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Live Performance and Video Games: Introduction to an Interdisciplinary Field of Research

Réjane Dreifuss, Simon Hagemann and Izabella Pluta

Introduction – Context, intentions, and origins of this volume

Narrative strategies, immersion, interaction, identification, multimodality, characters, the relationship between the physical and virtual worlds: The fields of investigation into the complex relationship between live performance and video games are many and varied. Since the early 2000s, video games have become the economically dominant medium of our world, and their cultural importance has only kept rising since then. It is, therefore, easy to understand why an increasing number of creators of live performances are interested in video games: be it to expand the possibilities of the theatre, or to tune in to the media reality of a theatre audience that is ever more immersed in ludic culture. On the one hand, references to video games can arise on very different conceptual, thematic, and technological levels. On the other hand, video games also draw on aesthetic features of older media. Though references to cinema probably dominate, there are also repeated allusions to theatre and other forms of live performance. Furthermore, especially with the success of e-sports and live streaming of gameplay, questions about the staging of gaming itself have increasingly taken centre stage.

In the research literature, a few pioneering works on the connections between play and performance (Richard Schechner) or on computer software and theatre (Brenda Laurel) can be found, but it was only with the rise in social significance of video games in the 2000s and the emergence of immersive theatre that references to video games began to be found in theatre studies. In the young discipline of game studies, which is considered to have begun in the early 2000s, little attention was paid to the aspect of performance until the end of the first decade, as the discipline initially focused more on narrativity and media specificity. Since then, a few articles have appeared on the complex relationship between video games and live performance in the two research disciplines.

The primary function of this book is to gather together the scattered approaches to this topic in one place. To the best of our knowledge, it is the first academic edited

volume on this subject. It follows a consistently interdisciplinary approach, bringing together experts from theatre and performance studies with specialists from game studies, researchers, and art-creating researchers with researching artists. The book evokes several hybrid formats such as game theatre, game performance, the use of avatars and VR/AR technologies on stage, e-sport, speed running, and reflects on notions such as play, games, performativity, theatricality, dramaturgy, immersion, participation, and interaction, which are discussed in terms of theatre and in video games.

This volume is based on the online symposium *Live Performance and Video Games*, which was held from 5–7 October 2022 by the Institute for the Performing Arts and Film, Zurich University of the Arts (ZHdK, Switzerland) in cooperation with the Digital Images and Virtual Reality Laboratory (INREV), Université Paris 8 (France); the Research Centre on Mediation, Communication – Language – Art – Culture (CREM), Université de Lorraine (France); GameLab UNIL-EPFL, Université de Lausanne; Ecole polytechnique fédérale de Lausanne (Switzerland); and the Association Theatre in Progress (Switzerland). The volume has also been enriched by several other important contributions. It should be noted that the ZHdK already has a certain tradition of reflecting on the relationship between live performance and video games, as two international symposia on this topic have already taken place here, in 2016, *Gamification: Digitale Ausräumung des Theaters* and in 2018 *Ludification in Theater. Neue Utopien des Theatralen*, both organised by Dieter Mersch and Réjane Dreifuss.¹

While the various articles included in this book deal with a variety of – sometimes very specific – aspects of the relationship between video games and live performance, the introduction aims to provide a brief overview of the general relationship between these two arts and/or media.² First, we will discuss the growth of gamification in live performance in recent years and the underlying causes of this development, as well as the specific format of game theatre. This is undertaken with reference to performances in an artistic context, mostly theatre performances (Schechner 2002, 31). Second, the application of a performative perspective to the playing of video games will be discussed. Video games are games that are played on a video screen, and we are of course talking about digital games in this case. Here the concept of performance is interpreted broadly, in the sense of Richard Schechner, who differentiated between eight different kinds of performance, of which play is one

1 The two symposia were part of the research project *Ludification in Theater: zur digitalen Ausräumung des Theaters*, 2016–2020, conceived at the Institut für Theorie, Zurich University of the Arts, under the direction of Prof. Dieter Mersch.

2 There is a whole series of academic articles on both the artistic character of video games and the medial character of theatre or performance, but these cannot be discussed further here for reasons of space.

(Schechner 2002, 31). Due to mediatisation, liveness must also be understood more generally and not in the sense of a strict physical co-presence of actors and performers as in the traditional concept of performance in theatre studies.³ Finally, we briefly present the structure of the book and introduce the individual contributions.

Gamification of live performance

Crucial turning points in contemporary live performance

When looking at changes in live performance in the western world in recent decades, a few general trends can be observed.

First of all, the 'hybridization of the arts' has, for the most part, vindicated the idea that the arts have a tendency to 'fray' (Adorno 1970). This tendency towards the 'ongoing dissolution of the arts' (Wellershoff 1989),⁴ the 'de-framing of the arts' (Klotz, Belting 2002) and the notion that the arts are, finally, 'dissolving their limits' (Fischer-Lichte, Hasselmann, Rautzenberg 2010) has been observed for well over 60 years. The concept of the dissolution of the arts touches on multiple aspects of artistic experience. Theorists have spoken of 'intertextuality' (Plett 1991) which has been extended to a broader concept of 'intermediality' (Rajewsky 2002, Bay-Cheng 2010). Theatre, no less than the other arts, is also influenced by the phenomenon of 'hybridisation'. This involves the aesthetic crossover of live performance with other forms from different artistic fields, such as plastic arts, film, installation, and digital art. The theatrical elements and the new components are placed in a contemporary configuration, in a single art form, which may be characterised by a fusion of these elements and components or by their tension (Manovich 2001, Pluta 2010).

Second, the 'performative turn' in theatre has led to a shift from representation based essentially on the text towards a theatrical 'event', which focuses on corporality, co-presence, staging, and performance as well as tendencies towards 'post-dramatic' theatre (Auslander 1997, Lehmann 1999, Fischer-Lichte 2004). The deconstructionist praxis deployed here has transformed the theatre itself into an object of reflection, questioning the division of space, text, roles, characters, presence, etc. Those reflections have led to the rethinking of the traditional setting of stage and audience as well as the relationship between authorship, production, scene, and drama – through collective productions, 'de-dramatised' and 'de-symbolised' plots (Balme

3 A concept that has also been repeatedly challenged by various artists through experiments with multimedia theatre.

4 Unless otherwise indicated, this and all other quotations from texts that are cited in bibliographies in languages other than English are translations by the authors.

2003, Sermon 2012). The book *Performative Stories* by Nina Tecklenburg shows in detail how new narrative practices have emerged since the beginning of the 21st century, including 'collective games, theatre installations, extensive autobiographical performances, immersive role-playing and audio-video walks' (Tecklenburg 2022).

Third, the 'digital turn', with increasing use of digital technologies in the theatre in recent decades, has also contributed to expanding the possibilities of theatre, both aesthetically and in terms of content (Blake 2014, Wiens 2014, Masura 2020). This digital transformation is a multi-faceted phenomenon. The range of technical devices is particularly complex today. The following devices can be mentioned: screens (panoramic, multi-screen, concave, convex); VR headsets (such as Oculus Rift); cameras (small digital cameras, 16mm cameras, surveillance cameras, surround-view and 360° cameras, Kinect); sound devices (headphones, sensors); mobile media (mobile phones, tablets); robotic objects (arms, exoskeletons); robots (androids, robotic puppets, domestic robots) (Mersch et al. 2023, Pluta 2022). Software and interfaces, meanwhile, are particularly abundant these days: The most widely used software includes Max/MSP (real-time), Isadora (programming software, can work with video and interactive media), Sunlight (DMX interface and software environment), Hephaestos (multiple audio interfaces, multi-track, can generate spatialization, automation, lighting and electronics linked to Arduino boards), Videostage (video broadcasting software) and many others (Dixon 2007, Salter 2010).

Fourth, with the development of digital technology, two important concepts that invoke the idea of audience participation are placed at the centre of artistic interest: interactivity and immersion (Couchot 1998). Theatres have been experimenting with the idea of audience participation since at least the 1920s. The overcoming of the 'fourth wall' has been discussed since the early avant-garde, and, in the course of the politicisation of theatre formats in the 1960s and 70s, interactive and participatory formats with the direct involvement of the audience were also tried out (action theatre, street theatre) with audiences being invited to participate, provoked, and used as the object of observation or questioning. Similarly, the renewed radicalisation of participatory models in the context of the performative turn and postdramatic theatre of the 1990s explicitly thematised the passive role of the audience. On the one hand, various attempts were made to dissolve the separation of the stage and audience while, on the other, the creation of entire environments or theatrical spaces as artificial environments using new media was proposed.

Digital technology transforms ideas of interaction and participation from early forms of the dissolution of boundaries in theatre. Interactivity, we should note, is a characteristic of computerised media that can be summed up as the creation of a 'more or less advanced dialogue with the user' (Poissant 1997). Interactivity can have different levels of interaction, varying from a closed model to an increasingly complex format. Here it is the viewer that interacts with the system of the work of art and

enables it to come to fruition. In theatre, contemporary forms of interactivity and immersion have become highly popular. In his article 'Contour du Théâtre Immersif' (1990–2010), the stage-designer Marcel Freydefont defines immersive theatre as follows: 'Immersive theatre [...] is a spatial, three-dimensional stage that aims to break away once again from the two-dimensional stage, the tableau stage (*la scène-tableau*), by following the dynamics of all this research but also by taking other paths' (Freydefont 2011, 2).⁵

Immersive theatre,⁶ a format that unites actors and spectators in the same space, has become a significant subcategory of theatre since the 2000s, especially in the UK, where many theatre companies have pursued it, including pioneers *Punch-drunk*. Immersive theatre can be considered a further development of participatory theatre, amalgamating participation with immersion (Bieger 2007). The amalgamation works because participation creates the emotional 'involvement' that appears to be decisive for immersive experiences, while immersion and involvement promote genuine participation. The concepts of 'participation' and 'immersion' bring together different aesthetics or 'strands of discourse' (Ryan 2001, Bouko 2016), which appear relevant to investigating the gamification of theatre.

Gamification of society and performance

The term that remains at the heart of the debate on the intersection of live performance and video games is gamification. According to Gabe Zichermann and Joselin Linder, gamification '[...] uses concepts from games, loyalty programmes and behavioural economics to stimulate user engagement' (Zichermann, Linder, 2013, 123). The term was introduced by computer programmer Nick Pelling in 2002 and was preceded by a more general discussion of games and the gamification phenomenon following a presentation by Jesse Schell at the annual Design, Innovate, Communication, Entertainment conference in 2000. In this presentation Schell set out his hypothesis about the future of society, in which everyday actions would be subject to a system of points and rewards. From this conference onwards, gaming and ludic activity have been associated with areas of social life that incorporate ludic mechanisms into domains usually considered as 'non-play' (Schell, 2000).

Gamification, i.e. the transfer of elements of a game structure into non-game environments, mainly draws on two different streams of research: firstly, game the-

5 'Le théâtre immersif [...] constitue une scène spatiale et tridimensionnelle qui entend rompre à nouveau avec la scène bidimensionnelle, la scène-tableau, en se situant dans la dynamique de toutes ces recherches tout en empruntant d'autres voies.'

6 Catherine Bouko (2016) proposes a definition of immersive theatre with respect to the 'spectator' in 3 steps: 1. Physical integration in space, 2. sensorial and dramaturgic immersion and 3. Confusion between the real and the fictional world.

ories originating from the humanities and social sciences, and secondly, applied research in the field of design, using computer games as an example. This game structure is based on engagement, individual and/or collective progress, and creativity. Outside of the arts, applications of gamification in society are on the rise in many fields: Health, education, work, media, culture, emotional relationships, and other areas have all been affected by gamified practices. In order to analyse the trend of 'gamification in theatre', it is important to highlight the ongoing gamification of society as a whole (Cotta 1980, Vinck 2016, Stalder 2016, Le Lay 2021, Salter 2022).

The rapid growth of social media platforms where the line between art-consumer and art-creator is blurred reflects the increasing importance of gamification for modern audiences. The practices of personal representation, self-staging, playing with different identities, on blogs, YouTube, Twitter, or Facebook in ways that often resemble theatrical 'events' seem to have influenced contemporary theatre. The same applies to TV reality shows, which can also be seen as a form of 'theatricalisation' of everyday life. Perhaps even more if one thinks of online platforms such as Second Life, in which the user assumes a different identity in the game and experiences an adventure as 'someone else' in a digital parallel universe. As Ulf Otto has also shown in his book *Internetauftritte. Eine Theatergeschichte der neuen Medien* (2013), such network-based games exert an influence on theatre, because they have contributed to establishing participatory practices both inside and outside the theatre.

The gamification trend is also noticeable in the theatre. It is integrated in different ways and on various levels. Theatre can be inspired by new formats. Constanza Blanco notes that the theatre has taken up elements from live action role playing games, theme parks, and escape rooms (Blanco 2021). It can use technologies from the gaming world such as the Unreal Engine or Unity game engines or VR or AR technology, for example. Elements from digital games are also used in world-building, in reflecting on how the audience is perceived, in creating dramaturgies using game rules, and plays with 'quests' and 'levels'. This can be considered a 'theatricalisation' of the logic of digital game formats. The use of digital game technologies and game rules systems here can be seen as part of the digitalisation of theatre, even where the process is entirely analogue (Machon 2013, Kolesch, Schütz, Nikoleit 2021).

Different theatre companies apply the concept of gamification in various ways. This type of performance has many facets: It transposes the aesthetics of video games to the stage (Susanne Kennedy & Markus Selg, Nationaltheater Reinickendorf); it immerses the spectator in a fictional yet material world (Punchdrunk, SIGNA, Yan Duyvendak, Björn Bicker, Madame Lupin); it includes the use of game controllers or video game images (Rimini Protokoll, Extraleben); it explores interactivity between actors and avatars (Georges Gagneré); or it invites the audience on a life-size collective experience involving the interactive unfolding of a story (Blast Theory, Alan Borek, machina eX).

Towards a game theatre

The relationship between live performance and video games is still rarely studied, and relatively few research articles have been devoted to these issues (Homan 2014, Annis 2019, Männel 2018, Büscher 2018, Pluta 2022). A few dissertations and doctoral theses have been completed in relation to this theme, such as Michael St. Clair's dissertation, *Acts of Play: Games as Experiential Performance* (2013) or Greg Foster's PhD thesis, *Towards a Theatre for Gamers: A new paradigm of practice in contemporary live performance as a response to games and interactivity in digital media and performance culture* (2017).

The German theatre critic Christian Rakow has investigated theatrical performances in Germany that adopt interactive game mechanics for their own stage fictions. He coined the term '*Game Theater*' in the online theatre journal *nachtkritik.de*, adding it to the website's glossary (2012). In his article 'Playing Democracy', he describes several works involving audience participation developed by theatre collectives such as *machina eX* and *SIGNA* and argues that those live performances draw inspiration directly from video games (Rakow 2013, see also 2015).

The defining feature of game theatre is that it substitutes 'dramatic structures' with 'program design'. The latter generally comprises an initial situation and an open set of rules that serve as springboards for the development of play situations and scenes that integrate entire environments (off-spaces, industrial wastelands, neighbourhoods, basements, etc.). In designing/creating collective worlds (*Weltentwerfen*) (Borries 2016), game theatre formats require that all participants are equally actors, players, and co-creators, who are involved, engaged, and ethically concerned about the Other. By this means, game theatre produces narratives that can be concretely experienced by participating individuals. Thus, game theatre discards a series of distinctions that have structured the theatre over the centuries in various ways (including the binaries: inside/outside, actor/audience, role/action, drama/text). The distance established by the stage/audience binary gives way to direct action, involvement, and experience, because everyone present takes part in the action and has the capacity to influence the course of the game with their decisions. Participants get caught up in the events, have to take positions in group situations, can try to solve problems in different ways, and can engage in parallel activities, all the while having to take responsibility for the effects their actions have on other 'players'. In game theatre, these participants are charged with collectively solving a task and 'co-creatively' 'coming up with' a story that cannot be separated from their own personal 'experience' of the process (Drewes 2010, Birch 2012, Biggin 2017, Frieze 2017).

The German artist collective *machina eX* 'integrates modern technologies with elements of classical illusion theatre to create playable theatre pieces that are simul-

taneously accessible as computer games' (see website *machina eX*⁷). The collective builds its game theatres by working with a system based on precise game rules which define how the theatre space and the audience are treated, as is the case in a point-and-click videogame. In *Toxik* (2015), ten audience members had 90 Minutes to find out who murdered a policewoman. In *Patrol* (2019), they become employees of a fictitious company where they are supposed to work. In these games, the group experience becomes social and political as the group is constantly challenged to make decisions that are discussed collectively.

If *machina eX* builds its games in the tradition of point-and-click video games, there are theatre companies which draw inspiration from other types of games, such as Open World Games, embracing the idea of letting the spectator move freely in an artificial world with a wide range of choices over factors such as how and when to achieve their objectives. SIGNA, an Austrian-Danish collective, develops non-stop performance-installations which are built to be self-contained worlds, like miniaturised model-societies, in which the participants/visitors can enter, experiment, and explore. These performative installations are inhabited by actors with whom the visitors can engage. While the visitor must respect certain rules, evolve within a certain framework, within that they can then do 'whatever they want': move from one space to another, stay or move on, enter into contact with other people (actors and other visitors), and, by means of the choices they make, take a position and influence the course of the show. Depending on the concept, the length of time the audience spends in a performance can range from two and a half hours to several days (see website SIGNA⁸). *Das Halbe Leid* (Half the Suffering) (2017) took place in the halls of a disused machine factory in the Hamburg suburbs, which was converted into a fictitious emergency shelter where 50 spectators, i.e. visitors, were invited to share life with the shelter's inhabitants (played by the actors) all night long. In *Das 13. Jahr* (The 13th year) (2023) SIGNA built a village 'surrounded by dense fog' in which the visitors are transported back to their 13th year of life and assigned to one of the village's families.

The effects of the coming together of live performance and video games include increased interdisciplinary co-operation between different professional groups and the development of new technical and artistic skills. In some forms of game theatre we can observe the collaboration of professions from traditional theatre and professions new to theatre such as computer scientists and game designers. Many of these collaborations enable new ways of both thinking about theatre and of making video games, which can find inspiration in live performance.

7 See <https://machinaex.org/en/>

8 See <https://signa.dk>.

Gaming as performance

The integration of performance and video games: A question of perspective

Shifting perspective to look at the relationship between live performance and video games from the gaming side, we can observe many instances of inspiration, appropriation, and transfer.

Here the concept of 'liveness' is significant. In performance studies, a liveness debate was largely initiated by Peggy Phelan (1993) and Philip Auslander. In his book *Liveness: Performance in a Mediatized Culture* (1999), Auslander demonstrates the historicity of the concept, arguing that it is not an ontological condition, but has emerged since the development of recording technologies, as a historical condition of certain representations. As Auslander points out, following the establishment of the dichotomy between 'live' and 'recorded', our understanding has continued to change with the emergence of new formats such as live broadcasts or even live recordings.⁹ In a later essay, Auslander (2012) develops these ideas further. For digital technologies, which could easily include games, Auslander argues that liveness is an interaction produced through our engagement with the object and our willingness to accept its claim (2012, 9). Following this logic, when we play games, we expect real-time interactions with a machine that we can perceive as live. The concept of liveness must therefore be understood as something more comprehensive in the context of video games. Nevertheless, there are several different ways to mix live performance and video games.

Mixed art forms such as mixed-media performances or alternate reality games can be considered either from the point of view of live performance or from that of games, since both elements are included though, depending on the project, one or the other may predominate. The *framing medium* (Müller 2000), through which everything is ultimately perceived, is sometimes quite difficult to define. Alternate reality games often link the virtual and the physical worlds using GPS tracking. Mixed-media performances (Giannachi 2004) can exploit new potentials created by the use of augmented reality (AR) and virtual reality (VR) technology. Escape room games are a related category. They may contain performative elements and many draw inspiration from video games. However, escape room games are primarily perceived as sui generis and thus represent a framing medium in their own right.

9 While the co-presence of actors and spectators was often assumed to be constitutive of theatre performances, live performances today have to be defined more broadly. In various theatre performances, the shared co-presence has also been called into question by the fact that the audience and performers were in different places and communication was only possible via media technology, usually video.

While references to game culture, the use of video game technology and game design elements may seem optional in some live performances, other live events are inconceivable without elements drawn from video games, such as concert performances of game music. This is even clearer when gaming is the central element of a live event, as in e-sports or speedrun events. Even if the framing medium is live performance, gaming is the central element here.¹⁰ The same applies to gaming performances on Twitch, even if these are mediated and feature both greater interaction via chat and a slightly different role for the performers, who also take on the role of commentators. So even though gaming is the central element here, another major focus is on entertainment and performance as it is at some e-sport events.

Another hybrid situation is *virtual theatre* (Giannachi 2004, Dixon 2007). This form, which gained popularity in the 1990s and attempts to transport a theatrical experience into the virtual world, allows the 'spectators' to meet the actors in the form of avatars on a virtual stage. In this format, audience interaction means that each performance is different, and the levels of playfulness and performativity within those interactions may vary widely.

Marlena Huuhka (2020) provides one of the most complete overviews of the various possible combinations of video games and performance. She distinguishes five approaches to interweaving video games and performance. The first considers video games as an aesthetic resource in performances. Equally, performances can be used as an aesthetic resource within games, such as the theatre you can visit in *Red Dead Redemption 2* (Rockstar Games, 2018). The second approach examines video games as a structural category in performances and in various forms of immersive theatre, an approach already discussed above. Conversely, video games can be structured around essentially performative elements as in the *Just Dance* game series (Ubisoft, 2009–) where players are required to perform dance moves. The third approach focuses on performances staged within video games, such as the 2019 Marshmello concert attended by ten million spectators in *Fortnite* (Epic Games, 2017). The fourth category, 'performances made with video games' encompasses mixed-media performances and alternate reality games by artists such as Blast Theory. Huuhka analyses the concept of 'gameplay as performance' in the fifth category. For gameplay to be considered as performance, the player needs to abandon the ordinary goals and plot elements of the game and play it with a different purpose. However, considering only such 'counterplay' as performative may be a little bit too restrictive.

10 The question of the domination of one medium over another or even the incorporation of the latter in the former has been widely debated in studies of intermediality and performance (Chapple, Kattenbelt 2006/ Bay-Cheng et al. 2010).

The performative view of games and gaming

Besides counterplay, various other forms of play in video games can also be considered as performative. Since Brenda Laurel's *Computers as Theatre* (1991), attempts have been made to apply methods from theatre and performance studies to gain new insights about computer software. In a pioneering text in game studies, Espen Aarseth (Aarseth 1997, 21) identifies a 'performative aspect' in what he calls 'ergodic literature', which challenges the reader to interact. Another pioneer, researcher and game designer Gonzalo Frasca, has been trying to develop video games inspired by Augusto Boal's theatre work and to reflect on them rigorously since his Master's thesis (2001). Various researchers have since tried to fine-tune these approaches to gain a better understanding of various aspects of computer games.

Many researchers refer to the classical literature of performance studies: John L. Austin's speech act theory and the reality-generating qualities of language, John R. Searle's focus on intentionality, Jacques Derrida's counter-position and focus on the historical linguistic context, Erving Goffman's performance of social identities and Judith Butler's gender performance, Richard Schechner's performing as 'showing doing' and his concept of 'restored behaviour', and Erika Fischer-Lichte's concept of the transformative potential of performance. According to Erika Fischer-Lichte, the lowest common denominator of all performativity theories is that performative processes are always self-referential and reality-constituting (Fischer-Lichte 2021, 157).

Clara Fernández-Vara (2009) was one of the first to propose a more systematic framework for analysing computer games with the help of insights from performance theory and theatre studies. In her approach, the players take on the roles of both performer – via their interaction with the game – and the spectator, who makes sense of the videoludic sign system (Fernández-Vara 2009, 6). This idea was further developed by Britta Neitzel, who described the avatar controlled by the players as a 'point of action', which is always accompanied by a 'point of view' from which the data body can be observed by the players (Neitzel 2018, 184). In his dissertation, *Acts of play: Games as experiential performance* (2013), Michael St. Clair develops, without referring to Fernández-Vara, but in a similar direction, a performance studies approach to games which 'should focus on games principally as things people do, and only secondarily as media objects or technological artifacts' (St. Clair 2013, 4). He places particular emphasis on analysing physical aspects of the players' practice. As research focuses more on the players, gaming is increasingly being considered as an embodied performative practice. Darshana Jayemanne's concept of 'performative multiplicities' (2017) is one of the most recent comprehensive attempts to apply a performative approach to video games. Due to the large number of possible performances in games, this approach is deliberately comparative and not typological (Jayemanne 2017, 2). One feature of this approach is the distinction between

diachrony and synchrony, in which narration can be described as a synchronising element that brings together different performances (Jayemanne 2017, 26).

Performance theory is often applied to the study of video game characters. Some researchers have discussed the relationship between players and character avatars in terms of performance. The parallels between controlling avatars and manipulating puppets have been identified at least since Emma Westecott's paper 'The Player Character as Performing Object' (2009). Performance studies theory is also often applied to role-playing games. Pen and paper RPGs have been identified as performative at least since Daniel Mackay (2001). As Hoover, Simkins, Deterding et al. point out 'though modern role-playing games (RPGs) sprouted more from military wargames than from theatre, from the beginning, RPGs were seen as an interesting way of telling stories, playing characters, exploring themes and recasting performance rituals in a new and personal light' (Hoover, Simkins, Deterding et al. 2018, 213). RPG participants are considered to be simultaneously actors and spectators (Hoover, Simkins, Deterding et al. 2018, 217), especially in massively multiplayer online role-playing games, in which roles are performed in front of a large number of other players.

While a performative view of games often centres on questions of (role-)play, embodiment, and incorporation (Calleja 2011), other aspects like acting, dramaturgy, temporality and spatiality are also addressed. For example, to get a better understanding of video game space, Andre Westerside and Jussi Holopainen propose using site-specific performance theory (2019). Michael Nitsche looks at actions of the video game players in reference to improvisational theatre (Nitsche 2014, 390), while Magdalena Leichter, in her case study of *Tacoma* (Fullbright 2017), searches for performative elements in some games on the intradiegetic level, which she recognises above all in the development of a self-referential reality and requests to the players to co-create and complete the game world (2019).

As the numerous interactions between game studies and performance studies show, an exchange can be extremely fruitful and lead to new approaches and insights. While intermediality has been an important field of research in theatre studies, more publications address explicitly the topic of intermediality in game studies (Neitzel 2015, Fuchs, Thoss 2019). The performative view on games and gaming can help us to better understand video games, their elements, and their effects, but also the practice of playing and the various possibilities for staging gaming. As Michael Nitsche points out 'any introduction of an established discipline into the field of game studies not only opens up new opportunities but can also lead to misconceptions and mismatches in terminology and methodology' (Nitsche 2010, 11). It is not always possible to simply adopt approaches from the other discipline, as the specific characteristics of each medium must always be considered. As the terms gamification and, above all, performance or performativity have been interpreted very comprehensively and historically in many different ways, it is always important to de-

scribe which aspects are being referred to precisely in each case. However, as many video games and live performances are themselves becoming increasingly hybrid, interdisciplinary approaches are becoming more and more necessary.

The sections and articles of this volume

In the fifteen different contributions included in this book, a number of international authors attempt to shed further light on various aspects of the complex relationship between video games and performance. Some contributions were written alone, others are polyphonic, some are formulated as essays, others in the form of a dialogue or interview. Some concentrate more on the gamification of live performance, others focus more on performativity in games and still others more on the interfaces that arise from the interplay of the two forms. As almost all contributions address a variety of topics, categorising them into different areas was anything but easy. The division into different sections should therefore not be understood as restrictive, but rather as the creation of resonance spaces in which the individual articles illuminate common points from different directions.

Entitled *Potential and Critique of a gamified Theatre*, section one brings together diverse approaches to a theatre enriched with game elements. First, the conversation entitled 'It's (Not) Only a Game'... some (game-changing) potentials of game-based theatre' between Josephine Machon and the practitioners Munotida Chinyanga and Persis-Jadé Maravala shows how playing or gaming can go beyond a simple game-based theatre and become dramaturgical methods for establishing 'communities' within live performance. The performance events created by those two artists seek to rebuild physical connection across neighbourhoods and set up ways for creative and critical transformation in the society. Second, in 'Video Games, Flow and Immersive Theatre: Participatory Arts in the Ultraliberal Era' Olivia Levet, by contrast, shows a darker side of gamified theatre, arguing that the concept of the 'flow state', as used in video games and extended to immersive theatre, leads to an ideological shift in participatory processes. Taking up Adam Alston's thesis (2013), she considers that while they could originally lead to emancipation, participatory processes are now mainly being diverted in favour of individual sensational experiences, which seem to adopt the values of ultraliberal ideology. Third, applying her idea of a 'ludic neuro-method', the artist and researcher Margarete Jahrmann presents in 'Ludic neuro-performances: An approach towards playful experiments', a concept of artistic research that understands play as a process of questioning research methods, experimental rules, or technologies. Against this background, she discusses two of her own performances that test new forms of play using technologies such as neural interfaces or AI.

The second section, entitled *New (game) technologies for the theatre*, focuses on the theatrical use of technologies that play a major role in the gaming sector. It addresses the new possibilities, but also the challenges that these technologies bring with them, as well as artists' desire to respond to the audience's world outside the theatre. Georges Gagneré, in 'Directing Avatars in Live Performances – an Autonomy Simulacrum of Virtual Actors', reviews the history of virtual actors before going on to discuss theatre work with avatars, above all reflecting his own artistic praxis. The question of the autonomy of virtual actors emerges as a central aspect, alongside the new possibilities that arise for theatre makers in terms of presence and human-computer interaction. In 'Unreal Engine in the theatre: New challenges for the lighting designer', Victor Inisan deals with the very specific question of the potentials and challenges of using the game engine Unreal Engine for theatre lighting. The use of Unreal Engine 5 is compared to other visualisation software, and discussed in terms of how it can change the work of the lighting designer and influence theatre aesthetics. 'Combining layers of reality. Live performance and video game elements in performance' by theatre director Christophe Burgess addresses the use of VR technology in theatre, taking his own immersive performance *Brainwaves* (2021) as an example. He explains the various technical and artistic motivations and challenges involved in the work with VR, motion capture, and avatars as well as collaboration with artists from different disciplines.

Section three, entitled *Working at the interface of games and performance*, brings together a variety of interviews and conversations with artists influenced by theatre and video games who design artworks mixing the two media/artforms. In 'Gaming in performance. Between research and artistic approach', Helen W. Kennedy interviews Matt Adams, who explores some of the key influences and trajectories underpinning the work of Blast Theory, an internationally renowned artists' group at the forefront of innovative interactive storytelling. The interview shows how the artistic practices of Blast Theory make use of and advance the possibilities of play, games, and live performance. In 'Machina eX: Working collectively at the interface of theatre and video games' researchers Réjane Dreifuss and Simon Hagemann talk to Clara Ehrenwerth and Anton Krause, two current members of machina eX, pioneers of game theatre in Germany. They look back at some of their shows over the last thirteen years and address various questions about the interplay between video games and theatre: the role of the audience, the artistic input of games, different venues, the role of technology, and the political dimension of games. Finally, 'What even is video game performance?' is a conversation between performance scholar Marleena Huhka and live artist Harold Hejazi about video games as a medium of performance. Through examples from their own practice, they discuss contemporary video game performances as well as gameplay as performance and the possible futures of these intermedial artistic forms.

Play is a key term in both theatre and (video) games. Section four, entitled (*Digital*) *play as performance*, focuses on the performative dimension of, mainly digital, play in various configurations. In 'Play, Performance, Agency: Prompt Injections and Playful Misuses of AI' Miguel Sicart deals with the contemporary practice of prompt injections in generative AIs. It is Sicart's stated intention to change our perspective on generative AIs by no longer seeing them as independent, function-driven systems, but as agents we must enter into a relationship with, appropriating these new technologies in ways that are creative and playful, but also ethically conscious. This also suggests that a playful approach does not have to be limited to the magic circle of a game but can also have an effect beyond it. 'Operations & Encounters: Playing Out Performativity' by Mary Flanagan discusses performativity in digital and non-digital play through the lens of media archaeology and spans the arc of various media art projects, especially her own pioneering artistic works, from virtual theatres of the 1990s to more recent interactive activist artworks. She shows that already early net artworks can be regarded as highly performative. Flanagan notes that her own work has increasingly moved offline because, as she explains, our everyday experiences are so dominated by a technology that has yet to adequately address its own biases and shortcomings (from commercialism to addiction to data collection). Finally, Fanny Barnabé and Sacha Bernard in 'From Home to Stage: How Speedrunners Negotiate Performance, Relation to the Audience, and Spectacle in Live-Streaming Speedrun Marathons' explore a staged form of play using the example of charity speedrun marathons. The article, methodologically based on an analysis of a series of interviews with various actors, including speedrunners, commentators, entertainers, and reviewers, shows how this specific performance of gaming is perceived and how this perception is determined by a variety of factors or frames of reference.

The fifth section, *Understanding video games through a performative gaze*, proposes a new understanding of video games by looking at their performative qualities, in terms of dramaturgy, temporality, and materiality. In 'The Dramaturgy of video games: A Dialogue' Mike Sell and Michael M. Chemers attempt to extend their conception of theatre dramaturgy to video games. An essential feature of their discussion is that the video gamer should be understood as operating a dramaturgy, like an actor, director, or dramaturg. Computer games thus become an *improvisational dramaturgy*, in which the various systems of the game are used in an experimental way to create meaningful experiences. The second article in this section, 'On Time Compression and Déjà vu: Remastering, Remaking, Modding and Performing Final Fantasy' by Darshana Jayemanne and Cameron Kunzelman, is based on the concept of performative multiplicity initially developed by Jayemanne in *Performativity in Art, Literature and Videogames* (2017) but is extended here with a special focus on temporal dynamics and taking into account new phenomena such as the *platformification* of cultural production. The performative perspective can help

us to better understand the different temporal dynamics in such diverse forms as remakes, demakes, remasterings, and mods in reference to the *Final Fantasy* game series. Finally, in 'Video Games as Material Performances', Michael Nitsche argues for the perspective of object theatre to be brought to bear on video games. Drawing on aspects of puppetry, Human Computer Interaction (HCI), and New Materialism, Nitsche argues game objects should be viewed as performing pieces with their own agency. Finishing with a case study of *Tetris* (Pajitnov, 1985–) he argues that players can be considered as a species of puppeteers, also showing how gameplay can also be understood as a co-emergent performance between human action and the actions of the game objects.

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