### Projecting the voice: Audience responses to ICT-mediated contemporary opera

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Projecting the Voice: Audience responses to ICT-mediated contemporary opera

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Abstract:

In this paper, we outline the conception, design and performance of a contemporary opera at MediaCityUK (MCUK) in September 2012 and its simultaneous streaming to nearby digital screens. We evaluate the project's success as measured by a mix of qualitative and quantitative methods during the rehearsals and the performance at MCUK. As one of the few social studies of contemporary classic music in Britain, our practice-led research on how this contemporary opera and its audience at the premiere sheds light on how to develop new audiences through employing new digital technologies.

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Introduction

Existing research on opera audiences focuses on capturing the reception of conventional operas staged in an enclosed theatre. But how will the development of digital technologies that allow operas to be screened in distributed environments or to be staged in virtual environments change or transform audience experiences? Will Information and Communication Technologies (ICT)-mediated opera performances attract more contemporary audiences given the widespread adoption of ICT in modern times? Will audiences find virtual operas equally immersive? Will audiences respond to viewing digital operas broadcast across distributed sites in the same way as going to the cinema? How will contemporary audiences adjust their opera / music consumption behaviours as a consequence of rapid technological evolution?

These questions are relevant because increasingly we see opera and theatre being distributed outside single-site venues. For example, National Theatre Live, the National Theatre's groundbreaking project,
broadcasts theatre live from the London stage to cinemas across the UK and around the world. It would be interesting to discover how an audience’s experiences and behaviours differ when attending operas in different environments (in all respects: from dress codes, formal behaviour through to use of second screen technology and so on).

These questions are also crucial for understanding audiences in a complex media landscape. It has been suggested that there is a decline in attendance for operatic events. Many studies have been commissioned to understand why, and to provide recommendations for interventions to address this perceived decline. For example, in Edinburgh, Scottish Opera (SO) has commissioned The Audience Business to conduct research into the reasons behind this decline, and to delineate marketing recommendations for the coming seasons.\(^1\) The Sunderland Empire Theatre/Scottish Opera Audience Development Programme, part of a five-year project, focused on how to increase opera audiences, especially among young people aged 15-30.\(^2\)

In a similar light, this paper, based on a pilot study, looks at what encourages past and current opera audiences to attend, and contextualises the decline in attendance within a wider opera context and a wider arts context, in order to establish the broader preferences and opinions of current opera audiences. It will also set out recommendations that will help colleagues in music plan their short-, mid- and long-term promotion in the UK. More specifically, we are using some sociological methods to ask whether streaming opera performances in real-time could help diversify and develop audiences.

**Methodology**

The research contributes to understanding the relationship between a contemporary opera performance and audience. The production of a contemporary opera is a complex piece of work of art itself. The production team usually consists of composers, performers, director, conductor, musicians, project manager, stage designer and sound technicians. Whether or not the audience can appreciate the art presented by the production team is difficult to measure. As Perricone (1990) suggests, “aesthetic situation is complex”.

> “It is not just the artist, his vision and technique; it is not just the work of art, a static museum piece: form, content and expression; in addition the work of art indicates an attraction, a charge as it were between creators and appreciators that exist to keep both alive. Perhaps the work of art metaphorically produces a sort of bonding agent with properties such that the things it glues together are more dynamic than had they existed alone. What the nature of this dynamism might be is central to any philosophy of art.” (p.199)

In order to address the questions raised above, we take the performance of a new chamber opera, *Stefan and Lotte in Paradise*, as a case study. As a newly commissioned opera receiving its premiere, it enables us

\(^1\) http://www.theaudiencebusiness.org.uk/audience-business-reports-library.php?r=4cee9513c8cb3&h=Scottish+Opera+Understanding+Lapsed+Audiences.

to study how audiences receive and engage with a new piece of work. Moreover, as its premiere took place in a new venue for opera – the University of Salford’s building in MediaCityUK – it provided the opportunity to study an audience with no history of attendance at that particular venue. The venue also enabled two simultaneous performance experiences to take place: one in the relatively traditional setting of the Digital Performance Laboratory, a black-box theatre space with large projection facilities; and one viewed in an open foyer space via an assembly of digital screens. The storyline, focusing on the last years in exile of Austrian Jewish writer Stefan Zweig, explored themes of isolation and migration. By utilising the facilities at MediaCityUK, we experimented with the efficacy of distributed performance in communicating a narrative with a potentially strong emotional impact.

**Development Process for the Opera**

The information below about the conception, design and production of the opera will provide a better understanding of how this opera serves as a good case study for understanding the extent to which contemporary audiences appreciate ICT-mediated opera.

It also illuminates how the questionnaire was designed, what data the researchers could were able to collect, and how the methods used to collect data, before, during and after the opera performance.

Commissioned by the University of Salford with co-funding from Arts Council England, *Stefan and Lotte in Paradise* was a free one-hour performance, co-composed by one of the authors of this article, composer Prof. Alan Williams with Brazilian composer Dr Marcos Lucas, to a libretto (text) by Philip Goulding. The opera chronicles the last few months of the life of Austrian Jewish writer Stefan Zweig and his wife Lotte, who both committed suicide in 1942, in despair at the future of humanity and the rise of Nazism.

At one time the most translated author in the world, Zweig was forced to leave Austria in 1934 soon after the rise to power in Germany of Hitler, living in England and New York before moving to Brazil in 1940. The libretto for *Stefan and Lotte in Paradise* deals with the themes of persecution, migration and exile, while the music includes fragments of Zweig's collection of scores by Mozart, Schubert, Brahms and many other composers which are now housed at the British Library. In its instrumentation (violin, clarinet, cello and cimbalom) it makes a clear reference to Klezmer, an Eastern European Jewish folk music genre; and it also explores the sounds of Brazilian music. Instrumental parts were performed by Psappha, one of the UK's leading contemporary music ensembles. Seamlessly integrating memory with live action, digital projection made the need for substantial set changes unnecessary; instead, the scene could instantaneously be transformed from a café in Vienna to a semi-tropical terrace in Brazil- or suggest both simultaneously. Taking the main roles were baritone Jeremy Huw Williams as Stefan Zweig, soprano Zoe Milton-Brown (Lotte Zweig), and baritone Richard Strivens, playing the Zweigs' friend and fellow émigré Ernst Feder. Mark Babych directed, Gavin Wayte conducted the ensemble and Joe Stathers-Tracey created the projected imagery.

The University of Salford's MediaCityUK building served as an ideal venue for realising the conception of this opera in that it could facilitate digital projection and streaming. The live action opera took place in front an audience in the campus’ Digital Performance Laboratory, an innovative performance space with one of Europe's largest high-resolution projection screens, and featuring stunning video imagery developed by video artist Joe Stathers-Tracey.
At the same time, a second group of guests experienced a live transmission of the performance relayed to a huge, high resolution video wall in the building’s ‘Egg’ area – a ground-floor performance space opening onto the foyer area equipped with a bank of 120 Christie tiles, and a high-quality speaker system. Surrounding this, the foyer itself is equipped with touch-screen tables connected to the Internet and to the Digital Performance laboratory.

The audience were invited to use six stand-alone touch screen “interactive coffee tables”- to explore online content about the libretto and score, allowing them to be part of an immersive theatre experience using digital technology rather than the immersion of the enclosed theatre space.

Methods for Audience Analysis

The production of this opera used multiple forms of delivery as a prompt for discussion about the various effectiveness of live performance in the same physical space, as opposed to live performance via digital transmission to the big screen. The audience could be categorised into two groups:

Audience 1: a selected group (≤100) experienced the opera in the Digital Performance Laboratory (DPL) in Media City. Singers and instrumentalists were live, in the same theatre space, with imagery projected onto the largest HD screen in Europe. Green-screen technology enabled characters to appear on screen from “off stage” interacting with live singers. This was the intense, but largely passive experience of traditional theatre, with mobile phones switched off, and audience interaction at a minimum.

Audience 2: a larger group (≤200) experienced the opera via the 120 Christie tile wall in the open Egg space, part of the foyer at the University of Salford’s Media City building. The performance taking place in the DPL was filmed, and an editor mixed these camera images live. Singers and instrumentalists were live, but relayed from the DPL to the screens and the speakers in the Egg. In addition to the material on the touch-screen tables in the foyer, they were invited to engage interactively with the performance via social networking websites such as Twitter. A café setting in the foyer allowed participants to engage in a form of immersive theatre, as the subject matter dealt with café society in Rio de Janeiro and Vienna.

This footage has already generated some comments and requests for the whole opera to be made available; prompting the thought that a third audience – an online audience, who view the opera through video hosting sites such as Vimeo could be examined to understand whether announcing the digital opera to an online audience results in a global reach and target a more diverse audience. As yet this plan has not been realised.

To study these two audience groups, a mix of qualitative and quantitative methods have been employed including participatory observation, on-site event analysis, unstructured interview, survey questionnaire.

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The process began by having a researcher carry out participatory observation at both technical and musical rehearsals to understand what the producers, director, composers, conductor, musicians, and singers wanted to deliver, and devised a set of measurement tools (survey questionnaires, interview schedules, evaluation plan) to facilitate the evaluation.

A short paper-based quantitative survey and a small amount of informal unstructured interviews were undertaken with the opera attendees on 20 September 2012. While the survey questionnaire allowed us to gather some quick statistics on various questions, the interviews provided an in-depth insight into the audiences’ thoughts and opinions of their experience of the Opera. The participatory observation at the event also allowed the researchers to monitor the movement and level of engagement of the audience, to see how they interacted with various components (the streaming, the interactive coffee table, their mobile devices).

The questionnaire was designed in the light of existing national surveys that aim to capture cultural tastes, cultural preferences, classes, including the Great British Class Survey and DCMS’ The Taking Part Survey. Although Zweig’s work was hugely popular in the USA and South America, and remains so in continental Europe today, the author is little known in Britain. The composers therefore wished to make Zweig’s life and writing better exposed to a UK audience. To indicate how well this goal was achieved, one of the questionnaire questions asked the audience if they had a good understanding of the storyline after the show, as seen in the survey questionnaire included in Appendix 1.

As part of our survey ethics and strategies, respondents were advised that they had the freedom to reject, exit or withdraw from the survey, or refuse to answer some questions. To understand if viewing experiences at the DPL and at the Egg differed, we made sure that the questionnaires completed by audiences at two different sites were separated, grouped and compared.

The paper-based circulation of the survey also allowed the respondents to freely inscribe their answers. When responding, some drew, some ticked, some circled, and some critiqued the questions. It is also interesting to see what personal information was put down, and how it was put down and framed. For example, the respondents described their household earnings and age in various different ways: “comfortable income”, “middle age”, “old enough to go to many operas, concerts”, etc. This implicitly demonstrates the creativity (and perhaps also literacy) of the audience, and suggests that perhaps computer-mediated survey questions constrain respondents from being creative and provide less authentic, spontaneous, impromptu answers. Perhaps while this approach may be less acute and precise (for example, a tick on the paper may not fall directly in the desired grid) and more laborious (human labour is required for manual input into computers for data analysis and processing), it clearly provides different values which may offer additional information via the interpretation of the researchers transcribing the responses. Although implicit, the free text answers provided by the respondents also suggested the type of audiences who came to view the première, and helped identify audience types.

Preliminary Analysis of the Quantitative Survey Data

Altogether 84 responses were received. There are some missing data: not all questions were answered, and some questions answers are not particularly clear. The unclear answers (such as free-text annotation on the
survey questions, ticks in ambiguous areas) have been transcribed and/or interpreted by the principle analyst.

The quantitative survey data suggested a not-so-significant difference between the audience in the open space Egg area (40 responses) and the enclosed DPL room (44 responses) - 88.4% in the DPL were satisfied with the performance, compared to 84.6% at the Egg.

It is possible that the DPL and Egg audience understood the survey question 'projection' differently. The Egg audience might treat 'projection' as the streamed performance on screen, which was different from the projection on the screen in the DPL in the background of the live performance. Due to the way the streaming was done (selecting and zoom-in frames and cut screens), it was difficult to see all the action on the stage.

Some survey questions (question 4) aimed to capture the audience’s emotions and level of engagement. However, a minority of respondents considered these questions personal or intrusive and refused to answer.

The demography data suggested that the audience were experienced concert-goers. Some of them identified themselves as frequent opera-goers in the interviews. The data received from such a savvy group of audience was indicative (especially when positive feedback was received: “good music”, “good performance”, “good stage design”). A majority of the audience (75.3%) said they will attend more opera performances in the future – but there is a difference between the audience in the DPL (83.7%) and in the Egg (63.9%). It is worth investigating (through a co-relation regression analysis perhaps) if this is because the audience in the DPL are frequent opera-goers so the performance has little impact on their willingness to see operas in the future.

It is worth noting that a keyword was mentioned three times by audience members in the DPL: atmospheric. This is interesting because it may indicate that this ambience is perhaps lacking in the open space Egg area.

**Preliminary Analysis of the Qualitative Data**

The qualitative data include data collected through ethnographic participatory observation and informal interview with the audience (which were unrecorded, unstructured).

*Prior to the start of the show*

It was necessary to pre-book seats in the DPL, but not for the Egg (foyer) space. In order to make the whole experience for both audiences an immersive one, and also to address the practical necessity to filter one audience from another, we enlisted the help of a colleague from within the School of Media, Music and Performance who specialises in immersive performance practices, Richard Talbot. Richard used his long standing alternative personality ‘Mr. Whistler’, a quasi military figure dressed in 1940’s attire, to lead a group of performance students to check tickets determining which version of the performance they would be experiencing. This had the advantage of dramatising the process of sifting one audience from the other, which was felt by the production team to be appropriate given the nature of the subject matter- dealing as it did with citizenship and entitlement. One disadvantage was that one or two of the audience members felt uncomfortable being treated in a (dramatically) peremptory way. It also may have contributed to the impression that the DPL was the more desired location for the performance, and that the Egg was a second-class option.
Some audience members were sitting in the foyer reading while waiting; some chatting, and others browsing information on the stand-alone interactive coffee tables. They were intrigued by the historic photographs and manuscripts on show. The information about the performers on these computer terminals was also felt to be useful. All the people the researchers spoke to prior to the show starting claimed that they were open-minded, had no expectations about the performance and looked forward to being inspired or surprised.

Shortly before the show started, one of the composers, and co-author of this article, then addressed the audience in the Egg explaining the nature of the performance, and the way that it was being viewed in the Egg via the screens. It was explained that they were free to use their smartphones to look at the site, take pictures, and especially to use Twitter to comment on the performance, using a suggested hashtag (#zweigopera), that the bar would remain open and that they could walk around freely if they wished. The composer decided to remain in the Egg audience in order to suggest that their experience should not be viewed as second-class compared to the live performance for the audience in the DPL. While two people said they were more interested in the ICT-mediated version of the performance, others (2-3) did immediately express disappointment that they had been given seats in the Egg, rather than the DPL. No-one seemed intimidated by meeting members of the creative team before or after the performance.

During the performance

There were some late arrivals in the Egg but since it is an open space they were able to walk in unimpeded, and to walk around the space. The security guards did their usual patrols. A couple of people left after 15 minutes. Late arrivals stood at the back. Some of the audience were sitting in the Egg space chatting, exchanging words but quietly. Some held coffee in their hands, some consumed the snacks provided on the interactive coffee tables. Some drank beer. But by and large, the audience in the Egg was really focused and wanted to be formal. When one of the researchers exchanged a few words with Sam the event helper she asked her (the researcher) to be quiet.

The scene where Stefan Zweig continually grimaces when being photographed which some found humorous during the rehearsal in the DPL did not have the same effect on the audience at the Egg open space – the audience at the Egg hardly laughed or even smiled, perhaps suggesting a less atmospheric environment in the Egg.

Post-performance

A couple of audience members said that their expectations were not met as they expected someone to do something on the screen, to have a deeper interaction. They commented

"Basically, it was merely transmitting signals rather than engaging with the audience... Are Stefan and Lotte poor? They have only one bed, small room, big house, garden. The stage didn't quite add up to the storyline... I don't know who they are. I should have done some research, but we've only known about the event a night before... It's hard to know the words they were singing. Not about subtitles. I love the pictures. Not a twist in story - flat storyline, flat narrative, people know they'll be dead."
Further audience comments on liveness, interaction and interactivity, stage

Several people commented on the cold environment in the Egg (foyer) space. Although the sound diffusion was excellent, at the Egg, the ambience was cold and mechanical, with the relatively light, open space not giving the audience an immersive experience. The view of the stage conveyed via the Christie tiles (the wall of screens in the Egg space) was mediated by live video editing; for technical reasons we were only able to have two cameras in the DPL, which therefore meant that the view on the Christie tiles was limited to what the live editor in the TV edit suite decided was of most interest. Generally, the composers, producer and director concurred with this judgement, but it meant that the Egg audience was not able to view an unmediated version of the opera. Thus comments relating to the viewing screens in the Egg emerged such as “like Powerpoint”, “not provocative enough” “flat”.

Discussion: Audience types and dynamics

The data we collected clearly suggests that the two audience groups had different experiences with the opera which was performed simultaneously but distributed in different ways: one being streamed live in the open space Egg area and the other performed in the enclosed DPL room. The main factors that led to this difference in audience perception and reception were those of the environments and ambience. Unfortunately, a few of the effects that the production team wished to deliver (e.g., the sense of separation and segregation through staging the opera in two different spaces, encouraging the audience in the open space to mingle, to wander, to play, to interact, to use second-screen) were not achieved. Unlike what was expected, the audience in the open space predominantly complied with the same codes of behaviour: remaining seated, concentrating on the screen display quietly. They sipped glasses of wine, occasionally checked their mobile phones or texted, but the movements and behaviours were very different to what had been imagined by the production team. This could be because the audience were led to behave this way when the seats were provided and laid out as theatre audience seating. But it could also be because the audience, consisting largely of literate, savvy opera-goers, was locked in the conventional code of behaviours as if in a proper theatre. The latter suggests that opera (like other forms of art) is a social product and that opera houses and stages are social fields. Bourdieu, whose work is crucial for theorizing the structure of society as a result of class conflicts and status competition, sees the art field as a social field that like other social systems is highly stratified and has its own hierarchy (Bourdieu, 1996). The production and consumption of operas reflects social structures, established norms and acceptable behaviours. And this demonstrates Bourdieu's explanation of the interrelation between 'habitus' and 'social field'. The potential links between art education, consumption, tradition, customs, etiquettes, and beliefs call for a sociological treatment of the production of digital operas in future studies.

The pre- and post-performance interviews suggested that some audience members knew about this event because of the singers, conductor and the producer. Many were Friends of Psappha (long-term supporters
or frequent classic music concerts goers). Social networks and social capital are important factors in understanding audience dynamics.

The provision of operas through streaming may result in a difference in audience type. However, whether audience groups can be differentiated perhaps depends on the distance / proximity of the sites where 'real' operas are staged, and the screens where the streaming version are displayed. For example, the data collected from the audience of *Stefan and Lotte in Paradise* seemed to suggest that the backgrounds of the Egg audience groups are not that different from frequent opera-goers. However, their viewing experiences can vary because of the open space screening. One could reasonably expect more diverse audience groups had the streaming taken place in further afield, such as between London and Manchester (rather than as at the MediaCityUK – where they could still be considered as co-located).

This effect on audience groups could be compared to those observed in the convergent TV industry where on-demand digital TV content and services are being advanced rapidly. For example, in their study on digital television services and new business models, Evens et al. (2010) suggest that “digital television services not only provide promise for interactive services, but also for long tail-based business models in terms of tailor-made content... deliver[ing] culture to a wider audience.” But they also question “whether the long tail principle is applicable to the delivery of avant-garde material to develop a viable digital television service.” (p. 1005). In a similar light, *Stefan and Lotte in Paradise* seemed successfully to attract diverse groups of audiences in terms of ages and backgrounds, but it is unclear from this pilot study whether streaming helps deliver innovative material to various niche audience groups (for cultural events considered as conforming to the long-tailed business model).

**Conclusions and Future studies**

Attending operas is traditionally considered as a ‘high-brow’ activity and this stereotype limits a wide appeal. In this project, the production team tried to develop the audience beyond the perceived norm for this art form by making its location of the performance more flexible and also by incorporating new technologies. Compared to classical opera, which has an established audience base, it remains a challenge to draw audiences to contemporary opera. Placing operas in unusual locations and incorporating new technologies seem to have been successful in developing a new audience in this case. While there are clearly some continuities between traditional modes of behaviour (as described above), interesting new behaviours, such as the use of the interactive touch-screen tables before and around the performance also emerged. The arrival of latecomers also was permitted and accepted by the audience in the more flexible location of the Egg space.

It would be useful to repeat the audience survey using similar methods for audiences elsewhere. For example, performers in both France and Brazil have expressed interest in performing the work. In order to fine-tune responses, we would clarify in the questioning what was meant by “projection” – in our survey, some audience members assumed this meant the Christie tiles themselves. We would also prompt “second screen” activity via twitter, by beginning a “composer/producer’s commentary” on the #zweigopera hashtag, to see if that encouraged second screen activity. It would also be useful to experiment with subtitles, so that audiences new to opera and to operatic voices, and audiences whose first language is not English, might not have to concentrate so hard on understanding the text.

In future iterations of the audience response research project, we aim to:
a) compare the results with an unstaged performance, to assess what impact the digital imagery in the DPL has on the audience’s reception;

b) compare the results with a live performance from a distance – for example, by showing a single camera version of the opera on the Christie tiles streamed live from an overseas performance;

c) compare the results with a full recorded (non-live) performance of the opera;

d) compare the results with a performance available via a video hosting site such as Youtube or Vimeo.

The research project has as its ultimate aim the sharing of best practice for the increasing numbers of live relays and ‘as live’ recordings of opera and music theatre by professional companies in the UK and worldwide. The lessons learnt can also contribute to improving audience engagement in experience design such as a mixed reality display (Lucas et al. 2012) or affective interactive art (Bialoskorski et al 2009).

References


Appendix 1

Feedback Form for “Stefan and Lotte in Paradise” Opera Performance

1. Overall, were you satisfied with the event?

   yes / no / not sure

2. Which part of the opera did you like?

   Excellent   Great   Ok   Little

   Storyline
   Music
   Staging
Projection
Performance
Other (please specify)

3. Did the music help you understand the historic context where the story was staged?
Yes / No / Not sure

4. How much do you agree with the following questions?
1. I was completely absorbed by what was happening.
2. The performance didn't really hold my attention.
3. My eyes were open to some new ideas.
4. It got me thinking about things differently.
5. I was gripped by the sights and sounds of the performance.
6. I found aspects of the music moving.
7. Some aspects of the performance seemed relevant to my own life.

5. How many times did you attend _live musical performances_ in the past year?
none / 1-5 times / 6-10 times / More than 10 times

6. How many times did you attend live classic music concerts in the past year?
none / 1-5 times / 6-10 times / More than 10 times

7. Would tonight's event encourage you to go to see more operas in the future?
Yes / No / Not sure

8. Could you please let us know your sex, age, education, income, ethnicity, and other personal information you'd like to share with us? (Please note that the information you share with us will be treated with the strictest confidentiality, and will be used for research purposes solely. All the data will be anonymised should they be published. Thank you.)

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