Liveness for Contemporary Audiences: Developing online-togetherness in metaverse theatre audiences

1. INTRODUCTION

Liveness for Contemporary Audiences: Developing Online-Togetherness in Metaverse Theatre Audiences is a research project owned and carried out by Copper Candle. The project is funded by Innovate UK as part of the Audiences of the Future Round 2 – Design Foundations Fund. Our activities have focused on the experience of making digital/virtual theatre as creative producers of the work. Within this research we are asking, both of ourselves and of the practice, “what do contemporary audiences want?” Or more specifically “what do contemporary audiences want from live digital/virtual theatre?” And where can we look for insight? For us, this is the games industry. Our working assumption is that audiences do want to experience live virtual events, based upon a clear uptake on this offering within the arena of gaming.

In this paper we will offer a definition of metaverse theatre and explore key issues within this new form of theatre-making, namely the creation of liveness and its relationship to the notion of online-togetherness. We also identity a bias that surrounds current discussions, which we believe emphasises the experience of the performer and maker, over that of the audience. It is our belief that a sense of liveness can be created within virtual theatre by exploring how the audience experience and interact with the event, which moves away from this performer-centric bias. This interactivity can be achieved by deploying multiple aspects of interactive game play used widely across the digital and online gaming arena.

The authors/researchers of this paper are both current PhD candidates at Rose Bruford College and University of East London. Their research projects are focused on two different sides of the same issue – charting and analysing keys issues within emerging intermedial and interdisciplinary virtual theatre (both in terms of its reception and its validity as a theatrical form).

Liveness. Virtual theatre. Metaverse. Audience reception. Copper candle. Motion capture. Live streaming. Theatrical event.
theatre practice, from the standpoint of the designer/technologist (James Simpson) and the point of view of the director/performer (Rory Foster). We also own and run a company called Copper Candle which is a technical innovation studio, producing projects for virtual live theatre and conducting R&D. The company’s vision is to enable the production of theatre and live events in the new modes of digital and virtual production, with specific emphasis on the development of technologies and strategies for the creation of metaverse-theatre.

2. METAVERSE THEATRE AS A CREATIVE PRACTICE

The need for Live Performance in Mobile Based AR (Simpson 2021) was presented at EVA 2021, following an Innovate UK funded project called The Round. During this project we began to question the foundational use of our products. We were providing streaming solutions for live performances, hosted within game engines via various innovative new-to-market technologies. Our concern was that we were producing an overly elaborate technical solution – at great expense – to an audience that may not want, need, or even acknowledge that what they were watching was in fact live. This questioning led us to shift our research emphasis away from product research and development, towards more theoretical questions around what ‘live’ and ‘liveness’ means for this new mode of practice (live-virtual theatre making).

This research centres its discussion around our latest research enquiry, in which we seek to test and evaluate liveness from the perspective of the audience. We have coined the term Metaverse Theatre as a description of the technical and creative activity at the centre of this research.

The term virtual theatre is also used regularly in this area, as is digital theatre but they are all slightly different from each other. To be clear, here is our interpretation of the nomenclature and where our research sits within it.

Digital Theatre is most useful here as a blanket term which refers to all theatrical practice which harnesses and deploys digital technology as a means of staging and/or presenting the event.

Online Theatre: Theatre and performance which is recorded and viewed via a webpage or streaming service (such as Netflix or Digital Theatre+). It was originally intended and designed for a live audience but has been creatively modified to allow in-venue cameras to record it for post-production and editing, before being published.

Live-Streamed (Theatre): Theatre and live performance which are being filmed and streamed directly to a platform such as YouTube or Zoom. The production may or may not be attended by a live audience who are aware of the filming and the production would have been modified creatively to suit the needs of the camera and live stream.

Virtual Theatre: Theatre which actively applies virtual reality tools and techniques to stage part or the whole of an event, within a computer-generated virtual reality.

Metaverse Theatre: To give a totalising definition of the metaverse at this early stage of its development is foolhardy. However, we can propose that the metaverse is a network of virtual realities in which individuals can roam and interact with both the reality and others within it. Thus, metaverse theatre is a theatrical practice which not only deploys digital and virtual technology to create events, but also that these events are produced and performed for audiences within the metaverse.

3. LIVENESS IN THEATRE

Digital theatre operates differently to traditional theatre, with audiences and performers separated through different space/time – but there is more to be understood about what liveness is within both live theatre and digital theatre.

This is well-trodden theory, with the liveness debate firmly placed within performance theory and, particularly under discussions of the ontological nature of a given performance event. However, our starting point for discussing liveness, in this research, is no longer simple live-feed camera systems, as it was in its origins. But the creation of virtual realities where both audience and performer are immersed within a shared theatrical event – across multiple times and spaces. It is our assertion that the discussion around liveness needs to keep up with these technological advancements, by shifting what we understand about principles of liveness.

Philip Auslander, a preeminent performance scholar provides us with the framework on which to do this. Auslander started writing about liveness in the late 1990’s publishing his seminal text; Liveness: Performance in Mediatized Culture in 1999. This was in reaction to previous speculation on liveness by his contemporaries, notably Peggy Phelan; whose take on liveness (to summarise briefly) was concerned with preserving the pristine natural of performance’s ephemeral ontology, in the wake of huge intermedial activity in the theatre space (Phelan 1993).
Auslander introduced to the liveness debate a new sociological angle and has been one of the more fluid thinking (major) academics concerned with the debate, allowing his ideas and notions to evolve in relation to developments observed within theatre practice. Auslander posits that a sense of liveness within performance is not purely based upon a mutual time/space, in which the performers and audience coexist, but is exactly a conversation around forms of practice which question the existing theatrical paradigm.

In 2011 Auslander gave a keynote at the conference; Transmediale, in which he clarified and rectified his ideas on liveness. During this lecture he said ‘the live is an effect of mediatisation, not the other way around. It was the development of recording technologies which made it possible to perceive existing representations as live’ (Auslander 2011). Here Auslander is establishing an important proponent of this research. That it is only through the introduction of medial technologies into performance that we get to understand the paradigm of live / not live / liveness and, by extension, how this paradigm is relevant to both live and mediated theatre. Or as Auslander puts it,

The history of live performance is thus bound up with the history of recording media, and extends over no more than the past 100 to 150 years. To declare retroactively that all performance before the mid-nineteenth century was “live” would be to interpret the phenomenon from the perspective of our present horizon rather than those of earlier periods. (Auslander 2012)

Here Auslander is emphasising the phenomenological importance of liveness, that liveness is not so much the resultant nature of a live event (an event taking place in one discreet time/space) but an experience of the event’s own unique ontology. Liveness is an event specific phenomenon, which can only be understood in relation to the event to which it belongs. Thus, liveness in metaverse theatre can only be fully understood through the lens of the metaverse experience and it’s down to the audience of metaverse theatre to evaluate and validate its own unique qualities of liveness.

If we take this to be the case then, at these early stages of investigation into this area of practice, we can posit that qualities of liveness in metaverse theatre are to be found in the nature of the metaverse itself, as exploited by theatrical convention. For us these qualities are interactivity, user agency and the use of branch narratives.

When we consider these in relation to theatre in the metaverse, we can easily assume that the term user can be exchanged with the term audience – but an audience which is inherently active in the mode of theatre they are engaged with.

4. THE PERFORMER-CENTRIC BIAS

During our previous research projects, we have begun to identify and recognise a trend we term the ‘performer-centric-bias’. We believe that this, unconscious bias, is at play widely across the theatre industry and within the authors’ own practices. Furthermore, we believe that this observed trend is having a negative effect on the discussion and development of new innovative theatre practice. Here we define the performer-centric-bias as a tendency for theatre makers, producers, performers, critics etc. to consider and focus on the experience of the performer in the development of theatrical events. Which unwittingly not only subjugates fellow workers within the theatre industry, notably the technical and design teams, but also the audience.

As we move into this new uncharted mode of theatre making, we propose a conscious abandonment of this performer-centric-bias in favour of establishing a non-hierarchical approach to understanding the roles of each attending individuals within a metaverse theatre event. Be those individual performers, technical designers, or the audience themselves. This non-hierarchical approach to development and research has stood the post-dramatic theory (Lehmann, 1999) in good stead to uncover key theoretical developments within the last 50 years of performance studies, by disavowing advancements of the theatrical from the outmoded confines and bias of its predecessors. Once again asserting the idea that new forms of practice are best understood through their own conditions and perspectives.

5. LIVENESS IN METAVERSE THEATRE

To examine our hypothesis of liveness in metaverse theatre this project will design, produce, and deliver our first offering of what metaverse theatre could be, the metaverse performance of Hello World. At the centre of our research and development of the performance is the exploration of what we believe to be the tenets of liveness in metaverse theatre – audience agency, interactivity and the use of branch narratives. This is the first piece of theatre, harnessing Copper Candle’s own patented plugin technologies, to live stream motion capture performance into a shared metaverse performance space.

5.1 Audience agency

The audience are not only central to this research, but we believe central to the ongoing development
in this area of practice. As acknowledged metaverse theatre practice ruptures the existing paradigm of theatre, by dispersing its audience and its performers across different times and spaces. We believe that agency for the audience is essential, in order to keep a sense of connection to the performance, a sense of liveness. In Hello World we create this agency by endowing the audience with the ability to participate in the development and re-directioning of narratives. In other words, the audience are active participants in the unfolding of the story. Although this is not unique to metaverse theatre and this technique can be seen in other conventional theatre practices, such as immersive/participatory theatre, we are interested in testing how much agency an audience feels in metaverse theatre events. As we hope to understand more fully whether, in order for the event to have liveness, the audience need to have agency over the whole event, the narrative, or the performers. Or perhaps, only the illusion of agency is needed?

**Hello World** is engaged in by an audience through a bespoke user interface which provides them with a variety of interactive tools. Including the ability to choose their own POV from which they can observe the action. A chat function attached to the UI, in which the audience are invited to communicate with not only each other, but the performers in real-time. And also functions are available for the audience to provide feedback during the performance, by sending commands in the form of emotion reactions. Alongside this the UI also allows the audience to be a deciding factor in how the event itself unfolds, through a voting mechanism.

### 5.2 Interactivity

As outlined above Hello World uses a UI with multiple interactive functions built in. Interactivity is the second tenet we explore throughout this research. It also allows us to have some control over the manner in which we create agency within the audience. The main points of interactivity for this research are, an ability to communicate with other audience members and the performers, emotion reaction commands, as well as the ability to vote on the outcome of narrative within Hello World.

Firstly, for an audience member to communicate with both the rest of the audience and performers is a function we built in to find out whether this is an ability virtual audiences want/need. The thought behind this functionality, is to help foster a sense of what we term ‘online-togetherness’. In other words, the awareness of yourself as a part of a greater online whole, cohered around a metaverse theatre event. This idea of online-togetherness is supplanted here from the wider activities happening within metaverse environments. Tech blogger Limarc Ambalina refers to this sense of togetherness in his article *How Fortnite Became the Modern-Day Community Center for Hackernoon* writing,

> Fortnite became a place to hang out with your friends, no matter what age you were. Personally, living in Tokyo, Japan, I find it hard to stay in touch with people in Canada. However, in 2019 and 2020, I often found myself catching up with friends over a 2-hour-long session of Fortnite. In many ways, Fortnite became the modern community center or outdoor basketball court where people came to socialize, regardless of their actual skill level in the game. It was an open place for everyone. *(Ambalina 2021)*

This research understands the act of theatre as fundamentally a social event, in turn echoing Auslander’s reading of liveness. And that this event is firstly to do with cohering an audience of people to create communities of experience. It is our intention that an engagement with the chat function of Hello World’s UI will help bolster a sense of online-togetherness and in turn begin to form a single community of audience, across multiple times and spaces.

Secondly, the UI’s emotion reaction commands. This is a simple command built into the experience of Hello World. It gives the audience members a chance to respond to the performance, with either a happy, sad, or applause reaction. These emotions choices are intentionally generic, in order to capture a large range of response, in a small range of choice. When an audience member selects one command, they are displayed a visual response on their display only. This response is also logged on a print screen for the performance, that only the researchers are able to view. We have introduced this function to test whether response to contributed reaction by audience members needs to be reinforced by the group to garner further engagement, or whether a computer-generated response would suffice.

Thirdly, the UI’s voting mechanism. At various points throughout Hello World the audience will be asked to vote on how they would like the narrative / performance to proceed. The voting function allows the audience to cast their votes through a single demand, rather than using the chat function (keeping it free for any ongoing discussion within the group). The voting mechanism serves three distinct purposes, firstly to help garner initial response in the audience, the narrative will not proceed without the audience’s vote. Secondly, it introduces potential for the research to understand the direct correlation between audiences simply engaging with the UI, or if they are also engaged with the narrative and theatre of the event. And thirdly, to provide a grounding mechanism for our third tenet – Branching narratives.
5.3 Branching narrative structures

Branch Narratives, or in the realms of gaming build-your-own-adventure is a concept in narratology that refers to a narrative in which its audience chooses (often at various points) how the story proceeds, think Assassin’s Creed or Black Mirror’s Bandersnatch. The narrative then, when turned into a schematic takes on the shape of a branch, with all the connective options set out against one another. As mentioned, this is a common concept for gamers, with a plethora of build-your-own-adventure games on the market, with a huge online audience. So, this research asks, why not build-your-own-theatre-show? Branching narratives are a proven method to ensure engagement with online gaming, which in turn create virtual communities, brought about through online-togetherness. Utilising the UI’s voting function Hello World hopes to capitalise on this form of storytelling to help bolster engagement from its audience, as well as handing over agency to them.

5.4 Live and pre-recorded content

Throughout the series of 24 performances, presented over two days, these functions will be tested. This will be done by keeping these functions active, or not. In other words, at certain points in the performances the audience’s votes will be monitored and taken into account and they will effect change in the performance. At other times this mechanism will be falsified, and pre-decided outcomes will run regardless of the audience interactivity. In addition, throughout the performance the audience will engage with a mixture of live-streamed and pre-recorded content, in an aim to question whether real-time content is important to the liveness of metaverse theatre or not. The UI chat function and emotion response buttons will stay active throughout the entire run of performances.

Our main aim throughout the demonstration is to lay the framework to ask a very similar question, articulated in a variety of ways. Is liveness in metaverse theatre to do with the audience being in a state of online-togetherness, or is it to do with the application of real-time content. Or perhaps there is a more dynamic answer, in which a combination of both is needed. The audience members will be invited to engage in comprehensive audience research, supported by the Audience Agency. This survey will assess these questions through gathering feedback on how the audience experienced our hypothesis of liveness within the performance.

Our notion here is that we are producing an experience which feels live because it has an “eventfulness” or “togetherness” which provides audiences with a sensation that they might call “live”.

6. REFERENCES

Ambalina, L. (2021) How Fortnite became the Modern-Day Community Center. https://hackernoon.com/how-fornite-became-the-modern-day-community-center-dse2376n Accessed on 08/02/2022.

Auslander, P. (1999) Liveness: Performance in a Mediatized Culture. Routledge.

Auslander, P. (2011) Digital Liveness: Philip Auslander (US) About Digital Liveness in Historical, Philosophical Perspective. https://vimeo.com/20473967 Accessed on 28/02/2022.

Baugh, C. (2013) Theatre, Performance and Technology: The Development and Transformation of Scenography. Bloomsbury Publishing.

Bolter, J.D., and Grusin. R.A. (2000). Remediation: Understanding New Media. MIT Press.

Bormann, D., and Greitemeyer, T. (2015) Immersed in Virtual Worlds and Minds: Effects of In-Game Storytelling on Immersion, Need Satisfaction, and Affective Theory of Mind. Social Psychological and Personality Science.

Bolton. J.H. (1993) Unmarked: The Politics of Performance. Routledge.

Bordman, D., and Greitemeyer, T. (2015) Immersed in Virtual Worlds and Minds: Effects of In-Game Storytelling on Immersion, Need Satisfaction, and Affective Theory of Mind. Social Psychological and Personality Science.

Bolter, J.D., and Grusin. R.A. (2000). Remediation: Understanding New Media. MIT Press.

Bormann, D., and Greitemeyer, T. (2015) Immersed in Virtual Worlds and Minds: Effects of In-Game Storytelling on Immersion, Need Satisfaction, and Affective Theory of Mind. Social Psychological and Personality Science.

Bolton. J.H. (1993) Unmarked: The Politics of Performance. Routledge.

Bordman, D., and Greitemeyer, T. (2015) Immersed in Virtual Worlds and Minds: Effects of In-Game Storytelling on Immersion, Need Satisfaction, and Affective Theory of Mind. Social Psychological and Personality Science.

Bolton. J.H. (1993) Unmarked: The Politics of Performance. Routledge.

Bordman, D., and Greitemeyer, T. (2015) Immersed in Virtual Worlds and Minds: Effects of In-Game Storytelling on Immersion, Need Satisfaction, and Affective Theory of Mind. Social Psychological and Personality Science.

Bolton. J.H. (1993) Unmarked: The Politics of Performance. Routledge.

Bordman, D., and Greitemeyer, T. (2015) Immersed in Virtual Worlds and Minds: Effects of In-Game Storytelling on Immersion, Need Satisfaction, and Affective Theory of Mind. Social Psychological and Personality Science.

Bolton. J.H. (1993) Unmarked: The Politics of Performance. Routledge.

Bordman, D., and Greitemeyer, T. (2015) Immersed in Virtual Worlds and Minds: Effects of In-Game Storytelling on Immersion, Need Satisfaction, and Affective Theory of Mind. Social Psychological and Personality Science.

Bolton. J.H. (1993) Unmarked: The Politics of Performance. Routledge.

Bordman, D., and Greitemeyer, T. (2015) Immersed in Virtual Worlds and Minds: Effects of In-Game Storytelling on Immersion, Need Satisfaction, and Affective Theory of Mind. Social Psychological and Personality Science.

Bolton. J.H. (1993) Unmarked: The Politics of Performance. Routledge.

Bordman, D., and Greitemeyer, T. (2015) Immersed in Virtual Worlds and Minds: Effects of In-Game Storytelling on Immersion, Need Satisfaction, and Affective Theory of Mind. Social Psychological and Personality Science.

Bolton. J.H. (1993) Unmarked: The Politics of Performance. Routledge.

Bordman, D., and Greitemeyer, T. (2015) Immersed in Virtual Worlds and Minds: Effects of In-Game Storytelling on Immersion, Need Satisfaction, and Affective Theory of Mind. Social Psychological and Personality Science.

Bolton. J.H. (1993) Unmarked: The Politics of Performance. Routledge.

Bordman, D., and Greitemeyer, T. (2015) Immersed in Virtual Worlds and Minds: Effects of In-Game Storytelling on Immersion, Need Satisfaction, and Affective Theory of Mind. Social Psychological and Personality Science.

Bolton. J.H. (1993) Unmarked: The Politics of Performance. Routledge.

Bordman, D., and Greitemeyer, T. (2015) Immersed in Virtual Worlds and Minds: Effects of In-Game Storytelling on Immersion, Need Satisfaction, and Affective Theory of Mind. Social Psychological and Personality Science.

Bolton. J.H. (1993) Unmarked: The Politics of Performance. Routledge.

Bordman, D., and Greitemeyer, T. (2015) Immersed in Virtual Worlds and Minds: Effects of In-Game Storytelling on Immersion, Need Satisfaction, and Affective Theory of Mind. Social Psychological and Personality Science.

Bolton. J.H. (1993) Unmarked: The Politics of Performance. Routledge.

Bordman, D., and Greitemeyer, T. (2015) Immersed in Virtual Worlds and Minds: Effects of In-Game Storytelling on Immersion, Need Satisfaction, and Affective Theory of Mind. Social Psychological and Personality Science.

Bolton. J.H. (1993) Unmarked: The Politics of Performance. Routledge.

Bordman, D., and Greitemeyer, T. (2015) Immersed in Virtual Worlds and Minds: Effects of In-Game Storytelling on Immersion, Need Satisfaction, and Affective Theory of Mind. Social Psychological and Personality Science.

Bolton. J.H. (1993) Unmarked: The Politics of Performance. Routledge.

Bordman, D., and Greitemeyer, T. (2015) Immersed in Virtual Worlds and Minds: Effects of In-Game Storytelling on Immersion, Need Satisfaction, and Affective Theory of Mind. Social Psychological and Personality Science.

Bolton. J.H. (1993) Unmarked: The Politics of Performance. Routledge.

Bordman, D., and Greitemeyer, T. (2015) Immersed in Virtual Worlds and Minds: Effects of In-Game Storytelling on Immersion, Need Satisfaction, and Affective Theory of Mind. Social Psychological and Personality Science.

Bolton. J.H. (1993) Unmarked: The Politics of Performance. Routledge.

Bordman, D., and Greitemeyer, T. (2015) Immersed in Virtual Worlds and Minds: Effects of In-Game Storytelling on Immersion, Need Satisfaction, and Affective Theory of Mind. Social Psychological and Personality Science.

Bolton. J.H. (1993) Unmarked: The Politics of Performance. Routledge.

Bordman, D., and Greitemeyer, T. (2015) Immersed in Virtual Worlds and Minds: Effects of In-Game Storytelling on Immersion, Need Satisfaction, and Affective Theory of Mind. Social Psychological and Personality Science.

Bolton. J.H. (1993) Unmarked: The Politics of Performance. Routledge.