect*. Edinburgh: 2018. Accessed April 16, 2021, 2. https://www.edinburghfestivalcity.com/assets/000/003/791/The_Network_Effect__July_2018__original.pdf?1531301203

²⁶ *The Network Effect*, 2.

²⁷ *The Network Effect*, 8.

events sectors.”²⁸ The £313m economic impact of the festivals annually, set the precedent for a festival city of which Melbourne was “explicitly” modelled on.²⁹ The festivals are a major attraction for Edinburgh tourism and are a defining feature of Edinburgh/Scotland’s cultural identity that enhances the national and international profile of the city.

Edinburgh as a Festivalscape

The servicescape model refers to the environmental factors that influence the customers’ and employees’ habits of production and consumption.³⁰ Everyone within the physical setting responds to these factors in different levels. Therefore, by controlling the servicescape, behaviours can be influenced to benefit both parties. Environments can be lean or elaborate in terms of detail depending on the desired outcome.³¹

A festivalscape is based on this model as it is the atmosphere experienced by festival patrons where festival benefits are produced and consumed.³² As with servicescapes, the environment created by the festival can be categorised by emotions, each having cognitive and behavioural outcomes.³³ With Edinburgh identifying itself as a ‘City of Festivals,’ the festivalscape model can be easily applied to discover what environmental factors of the city draw in the crowds and encourage them to come back year after year. It should be noted that the festivalscape model was based off a single festival in South Korea. Given the scale of the Edinburgh festival programme, the generalisability of the model is a little uncertain but there are still relevant factors that can be applied to the city as a festival host.³⁴

Festival patrons will respond to their surroundings in three different ways. The first is cognitively where their responses will influence their beliefs about a place/environment. The second is emotionally, where their surroundings will have an effect to how the patron is feeling internally. If a festival attendee is enjoying their time at the festival, they will have a pleasurable emotional response and are more likely to spend time there and return at a later date. Finally, there is a

²⁸ *The Network Effect*, 10.

²⁹ *The Network Effect*, 3-6.

³⁰ Mary Jo-Bitner, “Servicescapes: The Impact of Physical Surroundings on Customers and Employees.” *Journal of Marketing* 56, no. 2 (April 1992): 57.

³¹ Jo-Bitner, “Servicescapes,” 59.

³² Yonh-Ki Lee, Choong-Ki Lee, Seung-Kon Lee, Barry J. Babin, “Festivalscapes and Patrons’ Emotions, Satisfaction, and Loyalty.” *Journal of Business Research* 61, no.1 (January 2008): 57.

³³ Lee, Lee, Lee, and Babin, “Festivalscapes,” 57.

³⁴ Lee, Lee, Lee, and Babin, “Festivalscapes,” 57.

physiological reaction where environmental factors can cause a reaction such as physical discomfort.³⁵

These three different responses will be influenced by different cues. Intrinsic cues are physical to the environment. They could be thermal conditions, location, and crowds, alongside factors that influence the five senses like light intensity, colours, smells and most relevant to this dissertation, sound.³⁶ As this literature demonstrates that soundscapes are a crucial element to festival patronage, if they are not reflective of Edinburgh as a city of festivals, audiences will fail to return. Intrinsic factors are opposite as they are not physical but are just as important to the festivalscape. Prices, brands, and reputation are critical for servicescapes and festivalscapes, to ensure an engaged and responsive environment.³⁷

In Edinburgh both intrinsic and extrinsic cues rely on one another to elicit positive cognitive, emotional and physiological responses from festival patrons. For Edinburgh, the reputation that it maintains as a city of festivals, a home for global artists and a cultural hub is an important draw for worldwide audiences. But without the physical factors of Edinburgh as a city and of the festivals themselves, it wouldn't be possible to maintain this reputation. Likewise, the sound, colour and sensory explosion provided by the festivals wouldn't be possible without the reputation of Edinburgh drawing in the necessary personnel and resources for them to happen. This is largely due to the aspect of collaboration in the festivals. They must each work with each other, and often other cultural or educational institutions too, to populate a festivalscape.

It is important for Edinburgh to be mindful of the responses elicited as a result of the festivalscape. It was established by the *Edinburgh Festivals Impact Study 2015*, that providing opportunity to explore the arts and different genres was at the heart of the programme. By not keeping festivalscape factors in mind, particularly ones that influence physiological reactions, the festivals will become increasingly inaccessible and start to alienate audiences. Intrinsic cues of the festival environment, such as the immense summer crowds, can be overwhelming with the possibility of having a substantial impact on a person's emotional and physical being. Whilst reputation is less likely to alienate a festival patron, price, (an extrinsic factor) can deter members from experiencing shows or events, especially if it is a genre they are not familiar with.

³⁵ Lee, Lee, Lee, and Babin, "Festivalscapes," 57.

³⁶ Lee, Lee, Lee, and Babin, "Festivalscapes," 57.

³⁷ Lee, Lee, Lee, and Babin, "Festivalscapes," 57.

Edinburgh as a Soundscape

A soundscape refers to all the auditory components featured in an environment. The physicality of a sound environment confines it to the category of intrinsic/physical cues. Like a festival- or servicescape, a soundscape can be used to influence the thoughts and behaviours of employees and customers. By creating a sonic threshold, a physical area particular to a type of sound(scape), you can attract a specific type of consumer. This is similar to the way a shop will blast music to connect with its target audience.³⁸ As part of a festivalscape, a soundscape can consist of a range of things integral to Edinburgh during its peak festival season. Secondary features will include the example of shop music, but also the cheering and applause for street performers, or the sound of constant excitement on Edinburgh's streets that can drown out the sound of many pipers. The most immediate components of a festival soundscape that springs to mind, are the musical performances and concerts that take up a large part of the programmes featured on the individual programmes. It is identifiable that Edinburgh as a city plays a role in this soundscape and could arguably be referred to as a technology in itself.

It was mentioned earlier that festivalscapes provide a level of accessibility for exploring new genres. The familiarity of music makes it a key tool for opening up the arts and the Edinburgh festivals to large audiences. It makes the exploration of soundscapes and how they reflect the characteristics of Edinburgh as a festival city all the more interesting. Whilst most of the festivals intuitively associated with Edinburgh are arts based, they do not have to be in order to utilise a digital soundscape to connect to their desired audiences and fulfil their mission. The Science Festival is a perfect example of this. Speaking with Creative Director, Amanda Tyndall, she has said that during her many years at the festival, they are always looking to find ways of how they can, "better use digital tools, techniques and approaches to create more engaging and more emotive experiences..."³⁹ (See Appendix A-1). A creative example of this comes from 2019 in the form of *Melody and Sam*. It was a piece on climate change aimed at children ages 5-8 that worked in partnership with a theatre company (See Appendix A-2).⁴⁰ It utilised a sonic landscape to connect with the children and immerse them in the themes of a show in an accessible and engaging way.

Performances of a nature like *Melody and Sam* have featured in the Science Festival programme a few times. The growing experience with these technologies was leading up to a major event in 2020, described by Tyndall as "immersive multimedia installation around the theory of

³⁸ Jonathan Sterne, "Sounds Like the Mall of America: Programmed Music and the Architectonics of Commercial Space." *Ethnomusicology* 42, no.1 (Winter 1997): 31.

³⁹ Amanda Tyndall, interview with the author, Edinburgh (Zoom), February 15, 2021.

⁴⁰ Tyndall, interview.

elements,” that was unfortunately cancelled because of the pandemic (See Appendix A-1).⁴¹ The mission of the Science Festival is, “to inspire, encourage and challenge people of all ages and backgrounds to explore and understand the world around them.”⁴² By using the sensory and intrinsic cues of different soundscapes to tell a story, these technologies can be used to explore different areas of science. As music and sound are more intuitively recognised than physics and chemistry, it can be used as a tool to reach different demographics, such as children, and creates opportunities for learning. It shows that the potential cognitive responses to the sonic features were taken into account and reflected a key part of a city of festivals, accessibility.

Conclusion

Edinburgh adopting an identity as a ‘City of Festivals,’ was a process that took years of curation and was not an overnight development. However, it was a conscious journey as the three stages of festivalisation personify the vision of being a world leader in festivals for the arts and beyond.⁴³ The different celebrations that occur throughout the year are a result of collaborations between multiple organisations to ensure a seamless programme that creates opportunity for artists and audiences alike. Soundscapes are an intrinsic part to Edinburgh’s identity as a ‘City of Festivals,’ as it shapes the individual festival programmes as well as the city itself. Streets are transformed into stages of music and theatre providing opportunity to discover new passions at every corner. The responses of festival patrons are dependent on the soundscape of Edinburgh amongst other intrinsic cues, and it is vital that they each reflect Edinburgh as a city and exemplify some of its characteristics.

⁴¹ Tyndall, interview.

⁴² “About Us,” Edinburgh Science, accessed February 12, 2021. <https://www.sciencefestival.co.uk/about>

⁴³ Hague, “Festivalisation,” 38.

CHAPTER TWO

Immersion

Defining Immersion

The feeling of immersion can suggest a physical sensation such as plunging into the sea and being surrounded by the waves.¹ Immersion can apply to a whole spectrum of environments and is being used more frequently in realms of consumerism to influence habits and entertainment. The key factor of an “immersive” experience is that the space in which it takes place hosts an overarching narrative.² The area that a person is in will take on a different theme as to what is often expected. So, in terms of entertainment, there will be technological and performative approaches to enhance the immersive-ness and change the expectation of an environment.

The feeling of immersion is subjective with some wondering if you can ever be truly immersed in something.³ Individual experiences of an environment will be based on pre-existing social relationships with activities and emotions.⁴ Whilst the level at which a person experiences immersion is influential, the main objective is for them to experience a “perspective shift” where specific details alter their way of thinking and change their experience of a space, even if only minutely.⁵ These details are usually referring to intrinsic visual cues, but it thoroughly applies to factors of other senses, including sound.⁶ Spaces are often designed with audio in mind and the architecture too will reflect the soundscape.⁷ This chapter explores how soundscapes can play into this idea of immersion from different performances and installations of the Edinburgh festivals. By identifying the perspective shift of each narrative, it is possible to explore how the music and/or sound enhances the themes.

¹ Scott A. Lukas, “Questioning “Immersion” in Contemporary Themed and Immersive Spaces,” in *A Reader in Themed and Immersive Spaces*, ed. Scott A. Lukas (Pittsburgh: Carnegie Mellon, 2016), 115.

² Scott A. Lukas, “Introduction: The Meanings of Themed and Immersive Spaces,” in *A Reader in Themed and Immersive Spaces*, ed. Scott A. Lukas (Pittsburgh: Carnegie Mellon, 2016), 3.

³ Lukas, “Immersive Spaces,” 119.

⁴ Lukas, “Immersive Spaces,” 116.

⁵ Lukas, “Immersive Spaces,” 116.

⁶ Gordon S. Grice, “Sensory Design in Immersive Environments,” in *A Reader in Themed and Immersive Spaces*, ed. Scott A. Lukas (Pittsburgh: Carnegie Mellon, 2016), 131.

⁷ Grice, “Immersive Environments,” 136.

Night Walk for Edinburgh

The *Night Walk for Edinburgh* is a narrated video walk through Edinburgh's Old Town after dark, created by Janet Cardiff and George Bures Miller on commission from the Fruitmarket Gallery. In 2019, it premiered at the International Festival, who were partners in the artistic process, but it also featured in the programme of the Art Festival as an installation by one Edinburgh's art galleries. Since then, it has become a permanent addition to the Fruitmarket's collection and is available to experience all year round.⁸ Cardiff and Miller have produced immersive walks across the world, and with a relationship between artist and gallery already existing in Edinburgh, there was excitement from both parties at the possibility of a similar installation in Scotland.⁹

It took around three and a half years for the walk to be completed as they shot numerous test scenes around the city's cobbled streets and began to create the collage of stories that appeared in the final version.¹⁰ The 55-minute intimate experience takes you through the narrow alleys and steep closes that weave through Edinburgh's Old Town and around the Royal Mile. You are led by the sound of Cardiff's voice as she directs you around the city, pointing out different people that appear in the video in front of you, as seen in *Figure 2.1*. Her narration is the most prominent and consistent feature of the night walk's soundscape as it serves as a constant companion to the dark streets. In chapter one, some noticeable features of Edinburgh's soundscape as a festival city are discussed, including the sounds of tourists on the streets. These features are reflected in the night walk because as you wander around listening to Cardiff, you squeeze past ghost tours, hearing the guide telling sinister tales, and dodge drunken revellers on the High Street. Or as the soundscape would have you imagine.

Music is also incorporated into the soundscape with performers dotted around the walk. A personal favourite of mine was the violinist playing on a bridge, visible after turning a corner. Immediately before, Cardiff is describing a lion from her dream as a man in fancy dress wearing a lion mask walks past you in the opposite direction. It invokes a feeling of surrealism, a favourite feature of Cardiff and Miller.¹¹ This feeling is continued when the violinist comes into view because whilst street performers are common during the summer festival season, to see one play Bach's Chaconne in the rain is extremely poetic and a captivating sight. The feeling of immersion is particular to you only as beyond the headphones and screen, there is no violinist, evidently a shift in

⁸ "Night Walk for Edinburgh," Fruitmarket Gallery, accessed April 27, 2021.

<https://www.fruitmarket.co.uk/exhibitions/night-walk-for-edinburgh/>

⁹ Sam Woods, unrecorded interview by the author, Edinburgh (Zoom), April 9, 2021.

¹⁰ Woods, interview.

¹¹ "Janet Cardiff and George Bures Miller: Night Walk for Edinburgh." YouTube. Uploaded August 27, 2019. <https://www.youtube.com/watch?v=s5aVHwdfiEU&t=10s>

perspective of the space around you. Using a technique called binaural recording, as you walk away, the Baroque melody is still being heard as if it in the space behind you. It is a recording technique that reflects spatial qualities of human hearing and helps to understand acoustic ecologies of a place by introducing sound cues that influence the perspective shift.¹²



Figure 2.1: The *Night Walk for Edinburgh* follows a female character in a red coat¹³

In 2019 when the *Night Walk for Edinburgh* was included in some festival programmes, a participant would borrow a tablet and pair of headphones from the Fruitmarket Gallery to experience the installation. As the walk began and ended at the gallery on Market Street, it was easier to transition in and out of the immersive world. There was the possibility to chat with others about your experience meaning your involvement with this unique Edinburgh world didn't end as soon as you took off your earphones. This was an important feature for Sam Woods, Exhibitions Curator at the Fruitmarket Gallery, as she described in a non-recorded interview, the intention to keep the conversation of immersion going, even after the walk had ended.¹⁴

By capturing Edinburgh and the features of its festival scene at the heart of the piece, the *Night Walk for Edinburgh* is unique to others across the globe. Intimacy has always been an important part of these projects and the unique soundscape captures this as your perspective of the city arounds you shift along the trail. The music was selected carefully to reflect the immersive theme and the binaural recording meant that it surrounds you in a specific way. The walk and its

¹² "Binaural Recording Techniques," DPA Microphones, accessed April 22, 2021.

<https://www.dpamicrophones.com/mic-university/binaural-recording-techniques>

¹³ Picture: "Night Walk for Edinburgh," Edinburgh International Festival, accessed April 29, 2021.

<https://www.eif.co.uk/whats-on/2019/nightwalk>

¹⁴ Woods, interview.

accompanying soundscape both reflect the topography and architecture of Edinburgh as it highlights its characteristics of curved streets and hidden closes. The soundscape then reflects Edinburgh's identity as a 'City of Festivals,' because of the artistic performers dotted along the installation, exemplifying musical collaboration.

The effectiveness of the immersive nature depends on each participant's experience of the streets of Edinburgh. The unevenness of the ground can make the walk inaccessible to some and experiencing the walk at night with the intention of paying little attention to real-life surroundings can also be off putting, especially to women. A separate version of the *Night Walk for Edinburgh* was created and displayed inside the Fruitmarket Gallery. It meant the experience was accessible to the widest possible audience and showed a thoughtfulness towards cognitive, emotional and physiological responses that can sometimes go unnoticed. The stages of festivalisation in Edinburgh has ensured that accessibility to arts and cultural objects was open to everyone. This separate version of the night walk has ensured this vision was maintained and completely reflective of Edinburgh as a city of festivals. Since 2019 when the night walk became a permanent part of the Fruitmarket's collection, it has been transformed into an app, removing the need to borrow equipment from the gallery.¹⁵ As well as being able to follow the trail on your own device, an 'at-home' version was released too in lieu of a version at the gallery itself. It maintains the position that the event is available to all and you can experience some of the features of Edinburgh as a city of festivals, even if not in the city itself.

The developments of technology were made possible by a number of organisations and funding. Cardiff and Miller injected masses amount of creative energy in the project and were supported particularly by the Edinburgh International Festival and their technicians who helped with lighting along the walk.¹⁶ The Art Fund, who helped to fund the installation, along with the Creative Informatics Department at the University of Edinburgh, were supportive in the development of the app, alongside the Fruitmarket Gallery. Collaboration was furthered with the representation of different festivals that also brought in new people from an audience perspective.¹⁷ These organisations are only some featured in the long list of credits that made the work possible. As the Fruitmarket Gallery commissioned the piece for the City of Edinburgh, the piece of public art is accessible in our pockets and available to be enjoyed by all.

¹⁵ "Night Walk for Edinburgh."

¹⁶ "Walks: Night Walk for Edinburgh," Janet Cardiff & George Bures Miller, accessed April 27, 2021. <https://cardiffmiller.com/walks/night-walk-for-edinburgh/>

¹⁷ Woods, interview.

The Encounter

We have already seen from the *Night Walk for Edinburgh* that soundscapes are critical to different types of festival event, not just those that are strictly musical. In an interview with *The Skinny*, Fergus Linehan, Director of EIF noted one of his favourite names in theatre as Simon McBurney.¹⁸ McBurney's show titled *The Encounter*, debuted at the Edinburgh International Festival in 2015 as a one-man theatrical performance incorporating, "an intimate and shifting world of sound."¹⁹ McBurney tells the story of Loren McIntyre, who was a photographer who found himself lost in the rainforests of South America. Based on the book *Amazon Beaming* by Petru Perpescu, *The Encounter* takes the listener on a journey of sound and, "with nature, with time, and with our own consciousness."²⁰

The Encounter begins with McBurney demonstrating some of the technologies that are to be used throughout. Binaural recording, as mentioned prior, uses two sensitive omni-directional microphones, usually placed on a silicon model of a head at the position of the ears. They pick up sound from all directions instead of being pointed at a particular sound source and are responsive to reflections of sound that are interpreted by the brain.²¹ As the audience looks on wearing a pair of headphones, McBurney uses the silicon head, as shown in *Figure 2.2* to demonstrate the spatial sound possibilities in a way that feels almost uncomfortably intimate as he pretends to blow in your right ear. It creates the feeling of immersion because your perspective of the space directly around you changes; it feels as if there is someone standing beside you because of this soundscape technology. The beginning of the show is accompanied by another part of the soundscape, audience laughter. Whilst an (presumably) intended reaction from the audience and therefore, part of the performance, it connects with the idea that you cannot be fully immersed, at least, not yet. It acts as a transitional phase from your original perspective of theatre performance into the layered soundscape of the Amazon rainforest that begins to evolve. This idea of a transitional phase was demonstrated earlier after experiencing the immersive night walk.

Whilst McBurney is on stage performing, the soundscape has some extraordinary features to it, including two perspectives of the story. The first is a narrator, voiced by McBurney without many audio tweaks, who describes the journey as we accompany the photographer through this

¹⁸ Emma Ainley-Walker, "Fergus Linehan: The Eclectic International," *The Skinny*, July 28, 2015. <https://www.theskinny.co.uk/festivals/edinburgh-festivals/eclectic-international>

¹⁹ "The Encounter," Edinburgh International Festival, accessed April 26, 2021. <https://www.eif.co.uk/whats-on/2015/encounter>

²⁰ "The Encounter."

²¹ "Binaural Sound Recording," Wimbledon Sound, accessed April 22, 2021. <https://www.wimbledonsound.com/binaural-sound-recording/>

wilderness, pointing out details in our imaginary physical surroundings. The other, is a first-person perspective of McIntyre using a separate microphone where McBurney's voice is heard with an American accent and adjusted to sound deeper. Not only do the sound technologies distinguish the performance viewpoints but McBurney himself is acting each role to perfection, immersing the audience in the story when all they see is a single actor on stage, yet hearing many. The dialogue is accompanied by other sound elements such as the sounds of a rainforest as we follow McIntyre through the tall trees. McBurney uses pre-recorded sounds, such as those of the rainforest, mixed with others that are performed live, like the snapping of twigs, to layer the soundscape. Despite the in-person demonstration of sound effects, our perspective of the environment is still changed from the over-arching narrative provided by the soundscape. Each intricate detail to the soundscape distinctly appears in our minds as intended, and as an audience we are fully immersed in the story.



Figure 2.2: McBurney interacting with the silicon head for binaural recording²²

Binaural recording comes to the forefront on many occasions, particularly as McIntyre appears to experience moments of madness and “feels like an animal.” McBurney approaches the silicon head on stage, growling in our ears, giving the impression of circling each member in the audience. Even with the vision of him on stage, the animalistic sounds create goosebumps up your arms, induced by McIntyre's internal struggle. Sonic pedals create possibilities to enhance the variety of sounds heard. McBurney creates short loops on stage of anguished breathing that can be narrated over as the story continues through the photographer's times of desperation. Feelings of isolation are apparent when there is an echo to McIntyre's voice in an intimate experience where

²² Picture: Eve Newstead, “The Encounter Online – Complicité, YouTube,” *The Reviews Hub*, May 16, 2020. <https://www.eif.co.uk/whats-on/2019/nightwalk>

the audience feels like they are in McIntyre's head, exploring his thoughts, and accompanied by no other sound.

Over the course of the two-hour performance, the relationship between audience and theatre shifts. It starts as audience members find their seats and the lights dim, common to most theatre productions. But almost immediately, the experience differs from the norm when everyone is instructed to wear the headphones provided. The sonic journey throughout creates a disconnect from the sounds being made on stage and the soundscape heard through the headphones. This disconnection is a result of a shift in perspective of live theatre and gives the feeling of complete immersion.

After the premiere of *The Encounter* in 2015, some audience members were interviewed to gain their immediate reaction. They were left in awe after the performance with one person saying, "I can't believe it was all one person on stage doing everything."²³ It is apparent from this comment that they were immersed in the story being told by McBurney as their perspective of the single actor on stage shifted to believe that they were hearing more than a single voice. In an online review of the performance, the soundscape technologies, including the binaural recording techniques, were described as "clever sound magic!"²⁴ This emphasises that the soundscape was critical to the performance and enhancing the feeling of immersion. As part of my research, I experienced the show through my laptop and earphones instead of in-person. Even through this secondary viewing, hearing McBurney move around my head was a bizarre feeling and made me question if I was alone in the room. The different soundscape technologies including loop pedals, pre-recordings and binaural techniques created a sensory way of storytelling that did not rely heavily on visual cues to immerse the audience in a narrative.

The Encounter was a co-production between the Edinburgh International Festival, Complicité (a theatre company co-founded by McBurney in 1983), and other performance institutions in Europe such as the Barbican in London.²⁵ With EIF investing in Complicité and giving *The Encounter* a premiere, they continue to operate in way that is faithful to their original mission to "provide a platform for the flowering of the human spirit," and helped to navigate the sense of the piece (See Appendix A-3).²⁶ The extrinsic cues of status and reputation of the International Festival was an

²³ "The Encounter Audience Reaction | Festival 2015," YouTube. Uploaded August 11, 2015.

<https://www.youtube.com/watch?v=e-anjKWJx4>

²⁴ Jo Tomalin, "The Encounter: Complicité / Simon McBurney," *Fringe Review*, August 22, 2015.

<http://fringereview.co.uk/review/edinburghfestival/2015/the-encounter-complicite-simon-mcburney/>

²⁵ "The Encounter," Complicité, accessed April 26, 2021.

<http://www.complicite.org/productions/TheEncounter>

²⁶ Roy Luxford, interview by the author, Edinburgh (Zoom), February 5, 2021.

element of *The Encounter*'s success. However, they would not matter if it were not for the soundscape technologies eliciting the cognitive response of immersion. We know that collaboration between organisations is central to Edinburgh as a city of festivals because the festivalisation of the city would not have happened without it. The collaboration in producing *The Encounter* from different institutions is reflective of this element in the Edinburgh festival scene. Following the world premiere of *The Encounter* at Edinburgh International Festival, the show has gone on to have a long touring life and experienced much success.²⁷ As well as being able to see it live in theatres, there have been live-streamed versions available to watching from home so that a larger audience could be introduced to this unique piece of theatre. The increased accessibility of the piece came from the collaboration between Complicité, EIF and others who have cohesively worked together to celebrate this artistic vision and bring it forward.

Soundscape technologies have never just been exclusive to musical performances since the inception of the Edinburgh festival scene. *The Encounter* has gone beyond the traditional ideas of a soundscape and explored new possibilities of the genre. It reflects on the city's core themes of collaboration and providing opportunity to revolutionary works of art.

Conclusion

Even with Edinburgh being a relatively small capital city, when the floods of tourists descend during the Summer festival season, it is easy to be overwhelmed by the masses of people. These immersive soundscape performances demonstrate that there are still ways to connect to Edinburgh as a city of festivals even if you choose to separate yourself from the chaos of it all. It can be as simple as putting on a pair of headphones and wandering around the city alone with a stranger's voice for company. Edinburgh showcases a range of art throughout the festival calendar and sound is used across different genres and disciplines such as theatre. Both *The Encounter* and *Night Walk for Edinburgh* showcase that soundscapes can be effective with or without music and take you to places on your doorstep or far beyond. Either way, collaboration between different artists and organisations are what makes the festivals possible in the first place and this is only enhanced by the complexity of soundscape technologies. Edinburgh as a city and as a home for creatives, presents opportunities to explore narrative in an intimate way that surrounds you, even when it doesn't.

²⁷ Luxford, interview.

CHAPTER THREE

Spectacle

Defining Spectacle

The term, 'spectacle,' immediately invokes an idea of something that is large, imposing and demanding of attention. Even still, the perception of the word can vary between individuals, so it is important to establish some common criteria to properly analyse how the soundscape technology plays a role. Spectacles are events of arranged display that are intended to be seen by a mass, and often public, audience. This definition can be applied to a variety of genres including music, where the spectacle is witnessed by consumers of a soundscape. Producers, artists and consumers understand the performative aspect of the media as the spectacle will influence the perception of those who view it.¹ Guy Debord has a Marxist perspective on the role of spectacles in society and deems their origins as a status of power.² He wrote that "the spectacle's essential character reveals it to be a visible *negation* of life – a negation that has taken on a *visible form*." ³ Whilst this is not a viewpoint I necessarily agree with, it will serve as a contrasting perspective to the role of soundscape technologies as a spectacle.

An artistic spectacle as part of a festival will have an instantaneous reach by immediately capturing the attention of its audience due to the overwhelming scale.⁴ This idea plays into the nature of festivals themselves as they burn exceedingly bright for a short period of time and disappear almost as quickly. Bruce Magnusson and Zahi Zalloua write, "what makes an event a spectacle – an image that takes on its own life – has everything to do with the reception of the event." This emphasises the instantaneous reach of the event and that how it is perceived by the audience matters. At their best, spectacles can encourage participation.⁵ Arguably, events discussed in the previous chapter such as the *Night Walk for Edinburgh* can also fit the description of what is regarded as a spectacle as they encourage participation. What distinguishes the following

¹ Bruce Magnusson and Zahi Zalloua, "Introduction," in *Spectacle*, ed. Bruce Magnusson and Zahi Zalloua (Seattle, Washington: University of Washington Press, 2016), 9.

² Guy Debord, *The Society of the Spectacle*, trans. Ken Knabb. (Berkeley, CA: Bureau of Public Secrets, 2014), 4.

³ Debord, *Spectacle*, 4.

⁴ Magnusson and Zalloua, "Introduction," 4.

⁵ Magnusson and Zalloua, "Introduction," 7.

performances from the ones discussed, is the physicality of the soundscape and how it is represented in a much more imposing and overwhelming manner.

The Edinburgh International Festival Opening Events

Fergus Linehan introduced a new initiative to kickstart the Edinburgh International Festival season during his first year as Director of EIF by commissioning an opening event of jaw-dropping magnitude. 59 Productions, a design studio and production company based in London were commissioned for the project as Linehan had worked with them in previously in Sydney. Having worked on numerous projects, including the Opening Ceremony for the London Olympic Games in 2012, 59 Productions were thoroughly acquainted with large-scale, open-air productions. With a proven partnership in existence already, the concept for a new opening event of the International Festival, had all the resources to be a success.

Harmonium

The first opening event of this kind was on the 7th of August 2015, titled *Harmonium*. It was named after the choral piece composed by John Adams that served as founding inspiration for the showstopper at the Usher Hall.⁶ The aim of 59 Productions was to create a spectacle of sound and imagery that drew in the widest possible audience and showcased the music of *Harmonium*. 2015 marked the 50th anniversary of the Edinburgh Festival Chorus, with whom EIF has a year-round relationship with.⁷ *Harmonium* served as the perfect piece to celebrate this milestone in a way that was special to the involvement of the chorus. To further incorporate the singers into the event, the visuals projected onto the Usher Hall drew inspiration from the performers themselves and what it meant to be a member of the chorus. However, a challenge lay in the question of, ‘how can the music and chorus be represented on the side of the Usher Hall?’

By capturing data of how singers’ faces moved as well as eye tracking and pulse monitoring, the event began to capture the essence of performance from the hearts and minds of the chorus members.⁸ The School of Informatics at the University of Edinburgh were involved with recording the variables as they provided access to high level equipment for an “innovative look of what it

⁶ “The Harmonium Project.” Edinburgh International Festival. Accessed April 3, 2021. <https://www.eif.co.uk/whats-on/2015/harmonium>

⁷ Roy Luxford, interview by the author, Edinburgh (Zoom), February 5, 2021.

⁸ “The Harmonium Project – Behind the Scenes,” Vimeo, uploaded August 14, 2015. <https://vimeo.com/136342369>

means to be a performer and a singer.”⁹ This data was then transformed into visual artistry to be projected on the large canvas that is the Usher Hall, seen in *Figure 3.1*, accompanied by a performance of *Harmonium* from the chorus that was amplified into the city. Richard Slaney, the Creative Director of *The Harmonium Project* described the sound environment as crucial to the success of the event. He, along with the rest of the 59 Productions team, pushed for the immense volume that was consistent for its entirety and recalled, “we shook a lot of buildings and set off a lot of car alarms in our soundchecks...” as he described the volume that surrounded the audience (See Appendix A-4).¹⁰ The loud volume, usually only found in jam-packed arena gigs, was to increase the impact of emotion that the audience felt in terms of culture, especially when paired with such a remarkable piece of music. An online reviewer wrote, “But the result – always beautiful and, at times, breathtaking – is even more than the sum of its parts.”¹¹ This review demonstrates the success in eliciting an emotional response from the intrinsic cues of the soundscape and light projections that *Harmonium* consisted of. As a spectacle, the event went beyond its components and took on a whole new life and meaning. With sound forming the inspiration for the event itself, it was imperative that it showcased the dynamic range of the performers and created a memorable marker that the show (and by extension, the festival) was starting.

Harmonium is an excellent example of the collaborative nature between major companies that is necessary to put on such an immense spectacle. There were conversations of production in place between 59 Productions, The International Festival, and the University of Edinburgh. There was also a form of a traditional music partnership in performance from the Festival Chorus and the Royal Scottish National Orchestra who performed the piece alongside the singers. These two groups ensured that Scotland was represented on the global stage as audiences from across the world came to view. Prior to giving a talk as part of the Andrew Carnegie lecture series, Linehan was given praise that “throughout all his programmes, he had brought the best of the world to Edinburgh and taken the best of Edinburgh and Scottish arts to the world.”¹² *Harmonium* is evidence that this was applicable from the very beginning of his Edinburgh career. It also shows how the festival itself has evolved from its inception in 1947, when it was publicly criticised for not representing Scottish arts enough on their home stage, now the choir is front and centre.¹³

⁹ Slaney, “The Harmonium Project – Behind the Scenes.”

¹⁰ Richard Slaney, interview by the author, Edinburgh (Zoom), March 1, 2021.

¹¹ Kirsten Waller, “The Harmonium Project,” *The Wee Review*, August 9, 2015. <https://theweereview.com/review/the-harmonium-project/>

¹² “Andrew Carnegie Lecture Series – Fergus Linehan,” YouTube, uploaded December 6, 2017. <https://www.youtube.com/watch?v=IzdIOAudTOM&t=1564s>

¹³ Angela Bartie, *The Edinburgh Festivals: Culture and Society in Post-war Britain* (Edinburgh: Edinburgh University Press, 2013), 52.



Figure 3.1: The visualisation of what it means to be a singer in the chorus¹⁴

From the very beginning, the International Festival curated its programme entirely around high art, which in 1947, often was inaccessible to vast numbers of Edinburgh citizens. With the country still recovering from the war and many families still surviving on rations, the high ticket prices were unaffordable for the majority, if they were not part of the cultural (and financial) elite.¹⁵ This too, is a concept that has evolved since 1947 because *Harmonium*, an extravaganza of high art, was accessible to all financial backgrounds as there was no ticket fee in place. By taking the soundscape out of the Usher Hall and onto the streets of Edinburgh, the physical boundary encompassing high art was removed and welcomed in an unprecedented number of people. There were an estimated 20,000 people on Lothian Road and Festival Square that witnessed the once in a lifetime spectacle, a fraction of which is shown above in *Figure 3.1*.¹⁶ Despite the extensive planning prior to the event involving road closures and the emergency services, nothing had prepared the International Festival for that much public excitement. The numbers were proof that *The Harmonium Project* was a hit and planning was soon underway for the opening event of 2016.

¹⁴ Picture: "The Harmonium Project," 59 Productions, accessed April 28, 2021. <https://59productions.co.uk/project/the-harmonium-project/>

¹⁵ Bartie, *Edinburgh Festivals*, 44.

¹⁶ Waller, "Harmonium Project."

Deep Time

Deep Time opened the 2016 Edinburgh International Festival on the side of Edinburgh Castle, see *Figure 3.2*, in a spectacular show that embodied the themes of Scotland's, 'Year of Innovation, Architecture and Design.'¹⁷ With Edinburgh featuring at the heart of production, "Deep Time reimagines the ancient site from which Edinburgh sprang, using iconic Edinburgh Castle and Castle Rock [...] as the rugged canvas for spellbinding projections and illuminations inspired by the deep geological history of this unique location."¹⁸ During *Deep Time*, Edinburgh Castle didn't necessarily take on what could be deemed a 'new' life as a spectacle but rather, the event reimaged the castle's old life, before the city existed around it. Slaney, producer of *Deep Time*, commented on how they loved the music in *Harmonium* but wanted to use the soundscape in a way that was different to 2015.¹⁹ The soundscape featured contemporary Scottish music complied into a soundtrack by Mogwai. The electric additions were a sharp contrast to the choral music featured the year prior, but complimented the flashing lights and the feeling of moving through time. In this journey through the creation of Edinburgh, the soundscape also featured crashing waves and volcanic eruptions which as geographical events are spectacles themselves. Using them for *Deep Time* not only connected with the theme of the piece but the sheer volume was almost unable to comprehend, eliciting an emotional and physiological response from audience members, as *Harmonium* did.

In my interview with Slaney, he talked about how they evolved ideas from 2015 to 2016, "Deep Time at the Castle was very much like, "OK! We've done this thing on the Usher Hall and it went really crazy well. We should do this again, let's go bigger in some way and the castle seems like a really great place to do it." (See Appendix A-5)²⁰ In 2016, the collaboration between the International Festival and 59 Productions was formalised in a new way when the latter became Artistic Associates for a three-year residency, emphasising the need for partnership in a city of festivals.²¹

¹⁷ "Standard Life Opening Event: Deep Time," Edinburgh International Festival, accessed April 3, 2021. <https://www.eif.co.uk/whats-on/2016/deeptime>

¹⁸ "Opening Event: Deep Time."

¹⁹ Slaney, interview.

²⁰ Slaney, interview.

²¹ "Deep Time – EIF Opening Event 2016," Vimeo, uploaded February 27, 2017. <https://vimeo.com/205877515>



Figure 3.2: Deep Time projects a volcano erupting onto Castle Rock²²

Bloom

2017 marked the 70th Anniversary of the Edinburgh International Festival. The opening event *Bloom* was created to encompass their mission to, “provide a platform for the flowering of the human spirit.”²³ Techniques like 3D mapping that had been used in previous opening events returned and were projected onto another Edinburgh landscape, St. Andrews Square, as shown in Figure 3.3, and celebrated, “the joyful transformation of the city over the past 70 years.”²⁴ One of the notable differences from previous opening events was an enhanced immersive experience. Whilst the soundscape and animation sequences were on a 20-minute loop, the occasion lasted for two hours on two different nights, encouraging audiences to explore the square at their own pace.²⁵ This translates back to Magnusson and Zalloua’s description of spectacle as encouraging participation. The “visually stunning digital constellation,” utilised sound features such as a war plane flying across the facades, visualising the immense journey that the city of Edinburgh has been on to become, a ‘City of Festivals.’²⁶

²² Picture: “Deep Time: 350 million years of Edinburgh’s history,” British Council, accessed April 29, 2021. <https://www.britishcouncil.org/arts/city-arts-tour/edinburgh/deep-time-350-million-years>

²³ “Standard Life Opening Event: Bloom,” Edinburgh International Festival, accessed April 4, 2021. <https://www.eif.co.uk/whats-on/archived-events/standard-life-opening-event-bloom>

²⁴ “A Platform for the Flowering of the Human Spirit,” 59 Productions, accessed April 27, 2021. <https://59productions.co.uk/project/bloom/>

²⁵ Slaney, interview.

²⁶ “A Platform for the Flowering of the Human Spirit.”



Figure 3.3: Bloom taking over St. Andrews Square²⁷

Five Telegrams

The epic conclusion to the residency of 59 Productions as Artistic Associates took the form of *Five Telegrams*. It echoed the roots of their partnership with the International Festival as the opening event in 2018 took place at the Usher Hall. The commission came from The Edinburgh International Festival, the BBC Proms and 14-18 NOW for the production company and Anna Meredith, who composed a brand new orchestral and choral work for the event.²⁸ The piece was reflective of the centenary of World War I and was inspired by the telegrams sent by young soldiers. Due to the subject matter and the representation, members of the audience were overcome with emotion, with some resulting in tears at the end (See Appendix A-6).²⁹ *Five Telegrams* was shown in London on the Albert Hall before the festival season in Edinburgh, but Slaney felt it had more success in Scotland,

I think it was more successful in Edinburgh because there's something about people's willingness of being the city to be like, "Oh okay, it's the International Festival. I don't know who John Adams is, I don't really know what Harmonium is. But there's a validity in the EIF stamp on something that means, 'I'm going to go and try this thing out and it's free.' (See Appendix A-7)³⁰

This is likely because of the extrinsic cue of reputation of the opening events amongst the city as well as the reputation of the festival drawing in an unmatched audience each year.

²⁷ Picture: "Standard Life Opening Event: Bloom."

²⁸ Slaney, interview.

²⁹ Slaney, interview.

³⁰ Slaney, interview.

The Usher Hall has played host to countless events during the festival's 70+ seasons, providing a stage for world renowned ballets and orchestras, such as the Vienna Philharmonic in 1947. *Harmonium* and *Five Telegrams* incorporated the staple venue into the programme in a new and unique way. It also meant that the audience capacity was much larger than had it been performed inside as a choral concert solely. Contrary to Debord's views I believe that the opening events of spectacles are not the visible form of a "negation of life," but rather the opposite.³¹ Each celebrate some part of life and human existence and the achievements that have been gained as a result. The connection between the city and each opening event demonstrates how ingrained the festival identity is in Edinburgh. It was enhanced by the soundscape to engage the audience in the message and story of each event.

The trend of these soundscape performances is demonstrated in the programming of each festival season and is encouraged by the emotional reaction from the audiences. As discussed earlier, taking these events to the streets opened up the experiences of the festivals to a new range of people, some of which may not be familiar with choral or orchestral music. It provided opportunity to experience a new type of music and made it accessible to view. Not only were they free to view, removing a financial barrier, but the capacity of Edinburgh's public spaces can be up to ten times that of the Usher Hall. The immense turnout for *Harmonium* in 2015 initiated a new trend for the following opening events regarding ticketing. There was no financial cost involved for the audience, but it ensured that there were plentiful resources available to ensure the safety of everyone. The numbers shown in *Figure 3.4* demonstrate that there was an appetite for the opening events.³² Magnusson and Zalloua wrote that that the reception of a spectacle was crucial and with such high attendance numbers, the opening events certainly deserves the title.³³ It is no wonder that hosting a spectacular opening event on Edinburgh's infamous landmarks, was a programme feature for a number of years.

Another element of a spectacle's criteria was that it was, "an image that takes on its own life."³⁴ The opening events of the International Festival connect to this idea by transforming Edinburgh's landmarks to become a place of sound and technicolour, outside of their ordinary standing. However, not only do these spectacles take on their own life but they take on the life of the festival. The opening events encourage the curiosity of each attendee and keep them mesmerised with wonder, and then encourage their participation in the rest of the festival

³¹ Debord, *Spectacle*, 4.

³² Emma Hay, email to author, April 2, 2019.

³³ Magnusson and Zalloua, "Introduction," 7.

³⁴ Magnusson and Zalloua, "Introduction," 7.

programme. *Harmonium*, *Deep Time*, *Bloom*, and *Five Telegrams* not only serve as the starting point of a global arts festival, but they represent to the world Edinburgh's place in the wider arts community as a city of festivals.

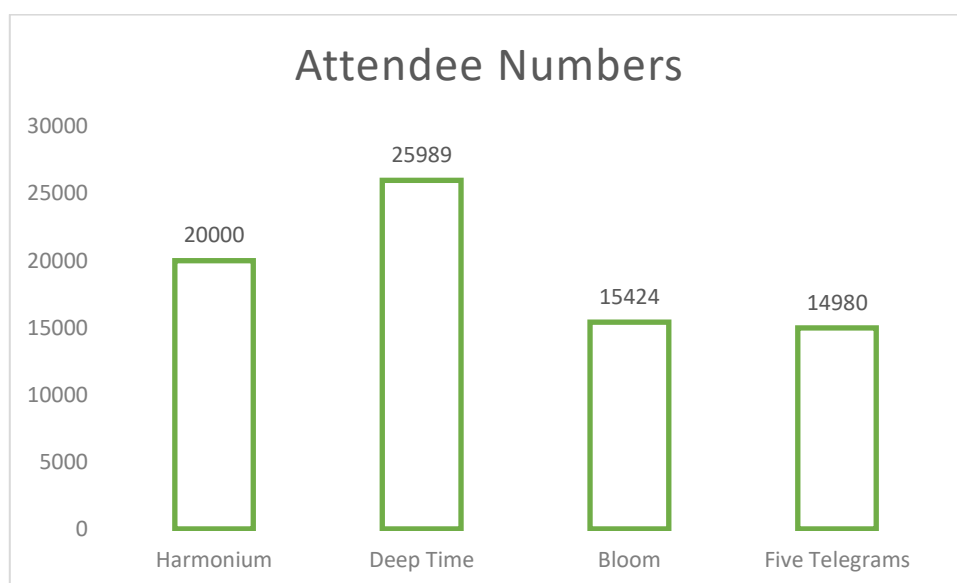


Figure 3.4: Audience figures of the EIF opening events

Whilst researching for my dissertation, I have watched videos of these opening events countless times. Focussing singularly on the soundscape, the concept of *Harmonium* is my favourite. I think there's something incredibly special about showcasing the choir and what it means to be a member on this festival stage. But as a soundscape in Edinburgh specifically, *Deep Time* is the event that has captivated me the most. Throughout my research, it is apparent that a feature of Edinburgh as a city of festivals, is incorporating the city's unique features into the soundscapes of different events. For me, *Deep Time* captures this the most, by taking us back in time and using the landscape to enhance the spectacle of the soundscape. Other cities in the UK have dome-like concert halls to showcase these events, as seen with *Five Telegrams*, but how many can boast a castle atop an extinct volcano?

The Pianodrome

The Pianodrome is a 100-seater amphitheatre made from around 50 upcycled pianos.³⁵ It was constructed in the Summer of 2018 and had a three-month residency at the Royal Botanic Gardens in Edinburgh coinciding with the busiest time of Edinburgh's festival season.³⁶ The

³⁵ "Home," Pianodrome. Accessed April 6, 2021. <https://pianodrome.org/>

³⁶ Tim Vincent-Smith, interview by the author, Edinburgh (Zoom), March 16, 2021.

Pianodrome was involved with the Edinburgh Fringe Festival and also featured in the programme of the Science Festival to draw in a wide range of curious onlookers. Even with the extensive installation in the gardens, there were few concerts officially programmed to happen, an example in *Figure 3.5*, in a bid to encourage more people to wander in whilst exploring.³⁷



*Figure 3.5: Vincent-Smith (violinist) and his band performing in the Pianodrome*³⁸

One of the founding motivations for the project was upcycling. Describing individual pianos as having their own characteristics and tone particular to each instrument, Director, Tim Vincent-Smith decided there needed to be a change to stop scrap pianos from being burned.³⁹ By using them as building materials, the old instruments were used to create the amphitheatre as a communal theatre space. Describing the build as “horrifying” but also exciting, every single part of the Pianodrome, including the handrails and seating, came from a piano, shown in *Figure 3.6*.⁴⁰ With upcycling being a core motivation for the origins of the Pianodrome, it contradicts Debord’s view as all spectacles being a statement of power.⁴¹

³⁷ Vincent-Smith, interview.

³⁸ Picture: Si Hawkins, “How this year’s Edinburgh Fringe is tackling the serious subject of global warming,” *The National News: Arts & Culture*, August 2, 2019. <https://www.thenationalnews.com/arts-culture/on-stage/how-this-year-s-edinburgh-fringe-is-tackling-the-serious-subject-of-global-warming-1.893634>

³⁹ “Instruments in the Architecture: Building the Pianodrome,” Vimeo, uploaded June 24, 2019. <https://vimeo.com/344079660>

⁴⁰ “Instruments in the Architecture.”

⁴¹ Debord, *Spectacle*, 4.

The Pianodrome encourages the belief that not a single person is, 'unmusical.'⁴² With few scheduled events, the Pianodrome was still constantly filled with music as beginners, amateurs and professionals alike could have a play about on the instruments if they wished. This is tied to one of the features of spectacle, that they encourage participation. Not only was it an impressive piece of craftsmanship but it inspired creative practice in those that passed through. The amphitheatre welcomed people of all abilities, ages and experience and was accessible to all, another large motivation for the project (See Appendix A-8).⁴³ The space was wheelchair friendly for those with mobility issues. Due to the physicality of the space, the Pianodrome provided an experience for deaf people too who could feel the vibrations of the music through the structural elements of the space. The physicality of the Pianodrome, and its intrinsic cues allow for cognitive, emotional and physiological responses. You can either interact as a performer or an active listener because the amphitheatre resonates with each note and the sound of applause.⁴⁴



Figure 3.6: The building materials of the Pianodrome⁴⁵

Vincent-Smith believes that being based in Edinburgh influenced the outcome of the Pianodrome in 2018. As a cultural hub of the world, the music scene is constantly growing and it

⁴² "About," Pianodrome. Accessed April 6, 2021. <https://pianodrome.org/about/>

⁴³ Vincent-Smith, interview.

⁴⁴ Vincent-Smith, interview.

⁴⁵ Picture: IMG_9910 by Chris Scott, "About."

comes as no surprise that a project with such deep roots in the instrumental world, drew inspiration from it (See Appendix A-9).⁴⁶ The project is inherently based in Edinburgh because of its connections and funding opportunities but was shaped by hands from across the world. It is only a matter of time to see what other global influences do, as the project expands internationally. The Pianodrome has been franchised to a festival in America with the goal to have a similar amphitheatre on every continent (See Appendix A-9).⁴⁷ The project has been constantly evolving since the start, and as new volunteers join the project, this evolution doesn't appear to be slowing down soon. Participation is a theme commonly found in the Edinburgh festival programme, particularly the Fringe that the Pianodrome was a part of. As each season begins more people and ideas are welcomed into the city.

Lie Still my Sleepy Fortunes

During the Pianodrome's residency at the Pitt Market in 2019, it was once again a Fringe venue and hosted *Lie Still my Sleepy Fortunes*, a work created by Raymond MacDonald and Friends. It was commissioned by Creative Scotland as part of the Made in Scotland Showcase to celebrate the life and work of Scottish writer, Muriel Spark.⁴⁸ It featured a graphic score accompanied by a film made by Jules Rawlinson. The audience were, "sitting in history," as the instrumentalists walked through and around them whilst performing (See Appendix A-10).⁴⁹ Themes of immersion once again crop up due to the intimate seating of the audience and how the close quarters allow the musicians to respond to their emotions, a form of audience participation. The musical soundscape was further enhanced by real time sampling including words written by Spark (See Appendix A-10).⁵⁰

The themes of *Lie Still my Sleepy Fortune* mean that it could be incorporated into other Edinburgh summer festivals such as the Book Festival, but chances are, the Pianodrome would not play a part.⁵¹ The unique features of the amphitheatre affected the plan of the performance and how it was rehearsed, influencing the final spectacle.⁵² The soundscape of the Pianodrome is shaped with each performance that occurs, as different musical installations and instruments have an influence on what is felt and heard by each. The opposite of this is also true as the soundscape possibilities from the Pianodrome have an impact on each artist that performs there. Not only is

⁴⁶ Vincent-Smith, interview.

⁴⁷ Vincent-Smith, interview.

⁴⁸ "Lie Still my Sleep Fortunes," Made in Scotland, accessed April 7, 2021.

<https://www.madeinscotlandshowcase.com/shows/lie-still-my-sleepy-fortunes/>

⁴⁹ Raymond MacDonald, interview by the author, Edinburgh (Zoom), January 28, 2021.

⁵⁰ MacDonald, interview.

⁵¹ MacDonald, interview.

⁵² MacDonald, interview.

there a collaboration demonstrated by the different people who worked on both projects but there is a collaboration between sound and structure.

Conclusion

MacDonald, who created *Lie Still my Sleepy Fortunes*, said in an interview that “music lives in everything.” (See Appendix A-11) ⁵³ This is evident from these spectacles where music has been found in old pianos and in the rocks of Edinburgh. These types of events are exceptionally welcoming to all whether you have experience and knowledge of classical music or not. There is a freedom of participation that is encouraged by the soundscape itself, to interact with the music that surrounds you. The reception of each performance, the opening events particularly, demonstrate the eagerness to engage with the large soundscape of Edinburgh as a city of festivals. Other organisations such as the BBC Proms or Creative Scotland recognise the importance of these soundscapes and their funding supports the grand scale of each project. Spectacles are recognised pathways to engaging with vast numbers of people by creating accessible soundscapes to share an ambition or theme. Goethe once described architecture as being “frozen music,” and I believe that with the right people who are fuelled by creativity, the music can be released from unusual spaces and draw in the natural curiosity of all. ⁵⁴

⁵³ MacDonald, interview.

⁵⁴ “Instruments in the Architecture.”

CONCLUSION

Through different stages of festivalisation in Edinburgh, there are evident features present that are crucial to maintain the title as a City of Festivals. Through exploration of different genres, shows and performances, we can see that soundscape technologies reflect the nature of Edinburgh and exemplify these trends. These events can encompass themes of spectacle, immersion or a combination of both to engage with audiences and encourage participation.

The incorporation of soundscape technologies is not limited to music. They can be reflective of genres beyond traditional art forms and incorporated into festivals that not immediately thought of, such as the Science Festival. The soundscape technologies can also be paired with other forms of media to enhance the engagement from an audience member. The *Night Walk for Edinburgh*, *Deep Time* and *Bloom* all made extensive use of videos and imagery, paired with a unique soundscape. *Harmonium* also worked with artificial intelligence to further incorporate the festival choir into the spectacle.

The incorporation of these other art and media forms would not have been possible without collaboration. Different creatives and organisations play a role in producing these events lending expertise around the city. The University of Edinburgh, particularly the Informatics Department has been involved with numerous performances and shows at a range of festivals for several years. Their involvement can be with artificial intelligence as utilised by *Harmonium* but it can also be about evolving the work. They were involved with the *Night Walk for Edinburgh* to help develop technology, in this case an app, so that the installation can continue to thrive even after its festival season. Overall, each festival betters the others' presence and brings in audiences from across the globe, as they all contribute to Edinburgh's reputation as a City of Festivals.

As a city of festivals, Edinburgh provides opportunity. The festivals and other cultural organisations can offer funding, a platform and an audience to people who are innovative in their creative work. For example, *The Encounter* and theatre company, Complicité received funding from the International Festival as well as support and guidance in bringing the piece to life. The festivals can also provide opportunities for participants and spectators to explore other genres and experience shows that they might not usually. The reputation of Edinburgh is vital to both these components of opportunity as it is primarily what draws in attention from around the world.

Accessibility can take a range of forms and soundscape technologies bring wonder to the masses. The Pianodrome was accessible for anyone to participate in and provided experiences to those who may not often encounter such unique opportunities with sound. It encouraged participation from people of all backgrounds and experience and was not limiting in musical expression. The opening events of the International Festival also created accessibility in a festival that was once criticised for being the opposite. Soundscape technologies have contributed to the festivalisation of Edinburgh as well as the evolution of individual organisations themselves as they invite audiences to marvel at art on a global stage.

Finally, Edinburgh as a city can be a technology expressed in a soundscape. Without the city itself, none of these performances or events would have had the same outcome. This is true partly because of the reasons mentioned before; Edinburgh's reputation as a city of festivals has impacted each artistic decision and has the platform to support innovative artistic ideas. The city is opened up to a mass audience with street performers and rounds of applause contributing to the soundscape of the very city. But the city inclusive of all its narrow closes, hidden steps, abundance of concert halls and extinct volcanoes have all played their part in the soundscape technologies of the festival sphere. I constantly refer to Edinburgh as a global stage because where else in the world can you experience such a diverse soundscape environment?

APPENDIX A

Interview Transcripts

Appendix A-1

Amanda Tyndall Interview Transcript Segment 1

00:04:09 Amanda Tyndall

I think the most interesting thing we've done, and I would have seen as our most substantial step in that direction, was a project that we were due to deliver in 2020, which couldn't happen. So we worked with an organisation called Bright Side Studios.

00:04:29 Amanda Tyndall

And who are digital creatives and our brief to them was that we wanted we ran a call for ideas around creating a more immersive experience for audiences. So, we're interested in how we can better use digital tools, techniques and approaches to create more engaging and more emotive experiences for our audiences. And we see sound as a really important part of that.

00:04:59 Amanda Tyndall

So this project with Bright Side Studios would have been an immersive multimedia sort of installation around the theory of the elements. Looking at our festival theme last year was looking at elementary and look at the elements and again we worked with them and they had a series of collaborators including a guy called Callum Easter.

Appendix A-2

Amanda Tyndall Interview Transcript Segment 2

00:02:25 Amanda Tyndall

We've also over recent years worked more commissioning Theatre, so we have a strand of activity called science in the spotlight, which is our projects and sort of events where the worlds of Theatre and science communication sort of come together. We did manage to get some sort of government and Creative Scotland funding through the Expo project.

00:02:54 Amanda Tyndall

That's part of the Edinburgh Festivals and to run some new commissions over the past few years working with Theatre practitioners and in some instances, commissioning them directly or in more recent years working as a Co producer with Theatre practitioners. As part of that we haven't directly tended to Commission the sort of soundtrack and the sort of sonic landscapes to accompany those. It's tended to be done through the Theatre partners.

00:03:34 Amanda Tyndall

But we have worked with musicians and creatives on a couple of projects in the past few years. One was called Melody and Sam and was a piece around climate change and rising sea levels for young people. And that was part of the Science Festival programme in 2019.

Appendix A-3

Roy Luxford Interview Transcript Segment 1

00:13:46 Roy Luxford

Simon's piece was slightly different because he has a producing company behind him. Complicité. So we were very much one of the Co-Commissioners for the work, so we invested in it. Then obviously we have an ongoing relationship from that point of being a Co-producer we made a theatre for Simon because none of the spaces we had were appropriate.

00:14:16 Roy Luxford

That was a challenging period.

00:14:19 Roy Luxford

Particularly when you're trying to make a space for a piece of work that doesn't exist. It's hard from the creative side of things to be quite prescriptive in terms of what that space may need to do. So as there was a producing company behind Simon, we have a slightly arms-length relationship there. It's their role to really develop the piece of work and to bring all the elements together.

00:14:49 Roy Luxford

For what you actually see on stage.

00:14:51 Roy Luxford

But as I said we did have to make a Theatre, so that was our real challenge. Then also with colleagues. You know it's the first bit of communicating about what the sense of that piece is and trying to enable audiences to engage with that as a title.

Appendix A-4

Richard Slaney Interview Transcript Segment 1

00:29:54 Richard Slaney

Hopefully we'll get the main points across but doesn't matter for me anyway if people don't see every moment. Because everyone comes with their own preconceived ideas of this sort of stuff anyway and pre-existing knowledge and we wanted there to be stuff there for the sort of geeks who really wanted to see that particular thing and stuff there for people who were just like wow, this is great! You know? this is just that I'm just here on a Friday night, then I'm going to the pub, you know?

00:30:21 Richard Slaney

Like, a mix of those two different things.

00:30:23 Richard Slaney

Um, but the sound is kind of critical to that.

00:30:29 Richard Slaney

Actually, very critical to that. I think that these things are, what? Having teched them in the middle of the night, they look great in the middle of the night, but they're not an experience and it's all about the sound environment.

00:30:45 Richard Slaney

And, speaking really about, this sort of, more 'front on' shows, I suppose.

00:30:53 Richard Slaney

We pushed really hard for high volume in these shows. They were really loud.

00:31:03 Richard Slaney

You know gig level, volume loud so 100 plus dba.

00:31:10 Richard Slaney

Quite consistently, we shook a lot of buildings and set off a lot of car alarms in our soundchecks and things like that, which is always the joy of doing these kind of big outdoor events.

00:31:24 Richard Slaney

But that was not just out of, being annoying to the city it was about if you're in that environment with all those people, that is a really good way to sort of have real impact of emotion in terms of the volume.

00:31:38 Richard Slaney

Yeah, and then really good dynamic range also in in Harmonium.

Appendix A-5

Richard Slaney Interview Transcript Segment 2

00:11:35 Becca Marriner

For the sake of the fact that there's been Usher Hall, there's being the Castle, St. Andrews Square; is there any reason for the different locations or just why not?

00:11:45 Richard Slaney

I mean a bit of, "why not?"

00:11:49 Richard Slaney

I'll come on to bloom in a second, but like Deep Time at the Castle was very much like, "OK! We've done this thing on the Usher Hall and it went really crazy well. We should do this again, let's go bigger in some way and the castle seems like a really great place to do it. But, also again, it's about this place you can watch from and we actually realised we could get a whole load of people into the viewing site from the bottom of it and also use this side of the Castle that's not normally used.

00:12:18 Richard Slaney

It's not the sort of, 'hero shot,' of the Castle that is sort of round the other side. But also the rock below it.

Appendix A-6

Richard Slaney Interview Transcript Segment 3

00:35:22 Richard Slaney

For 5 telegrams I watched, I decided to watch it in the crowd rather than at the back.

00:35:31 Richard Slaney

And I watched it with Anna Meredith, who was the composer and friend who, you know we worked with on that.

00:35:38 Richard Slaney

We worked pretty much worked together for 18 months on that show and that was a much more of an emotional piece anyway, just because of the subject matter, because it being about the First World War.

00:35:55 Richard Slaney

If you've watched the that show, Anna's piece, kind of climaxes in in the middle of the 5th movement with an incredibly loud organ chord. This sort of moment that's a sort of representation of the moment of Armistice, but also the moment of like pointlessness and death and everything else in the First World War.

00:36:16 Richard Slaney

First of all, she doesn't use the organ until that point. Like 33 minutes into a 35 minute piece. Second of all is recorded on the Albert Hall organ in London. Incredible instrument, incredibly loud whether or not we have the volume turned up to 11 in that square. So this organ chord happened, we had this bright blast of light from the building.

00:36:35 Richard Slaney

It just shook your chest and I remember the people in front of us in the crowd, the guy in front of his just put his hands to his ears like this, but it wasn't in terms of volume, it was in terms of like the sheer emotion of it somehow. And he turned around the end of the show and he was in floods of tears, and so was his wife. Anna and I were just like this is, this is so weird and we had to say to them like - I don't know why we never normally do this, but we both just said to them –

00:37:11 Richard Slaney

Like are you okay? What was that, you know? It was just so incredible.

00:37:16 Richard Slaney

And I was like, oh, well, Anna wrote it and I designed it, in a weird way that you sort of have to declare that and the woman was just like, "can I just give you a hug?" and it was like, well, okay, sure you can. But that, it's like why you make this stuff. It's amazing.

Appendix A-7

Richard Slaney Interview Transcript Segment 4

00:09:56 Richard Slaney

Like yes, these shows only really work in Edinburgh in many ways.

00:10:04 Richard Slaney

Five Telegrams we did do in London as well, in fact before Edinburgh, but on the Albert Hall.

00:10:11 Richard Slaney

I think it was more successful in Edinburgh because there's something about people's willingness of being the city to be like, "Ohh okay, it's the International Festival. I don't know who John Adams is, I don't really know what Harmonium is."

00:10:30 Richard Slaney

But there's a validity in the EIF stamp on something that means, "I'm going to go and try this thing out and it's free."

00:10:36 Richard Slaney

But if you take any of the components or any of these shows, and say, "do you want to come see this thing?" I don't think it's something that would work without the imprint of the festival on them.

Appendix A-8

Tim-Vincent Smith Interview Transcript Segment 1

00:07:40 Becca Marriner

Was there a particular message you were trying to convey with the Pianodrome itself or with these specific performances?

00:07:54 Tim Vincent-Smith

Yeah, I mean, there's really an emphasis on access and diversity. You know, which are over used words and under defined words.

00:08:08 Tim Vincent-Smith

And I think that in the sense of the physical structure, that's much easier to control. It's much easier to control access and diversity in that context of, like you know, how do you make something where there's lots of big, wide entrances and space for wheelchairs? And like, even deaf people can feel the music coming through the structure and so forth.

00:08:39 Tim Vincent-Smith

So that was very important to us in the in the designing process. But then there's, there's a, there's a tension between that and having to.

00:08:59 Tim Vincent-Smith

Gosh, I mean this is – it's complicated.

00:09:03 Tim Vincent-Smith

There's a tension between that and...

00:09:08 Tim Vincent-Smith

Like actually, in order to encourage diversity, you have to go out and deliberately invite things in. You can't just wait for stuff to turn up, and that's a much more complicated part of that is developing audiences developing, you know, rosters of performers and developing access and diversity within the actual organisational structure.

00:09:34 Tim Vincent-Smith

Yeah, I mean in terms of like the kinds of performances we would put on, I was I started off with this sort of just wanting to open a space for everybody and that is sort of embodied in the physical structure, being very inviting, being very playful. And, you know, trying to make it as much as possible: free access and free in terms of what happens there. You know, like so at Botanic Gardens in our first installation, we only programmed a few things during the day like a lunchtime concert and sometimes an afternoon concert. They were free access and it was just whoever was wandering around the Botanic Gardens would come across the Pianodrome and then they're all, "oh, this is exciting!" And for some people, it would really excite them, and they would stay for hours and other people would just pass through and were not very interested.

00:10:37 Tim Vincent-Smith

Some people just came back again and again and again coz they got the chance to play in front of people and would just play for hours, the most amazing you know, like sort of 15-year-old playing a Tchaikovsky Piano Concerto. A 95 year old playing? You know, Scottish folk tunes from the 40s that she used to play and kids like plunking around.

00:10:57 Tim Vincent-Smith

You know that really was in the first instance, that was the point. That was the idea, was that it should be really, it should be a sort of interactive sculpture rather than a venue.

Appendix A-9

Tim-Vincent Smith Interview Transcript Segment 2

00:13:13 Becca Marriner

As the Pianodrome's home is in Edinburgh, do you think that has affected the outcome of the project, as it were? Like, if it had been in London or in Sydney, do you think it would have been different?

00:13:29 Tim Vincent-Smith

Well, it's a very interesting question because we're actually building a second Pianodrome or other, we've franchised the model to the Charlotte Shout Festival in North Carolina, and they're going to build a Pianodrome to our designs and will see how different that turns out.

00:13:49 Tim Vincent-Smith

And you know, inevitably, obviously, being in Edinburgh made an enormous difference. I mean, it came out of music playing, which came out of a sort of music kind of musical scene here which is influenced by certain genres and certain ideas. Then it was crowd funded here at first and then the Science Festival connection, and the Botany connection.

00:14:19 Tim Vincent-Smith

Then the Creative Scotland funding. You know all of these things certainly have an influence on how something comes out.

Appendix A-10

Raymond MacDonald Interview Transcript Segment 1

00:09:18 Raymond MacDonald

Immersion and spectacle. So, absolutely. I think in terms of immersion, that it's a very intimate way in which the audience are situated in. In that space, you know. So, for example, when I was standing, I was closer to audience members than I was to other members of the band. So I think the audience become part of the performance.

00:09:44 Raymond MacDonald

You know you're, you're responding to not, just facial expressions, but you can actually sense and feel the audience very, very close to you. So they are immersed in your performance in that particular way.

00:09:57 Raymond MacDonald

I think, it's a unique spectacle. There's nowhere like the Pianodrome, nothing like that. So it clearly, and the Amphitheatre nature and the in-an-around nature and the sort of that vintage feel to the way in which the pianos are, you know, you get, you get a sense that you're when you're in the space, that you're sitting in history as well because these pianos are really old.

00:10:23 Raymond MacDonald

You can see the decay. You can see the faded grandeur and at the piano so that, that creates a unique type of spectacle as well. I think also the way in which I planned the performance also made it quite immersive in the sense that you know, Jules Rawlinson was using specific visual audio technology.

00:10:50 Raymond MacDonald

He created a soundscape by himself, because he was treating the music. He was real-time sampling as well as introducing as well as introducing pre prepared patches. And so, this type of immersive soundscape was already part of the performance.

Appendix A-11

Raymond MacDonald Interview Transcript Segment 2

00:17:39 Raymond MacDonald

Oh, absolutely, absolutely, yeah. I mean I could think of a beautiful performance that you could do in the Pianodrome that that that absolutely targets that remit, you know?

00:17:54 Raymond MacDonald

Whether that's "music, lives in everything," you know? So what is music? The nature of music? Or let's play a chair, let's play this piano over here I'll play my saxophone, let's all sing a song together. You could have a wonderful couple of hours in the Pianodrome.

00:18:06 Raymond MacDonald

Without any set list, without any composed song. Just exploring what it means to be musical in that wonderful space. And I think the Pianodrome would create a spectacle, and it would create an immersive experience and a much more exciting, innovative way that you might be sitting in a lecture Theatre.

BIBLIOGRAPHY

- Ainley-Walker, Emma. "Fergus Linehan: The Eclectic International. *The Skinny*. July 28, 2015.
<https://www.theskinny.co.uk/festivals/edinburgh-festivals/eclectic-international>
- Bartie, Angela. *The Edinburgh Festivals: Culture and Society in Post-war Britain*. Edinburgh: Edinburgh University Press, 2013.
- Bennett, Andy, Jody Taylor and Ian Woodward. *The Festivalisation of Culture*. Farnham: Francis & Taylor Group, 2014.
- BOP Consulting. *Edinburgh Festivals: The Network Effect*. Edinburgh: 2018. Accessed April 16, 2021.
https://www.edinburghfestivalcity.com/assets/000/003/791/The_Network_Effect__July_2018__original.pdf?1531301203
- British Council. "Deep Time: 350 million years of Edinburgh's history." Accessed April 29, 2021.
<https://www.britishcouncil.org/arts/city-arts-tour/edinburgh/deep-time-350-million-years>
- Complicité. "The Encounter." Accessed April 26, 2021.
<http://www.complicite.org/productions/TheEncounter>
- Debord, Guy. *The Society of the Spectacle*. Translated by Ken Knabb. Berkeley, CA: Bureau of Public Secrets, 2014.
- Delanty, Gerard, Liana Giorgi, and Monica Sassatelli, ed. *Festivals and the Cultural Public Sphere*. Florence: Francis & Taylor Group, 2011.
- DPA Microphones. "Binaural Recording Techniques." Accessed April 22, 2021.
<https://www.dpamicrophones.com/mic-university/binaural-recording-techniques>
- Edinburgh Festival City. "History of the Festivals." Accessed April 21, 2021.
<https://www.edinburghfestivalcity.com/the-city/history-of-the-festivals>
- Edinburgh Festival City. "Research Reports." Accessed April 16, 2021.
<https://www.edinburghfestivalcity.com/about/documents/156-research-reports>
- Edinburgh International Festival, "Bruno Walter." Accessed April 27, 2021.
<http://70years.eif.co.uk/history/#bruno-walter>
- Edinburgh International Festival. "The Encounter." Accessed April 26, 2021.
<https://www.eif.co.uk/whats-on/2015/encounter>
- Edinburgh International Festival. "The Harmonium Project." Accessed April 3, 2021.
<https://www.eif.co.uk/whats-on/2015/harmonium>

- Edinburgh International Festival. "Night Walk for Edinburgh." Accessed April 29, 2021.
<https://www.eif.co.uk/whats-on/2019/nightwalk>
- Edinburgh International Festival. "Plotting a New World Festival." Accessed April 21, 2021.
<http://70years.eif.co.uk/history/#plotting-a-new-world-festival>
- Edinburgh International Film Festival. "History." Accessed April 22, 2021.
<https://www.edfilmfest.org.uk/about-us/history>
- Edinburgh International Festival. "Standard Life Opening Event: Bloom." Accessed April 4, 2021.
<https://www.eif.co.uk/whats-on/archived-events/standard-life-opening-event-bloom>
- Edinburgh International Festival. "Standard Life Opening Event: Deep Time." Accessed April 3, 2021.
<https://www.eif.co.uk/whats-on/2016/deeptime>
- Edinburgh Science. "About Us." Accessed February 12, 2021.
<https://www.sciencefestival.co.uk/about>
- Fruitmarket Gallery. "Night Walk for Edinburgh." Accessed April 27, 2021.
<https://www.fruitmarket.co.uk/exhibitions/night-walk-for-edinburgh/>
- Hague, Cliff. "The Festivalisation of Edinburgh." *Scottish Affairs* 31, no. 1 (February 2021): 31-52.
- Hawkins, Si. "How this year's Edinburgh Fringe is tackling the serious subject of global warming." *The National News: Arts & Culture*. August 2, 2019. . <https://www.thenationalnews.com/arts-culture/on-stage/how-this-year-s-edinburgh-fringe-is-tackling-the-serious-subject-of-global-warming-1.893634>
- Jamieson, Kirstie. "Edinburgh: The Festival Gaze and Its Boundaries" *Space and Culture* 7, no.1 (February 2004): 64-75.
- Janet Carddiff & George Bures Miller. "Walks: Night Walk for Edinburgh." Accessed April 27, 2021.
<https://cardiffmiller.com/walks/night-walk-for-edinburgh/>
- Jo-Bitner, Mary. "Servicescapes: The Impact of Physical Surroundings on Customers and Employees." *Journal of Marketing* 56, no. 2 (April 1992): 57-71.
- Lee, Yong-Ki, Choong-Ki Lee, Seung-Kon Lee and, Barry J. Babin "Festivalscapes and Patrons' Emotions, Satisfaction, and Loyalty." *Journal of Business Research* 61, no.1. (January 2008): 56-64
- Lukas, Scott A, ed. *A Reader in Themed and Immersive Spaces*. Pittsburgh: Carnegie Melon, 2016.
- Luxford, Roy. Interview by the author. Edinburgh (Zoom). February 5, 2021.
- MacDonald, Raymond. Interview by the author. Edinburgh (Zoom). January 28, 2021.
- Made in Scotland. "Lie Still my Sleepy Fortunes." Accessed April 7, 2021.
<https://www.madeinscotlandshowcase.com/shows/lie-still-my-sleepy-fortunes/>

- Magnusson, Bruce and Zahi Zalloua. "Introduction." In *Spectacle*, edited by Bruce Magnusson and Zahi Zalloua, 3-17. Seattle, Washington: University of Washington Press, 2016.
- Naylor, Richard, Caterina Brazanti, Bronwyn McLean, and Douglas Lonie. *Edinburgh Festivals: 2015 Impact Study*. Edinburgh: 2016. Accessed April 16, 2021.
https://www.edinburghfestivalcity.com/assets/000/001/964/Edinburgh_Festivals_-_2015_Impact_Study_Final_Report_original.pdf?1469537463
- Newstead, Eve. "The Encounter Online – Complicité, YouTube." *The Reviews Hub*. May 16, 2020.
<https://www.eif.co.uk/whats-on/2019/nightwalk>
- Pianodrome. "About." Accessed April 6, 2021. <https://pianodrome.org/about/>
- Pianodrome. "Home." Accessed April 6, 2021. <https://pianodrome.org/>
- Slaney, Richard. Interview by the author. Edinburgh (Zoom). March 1, 2021.
- Sterne, Jonathan. "Sounds Like the Mall of America: Programmed Music and the Architectonics of Commercial Space." *Ethnomusicology*, 42 no.1. (Winter 1997): 22-50
- Tomalin, Jo. "The Encounter: Complicité / Simon McBurney." August 22, 2021.
<http://fringereview.co.uk/review/edinburghfestival/2015/the-encounter-complicite-simon-mcburney/>
- Tyndall, Amanda. Interview the Author. Edinburgh (Zoom). February 15, 2021.
- Vincent-Smith, Tim. Interview by the author. Edinburgh (Zoom), March 16, 2021.
- Waller, Kirsten. "The Harmonium Project," *The Wee Review*. August 9, 2015.
<https://theweereview.com/review/the-harmonium-project/>
- Wimbledon Sound. "Binaural Sound Recording." Accessed April 22, 2021.
<https://www.wimbledonsound.com/binaural-sound-recording/>
- Woods, Sam. Unrecorded interview by the Author. Edinburgh (Zoom). April 9, 2021.
- 59 Productions. "The Harmonium Project." Accessed April 28, 2021.
<https://59productions.co.uk/project/the-harmonium-project/>
- 59 Productions. "A Platform for the Flowering of the Human Spirit." Accessed April 27, 2021.
<https://59productions.co.uk/project/bloom/>

VIDEOGRAPHY

Vimeo. "Deep Time – EIF Opening Event 2016." Uploaded February 27, 2017.
<https://vimeo.com/205877515>

Vimeo. "The Harmonium Project – Behind the Scenes." Uploaded August 14, 2015.
<https://vimeo.com/136342369>

Vimeo. "Instruments in the Architecture: Building the Pianodrome." Uploaded June 24, 2019.
<https://vimeo.com/344079660>

YouTube. "Andrew Carnegie Lecture Series – Fergus Linehan." Uploaded December 6, 2017.
<https://www.youtube.com/watch?v=lzdIOAudTOM&t=1564s>

YouTube. "Edinburgh's Festivals: An Overview." Uploaded April 12, 2019.
<https://www.youtube.com/watch?v=jMHCZqaYTIY&t=138s>

YouTube. "The Encounter Audience Reaction | Festival 2015." Uploaded August 11, 2015.
<https://www.youtube.com/watch?v=e-anjjKWJx4>

YouTube. "Janet Cardiff and George Bures Miller: Night Walk for Edinburgh." Uploaded August 27 2019. <https://www.youtube.com/watch?v=s5aVHwdfiEU&t=10s>

