Rise of a Transcoded World

Field Study and Performance Analysis of Alexander Schubert's "Genesis"

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Cover photo: Max Pross performing as an avatar.

ISBN: 979–12–210–3006–8

ACKNOWLEDGMENTS

This book results from nearly a year of field study, data collection, research and drafting. During this period, several people contributed to my work in different ways. My sincere thanks go to all of them.

Firstly, I would like to thank Alexander Schubert for allowing me to participate in the performance at its various stages, informing me about the project's development and sharing the material under analysis. I am grateful to Alessandro Bratus for the text's revision and knowledgeable intellectual support. The confrontation with him has been a precious and essential resource. I thank the performers Carola, Fabian, Yana, and Max for sharing their impressions of the performance and the fraternal kindness shown to me before and after the event.

I also thank all the members of *Genesis*'s community involved in the realisation of the performance. With them, I shared difficult as well as intimate and profound moments. In addition to the mentioned author and performers, artistic contributors Carl and Heinrich, set designers Lisa and Jette, and staff members Isa, Francis and Vitus were an integral part of this group. I am also grateful to Dominic Osterreid and Jacob Sello for providing me with data and information about the *Genesis* website and the wristband device.

Finally, I would like to thank all the people who supported me during my stay in Hamburg: Stefano, Hannah, Arcangelo, Saskia, Irini, Orestis, Tommaso, Annalena, Adrian, Luca, Carmen, and Desiree. Their friendship was a vital emotional resource during the difficult period of the pandemic in Germany. Equally important was the support of the people in Italy during the text's realisation: Irene, Emanuele, Cecilia, Luca, Clara, Ingrid, and my family.

NOTES ON THE AUTHOR

Luca Befera: Trained in musicology at Università di Pavia, he studies contemporary artistic currents involving digital approaches, integrating the compositive process and sources analysis with ethnographic methodologies. His investigation focuses on multimedia in its broadest sense, namely on heterogeneous electronic devices and their application towards performance and installation artworks. The influence of software and computational approaches on formal management plays an important role in his research, allowing the analysis of tangencies, divergences, and permeations between human and mechanical, organic and inorganic, physical and virtual dimensions. He also examines the growing importance of the conceptual aspect in defining authors' aesthetics and works' nature. These perspectives relate to broader cultural environments and transcultural dynamics, implying the convergence of various stylistic traces on multiple expressive levels.

ABSTRACT

Alexander Schubert's most recent artistic research develops a new approach to digital and human realities, merging them through interactive media. Therefore, his works evolve in a completely autonomous manner, almost detaching themselves from the original authorship. The interactive installation *Genesis* is an online video game in which players control human avatars in a predefined and aseptic world. The performance has the social experiment goal, implying autonomous space development through a hierarchical relationship between gamers and avatars. The present analysis, entailed in the project's documentation, shows a comprehensive overview of the interactions that occurred in the empty hall. It also questions the author's prescriptive role: the explicit purpose of establishing an aseptic space results in a setting itself, influencing space definition. The environment develops its own rules and dynamics through recurrent patterns, strongly depending on digital mediation, emerging human behaviour, selectable items, stage connotation, and gaming dynamics. Human involvement – of gamers, avatars, authors, and staff – results in single participants' and emerging communities' complex behaviour. People redefine their knowledge, shaping new forms of interaction through digital encoding. In turn, they transfer their experience into real-life through personal or shared memories. Thus, space becomes not just where digital and physical perspectives flow into but also a gravitational pole expanding beyond given borders.

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INTRODUCTION

Overview

Genesis (2020) by Alexander Schubert[1] is a web-based computer-game conceived as an experiment, which takes place over seven days continuously – from 00:00, April 27 to 24:00, May 3.[2] Anonymous home gamers worldwide control four avatars impersonated by real-life human performers[3] in one-hour slots.[4] Connecting on a dedicated website, they order actors what to do by voice. The avatars wear VR glasses, by which gamers see from their first-person perspective. Also, a graphic interface augments the screen view, recalling a video games' graphic. Avatars interact with the environment and other avatars due to gamers' instruction and reply or manifest their needs with essential pre-set messages sent by wristband device buttons. The experiment starts in an empty industrial hall of 40m × 25m. Gamers cannot trespass its closed borders but only interact within the current configuration.[5] Moreover, they can select items from an inventory of around 2500 objects. Once entering, these remain inside the hall for the whole performance. Thus, the items grow in number according to a cumulative principle and progressively define the space through the interaction between human beings. The authors also mention this concept:

> […] the audience participates, according to their own ideas, in creating an environment, a community, a world [...]. Through the participants' selection of material, the setting is continuously developed and redesigned over the time of seven days. The audience is invited to create the space according to their own imaginations. Each participation leaves a trace – the sum of these changes and interactions will make up the entity of the work. The entirety is characterised by the personal experience of the individual as well as by the documentation of the entire process. [Schubert, 2020b].

[1] In addition to the composer, artistic head and creator of the concept, the project involves Heinrich Horwitz for dramaturgy, Carl-John Hoffmann for video realisation, Lisa Clemen, Juliette Krauss (Jette), Julian Sippel for the set design, Jacob Sello for the arm interface, myself for analysis and ethnographic research, Christoph Lohse and the Büro für Exakte Ästhetik for the website graphic realisation and the analysis of users participation (UI + UX), Dominic Osterried for website development using JavaScript and Gerhard Kühne, Christian Frank, Kai Lietzke, Cedric Johanson for the documentary realisation. This data and information about the piece reported in this paragraph come from *Genesis* website [Schubert, 2020b].

[2] Hamburg Elbphilharmonie commissions the performance. Also, Internationales Musikfest Hamburg 2020, Decoder Ensemble, Kraftwerk Bille, Hochschule für Musik und Theater Hamburg and A MAZE (Media Partner) contribute to its realisation.

[3] These are Max Pross (Avatar 1), Carola Schaal (Avatar 2), Fabian Oehl (Avatar 3) and Yana Eva Thönnes (Avatar 4). Also, Schubert and Horwitz occasionally enter the hall for substituting performers. Carola Schaal is a member of Decoder, Schubert's ensemble, whereas Heinrich Horwitz selects the other actors. Even if the avatars do not have a name during the performance, I will call them by the first name from now on for clarity.

[4] Initially, users book a ticket reporting only their email address. From the second half of the first day, the authors also allow the so-called 'quick users', who access the game without any former procedure and at any given time. They play until the pre-set time of the slot finishes.

[5] Kesselhalle of Hamburg Kraftwerk Bille hosts the performance setting. The building is a renovated power station which hosts festivals, conferences, music and theatre performances, offices, studios, and events [MIB, 2021]. Figure 2 reports some pictures of the building.

The experiment shows many facets rooted in virtual realities and involving the video game application, acting performers, audience observation, and social interaction between different contexts – regarding not only gamers and avatars but also the authors and staff. As virtual reality (VR), it implies digital means for simulating real-life and exploring new dimensions of human perception [Bartle, 2003; Bell, 2008; Burdea & Coiffet, 2003].[6] The video game application offers the possibility to reproduce social aspects and emotive engagement due to immersivity and real-time interactivity [Gregersen & Grodal, 2009; Nam, 2019], highlighting an increasing blending of human and virtual dimensions. Thus, *Genesis* implies similarities with 'massively multiplayer online role-playing games' (MMORPGs) such as *World of Warcraft* and' multi-user virtual environments' (MUVE) like *Second Life*, regarding features related to avatars' identity [Allbeck & Badler, 2002; Cheng, Farnham & Stone, 2002; Schroeder, 2002; Taylor, 2002], the social context developed within the game-playing [Boellstorff, 2008; Bowman, 2010; Gottschalk, 2010; Hine, 2000; Hjorth, 2011; Williams et al., 2006], and other external factors linked to the gaming world [Castronova, 2005; Newman, 2008].

Besides the observation goal, *Genesis* implies performative aspects entailed in social simulation, the influence of authors' background, artistic institutions' support, and gamers' way of playing. These points of view are highly significant to frame an experiment that, missing a restricted hypothesis and an explicit methodology, is not entirely scientific. On a broader sight, contemporary artistic trends involve a critique redefinition of pieces rooted in conceptual reflection [Lehmann, 2006]. Composers and artistic institutions frequently redefine their aim over the traditional performance representation towards an expressivity focused on social aspects [Dinkla, 1994]. *Genesis* entails these approaches through the social experiment goal: it does not regard entertainment but the study of a process in which the authors are partially involved. Scholars also outline the growing importance of digital technology and multimedia devices within the mentioned trends [Manovich, 2002, Sexton, 2007], both in the performance definition [Dixon, 2007; Salter, 2010], perception [Styhre, 2008] and in the related compositive process [Befera, 2019; Bogost, 2006; Cook, 1998]. Shubert himself states in his writings the fundamental influence of virtual, digital, and performative aspects [Kanga & Schubert, 2016; Schubert, 2021d],[7] as also do other authors who studied his production [Drees, 2014; 2018; Hurt, 2015].

[6] VR glasses have been applied in several other subjects like medicine, education, economics, engineering, and military, to train users or test specific problems [Hale & Stanney, 2015]. These applications are in line with the improvement of the Internet and cyberspaces over the last decades [Mitchell, 2003].

[7] Schubert's recently published book *Switching Worlds* [2021d] includes all the articles previously published by the composer, opportunely translated in English (ed. or. *Switching Worlds: Postdigital Perspectives*. Doctoral Dissertation. Hochschule für Musik und Theater Hamburg, 2020). Therefore, following quotations from these texts refer to this dissertation. These articles are *Uncertain Conditions* (or. ed. *Unsichere Zustände: Gedanken zu immersiven Strategien*, in Dissonance, 140, 2017, pp. 8–11, German), *Binary Composition* (or. ed. *Binäre Komposition*, in MusikTexte, 153, 2017, pp. 46–50, German), *Virtuality and Deception* (or. ed. *Virtualität und Täuschung*, in MusikTexte, 158, 2018, pp. 21–30, German), *Focussing the Gaze* (or. ed. Bernier, N. & Schubert, A., *Strobes, Mirrors, Fog and Site-Specific Experiences: Interview with Alexander Schubert, German Composer*, in eContact, 19(2), 2018, English), and *The Aesthetics of Error* (or. ed. *Die Ästhetik des Fehlers: Bruch der Kodierung als Chance ein System zu verstehen*, in Neue Zeitschrift für Musik, 14, 2018, pp. 14–19, German; 2nd ed. *The Error Aesthetic: The Opportunity to Understand Systems via Fractures in Coding*, in Tempo, 73(289), 2019, pp. 21–29, English).

The only references stated by Schubert are the sandbox video games *Minecraft* and *The Sims*, and his own virtual reality projects.[8] Among the latter, he recognises as the most similar *Control* (2018), a participative installation in which users command avatars and see from their perspective through VR glasses. Despite *Genesis*, avatars change every 30 minutes and perform specific actions in a pre-set stage. *Unity Switch* (2019) and *Perfect Circle* (2019) are other significant pieces based on a similar embodiment in another person through virtual reality devices. In the former, audience members see from the performers' perspective and vice versa, while both sit in front of a table; in the latter, the audience joins a therapeutic group session directed by a voice-over. Another significant reference is *Acceptance* (2018), a documentary depicting a solo performer's immersive experience. Carola Schaal, one of *Genesis*'s avatars, aims to build six wooden sculptures alone in the mountains. The author adds digital interfaces to footages in post-production. Finally, *Wiki-Piano.Net* (2018) allows users to edit a webpage by inserting musical notes, texts, videos, and images. A pianist occasionally interprets the result as a score.[9] Even if it does not provide any avatar, people interact through the Internet, remotely located, and on the same platform. Therefore, *Genesis* merges the web-based interactivity of *Wiki-Piano.Net*, the intimate embodiment of *Unity Switch* and *Perfect Circle*, the hierarchical dynamics of *Control*, and the avatar's immersivity of *Acceptance*. Also, it provides an empty hall with closed borders, focusing on the progressive emergence of a well-defined virtual and social space.

Related Works

Although Schubert does not testify any specific reference, various works realised in the last decades recall *Genesis* aspects. Performance interactivity through the Internet can be traced back to the 1990s. In *Brain Opera* (1996) by Tod Machover and *Cathedral* (1997) by William Duckworth, the audience manipulates the piece by uploading audio or video files [Duckworth, 2005; Wüst & Jordà, 2001]. Marvin Minsky's theories regarding artificial neural networks influence such works, extending them to web interaction [Dixon, 2007]. Telematic performances have also deepened the "conditions of abject bodies – bodies tenuously thriving through technology (e.g. on life-support systems), or bodies kept at a distance (in exile or detained)" [Parker-Starbuck, 2011, p. 76]. Works by Station House Opera such as *Live from Paradise* (2004), *Play on Earth* (2006) and *The Other Is You* (2006)

[8] The composer mentions these references in the documentation reported on his YouTube channel [Schubert, 2021c]. This speech is not useful for the present analysis because done after Schubert have accessed this text's drafts, which might have influenced him. Instead, the study of the links with his previous works follows the Graz lecture.

[9] The German author usually works with multimedia performances using theatrical representations, music, visuals, sensors, and lights. In the last years, he also experiments with artificial intelligence, online communities, and augmented realities. For more information about the multimedia pieces rooted in a musical and theatrical performance, see the articles *'...kreativ mit den Vorgaben umgehen'* by Stefan Drees [2018], *Zwischen Hardcore und Software* by Leopold Hurt [2015], and the composer's considerations [Kanga & Schubert, 2016; Schubert, 2021d]. For further information on online community pieces – such as *Wiki-piano.net* (2018) – participative installation using VR glasses – such as *Control* (2018) and *Unity Switch* (2019) – immersive performance – like *Acceptance* (2018) – and artificial intelligence installation – like *Av3ry* (2019) – see the dedicated section reported on the composer's webpage [Schubert, 2021b].

connect places far away from each other, creating remotely enacted narratives through a screen view [Station House Opera, 2020]. Staging both virtual and physical characters, authors implicitly consider the 'digital double', which might be "a reflection, an alter-ego, a spiritual emanation, and a manipulable mannequin" in relation to the real-life person [Dixon, 2007, p. 244]. Thus, the audience or performers interaction depends on the installation/performance rules and the avatars' connotation. In *Dare We Do It Real Time?* (2009) by Ghislaine Boddington, performers react to chosen identities appearing on the screen, miming their robotic facets in real-time: the persistent virtual bodies question human performers' identity perception. The avatar can also be a means to interact with other users. In *Me and My Shadow* (2012) by Joseph Hyde, motion-capture devices transfer the users' body in a 3-D virtual world, as shadows moving on a canvas: through the avatars' telepresence, people can remotely interact from four different countries [Boddington, 2012]. In *The Electronic Man* (2011) by Salvatore Iaconesi and Oriana Persico, instead, the many contributions build the avatar itself: users insert an emotional state in the Electronic Man digital body and connect with him by reporting their location [Iaconesi & Persico, 2021]. Furthermore, networked interplay emerges as co-located in pieces like *Collective Reality* (2016) by Ghislaine Boddington, Joseph Hyde, Nick Rothwell and Phill Tew, where users' movements modify sounds and visuals played around the venue. Even without avatars, the focus is on creating a shared virtual environment through digital devices [BDS, 2020].

Video games are strictly related to such works, referring to virtual worlds, avatars relationships, and digital mediation. Nevertheless, they provide a specific ludic experience and reference. Using this medium, artists entail recognisable graphical settings, interfaces, or gaming dynamics. Since Jaron Lanier research from the late 1980s, performances and installations also entail VR headsets for augmented reality. In *Desert Rain* (1999) by the artists' group Blast Theory and *A Midsummer Night's Dream* (2000) by ieVR with the University of Kent are relevant examples of this trend. The former provides a theatrically unified VR experience for six players pursuing their human targets through a digital desert landscape. The latter transposes Shakespeare fantasy world to become a computer game. A dreamlike atmosphere also regards Mathias Fuchs and Sylvia Eckermann's *FluID: Arena of Identities* (2003), where the player's avatar interacts with characters, borrowing aspects of their identities [Dixon, 2007]. *Embedded Games* (2004) by John Paul Bichard, with the collaboration of the Interactive Institute in Stockholm and Proboscis in London, extend the gaming principle to real-life environments. For example, Urban Tapestries and Social Tapestries projects enable users "to build relationships between places and to associate stories, information, pictures, sounds and videos with them" through GPS software [Proboscis, 2009]. Later works by Michael Takeo Magruder, like *Visions of Our Communal Dreams* (2012) and *The Nether Realm* (2014), propose a computer-graphic 3-D environment inhabited by customisable avatars and focusing on environment modification. The former can be edited by users simultaneously participating from different locations and recalls characteristics of the physical space where it takes place. The latter shows a floating island that flourishes each time people tweet the keyword 'sunlight' (or similar) sided by the piece's hashtag [Magruder, 2021]. Besides recalling gaming atmospheres, *What remains* (2017) by Marloes de Valk also has socio-political implications. In this NES 8-bit art game, the main character tries to "save the planet by rousing the public's outrage over the lack of regulations

the government imposes on corporations to protect citizens" [Herrmann & de Valk, 2017]. Rather than implying an online interaction, the piece sticks to classic video game dynamics, adding the conceptual content.

Other interactive game-based experiments have been done in the GAPPP project of the University of Music and Performing Arts Graz, providing a more significant musical influence. Run by composer and audiovisual artist Marko Ciciliani, it "sets out to explore the combination of game strategies and performer interactions for its artistic potential beyond the mere imitation of computer games" [Ciciliani, 2020]. Therefore, pieces such as *Atomic Etudes* (2016) and *Chemical Etudes* (2018) for Monome and Live-Electronics by Ciciliani, and *The Missing Piece* (2019) for solo instrumentalist as gamer by Alyssa Aska involve a canonical on-stage representation mediated by video games dynamics. The expressivity of the gaming medium becomes an even more abstract principle when lacking a visual representation. The concert installation *Attractive Correlations* (2017) for variable number of instrumentalists, microphonists, audience and computer music system (2017) by Kosmas Giannoutakis concerns interactions between all the subjects mentioned in the title. The audience interplay influences the digital networks and the sonic outcome inspired by neuronal processing [Ciciliani, Lüneburg & Pirchner, 2020]. On the other side, the video games' industry releases web-based collaborative works over the last decades, at times with artistic insights. Besides the mentioned MMORPGs and MUVE, *Journey* (2012) provides a suggestive desert atmosphere, where the only goal is to reach a far mountain. It is possible to interact with other remote players with sounds to progress throughout the levels. *No Man's Sky* (2016) allows travelling through space over several planets, collaborating with connected users. The game saves online editing of the open world, making them visible to other players. *Ingress* (2012) and *Pokémon Go* (2016) employ GPS to recreate augmented realities with defined settings and rules through mobile digital devices.[10] More recently, releases as *Half-Life: Alyx* (2020) also provide immersive virtual realities accessible via headset.

VR application concerning human avatars is missing in classic video games and very rare in interactive video game simulations. An example is *Public Avatar* (2009) by Martin Bricelj Baraga and Slavko Glamočanin, available online only during special events. Gamers give basic instructions to the avatar for a limited time, watching his visual and sonic perspective via live video stream [Barkley, 2014]. Omnipresenz XR studio carries out experimentations on "multi-sensory experiences based on physical and human engagement" [Omnipresenz, 2019]. Similarly to Schubert's works of the last years, they aim for an extended perception of the self through VR glasses. The *Avatar* service provides their application on a remotely controlled human being wandering around in public environments. Users see and hear from his/her perspective, enriched by a graphical interface. In *Embodied Narratives*, by BeAnotherLab (an interdisciplinary group linked to Omnipresenz), this principle is entailed in a plot. The resulting performance implies a far person wearing the glasses, who recounts

[10] In the Computer and Games section of *Switching Worlds*, Schubert talks about these two video games and other works outlining the increasing blending of real and virtual dimensions [2021d, pp. 177-179]. Some of the mentioned cases implicitly recall *Genesis* aspects. Among these, *The Stanley Parable* (2013), highlighting the different evolutions of settings depending on gamers' choices; the short film *Notre Amour Est Assez Puissant* (2014) by Jonathan Vinel, narrating a story through a first-person view; the GAPPP project by Marko Ciciliani already discussed; the Let's Play videos, showing a video game playthrough live or recorded as documentation.

a personal insight: the testimony is lived in 'first-person' by the spectator [BeAnotherLab, 2021]. Therefore, *Genesis* stands as an unprecedented attempt compared to experiments done so far. As a VR project with human avatars, it provides an immersive performance in a defined space and an extended period. It has predetermined rules that orient its development, allowing the high degree of freedom as possible. The simultaneous interaction of numerous gamers determines various social relationships, evolving within these borders with specific connotations. Space's and communities' definition plays a fundamental role in performance. On the other hand, it does not provide a 3-D graphical setting as video games. Celia Pearce states that "whether [virtual worlds] are represented textually or graphically, in real-time 3-D, isometric, or even 2-D graphics, is less relevant than the fact that they define a spatial construct of some kind" [2009, p. 18]. *Genesis* recalls a computer-based representation by superimposing an interface to a physical environment, while gaming emerges by enacting the avatar's character. Thus, it blends real and virtual dimensions, resulting in specific relationships between humans through digital devices.

Sources

The many sources available allow a detailed analysis of the many interactions taking place during the performance and subjects' and objects' roles within the new world setting. These data regard a) digital means, b) testimonies, and c) space definition (Fig. 1).[11]

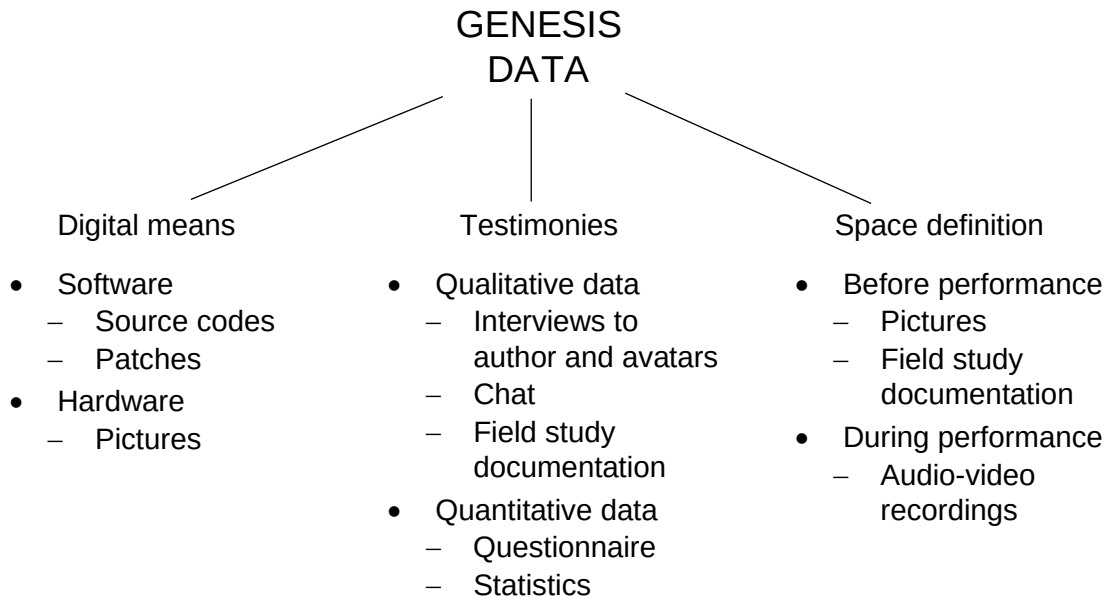

Figure 1. Genesis sources categories.

[11] Access to these data is kindly allowed by Shubert – regarding pictures, videos, chat – the programmer Dominic Osterried – about website codes and Matomo statistics – the composer and inventor Jacob Sello – concerning the arm interface and wristband device project. The appendixes show documents pertaining to the ethnographic documentation, whereas other data is not freely available.

a) Digital means analysis includes an overview of hardware and software used during the performance. The analysis regards the website source code, wristband device setting, signal processing, data transmission, and hardware arrangement within the building. The overall description does not deepen technical aspects, not having the whole software material available. Still, it enlightens the 'transcoding' of physical entities and cultural categories in digital units related to computer language [Manovich, 2002]. The process regards items selection and avatar's audiovisual perspective towards their roles' redefinition. Through metadata [Buckland, 2017] and discrete units [Bogost, 2006], physical reality is fragmented and further (re)defined. Consequently, uncommon interactions between gamer, avatar, objects, and space emerge.

b) *Genesis* shows various kinds of human relationships: between gamer and avatar, between gamers through the avatars, between avatars, between authors and avatars. Each one is significant in space definition and social context development, involving frictions or collaborations between human beings. To examine these trends, scholars developed various ethnographic methodologies applied to virtual environments [Boellstorff et al., 2012; Diaz & Tungtjitcharoen, 2015; Nardi, 2015; Pearce, 2009; Taylor, 2006], online communities [Hine, 2000; Kozinets, 2010; Pink et al., 2016], and other theoretical models [Ortiz, 1995; Welsch, 1999]. The present work involves the analysis of online and offline interactions, acknowledging that "gaming is defined, not only, or primarily, by the game, but by the [social] dynamics in which, and through which, gaming is experienced" [Thornham, 2011, p. 1].[12] The qualitative research provides first a participant observation by joining the meetings, helping in the setting, playing the game, and observing the whole performance and communities' behaviour *in loco*; then, testimonies from the main subjects involved, documenting their perspective. Interviews with the artistic head and the avatars have been realised, recorded, and transcribed for easier access. The avatars report their relationship with gamers, other avatars, and authors; their perception of virtuality and immersivity; their feeling of communities; attitude in performing. The author explains the project's genesis, its primary purposes, relationships with his previous works, the role of virtuality and immersivity, his experience within the context, and technical aspects. The chat room available during the game allows accessing anonymous users' point of view. Furthermore, it has been realised a questionnaire fulfilled by a significant number of 110 users, around one-quarter of the total participants. Concerning the latter, questions regard general information

[12] My participative work on the project starts at the beginning of February and finishes at the beginning of May with the end of the performance. My ethnographical tasks involved opinions' exchange with authors, avatars and staff, observation of their behaviour, and analysis of the performance evolution *in loco*. Also, I collect objects donated by Schubert's acquaintance or colleagues around Hamburg, I picture all the items with the occasional help of Tam Pham, Yuri Akbalkan, Rica Zinn, Heinrich Horowitz, and Carola Schaal, and I handle the performance Facebook and Instagram profiles together with the authors. These works help in getting in touch with Schubert's environment, understanding the inventory organisation in detail, and overviewing people participation on social networks. During April, I realise the interviews and questionnaire reported in the Appendix section. From then on, I collect and analyse data reported in Figure 1. Texts' drafts are shared with Schubert and with professor in charge of the consultation Alessandro Bratus. Schubert uses some of the text insights in the online intervention about *Genesis* for Hochschule für Musik und Theater Hamburg (January 6, 2021) and for University of Music and Performing Arts Graz (January 18, 2021). The latter is reported on the author's YouTube channel [Schubert, 2021c]. Also, he asks for the first cataloguing of the interactions (as reported on the timelines) for assisting the documentary realisation.

about the country from which they play; feedback about the game; interaction with avatars, space, and objects; considerations about the game in an open-answer section. It is possible to overview the online community's development and the gamers' insight through the questionnaire. Lastly, the statistics retrieved through the analytics platform Matomo gives information about the *Genesis* website participation over the performance week.

c) Space plays a central role as the basis on which the experiment takes place. As Genesis documentation is crucial for the experiment's analysis, many photos and footage about the performance hall definition are available. These concern the records of avatar views, camera overview,[13] Schubert pictures realised during the play,[14] my own photos, and many excerpts recorded by the staff in charge of the documentary from backstage and inside the performance. These data refer to two sections: about space asset before the performance; about space development during the performance. The former involves details about the building, performance hall concept, organisation of the items in the storage room, and control room setting. Pictures and maps show these aspects, further described through the field perspective. The latter regards a dedicated analysis of how empty space evolves through interactions over time. Timelines give an overview of a high number of sequences selected for analytical purposes. Not being the recorded sequences available to everyone, these are described during the text and occasionally sided by significant snapshots.

Book Structure

The book includes three parts. The first one, 'Genesis', regards the description of what surrounds the performance, namely the many steps to define the final setting and the performance's theoretical framework. Chapter 1 describes the experiment side on the very basis of the concept. Chapter 2 regards the many facets of virtual reality. Chapter 3 shows which factors refer to the underlying artistic environment.

The third part, '*Genesis*', regards the performance evolution and analysis. Chapter 5 focuses on avatars and gamers, hypothesising typologies through interviews and questionnaire. Chapter 6 involves a detailed analysis of the performance, describing interactions categories and their evolution. Chapter 7 shows different social dynamics related to the various performance communities, internal and external to the game.

The second part contains only one chapter. It is separated from the other sections to highlight the text's core hypothesis: that the digital means structure determines a re-establishment of new rules of interaction, which are still related to each human being's real-life background. Thus, 'virtual shift' signifies a metaphorical transition from before to during the performance, from authors' conception to game, from physical to virtual dimension: like the hatch, through which objects enter the virtual space, this section is a gate towards another reality, towards which users project themselves.[15] This research enlightens *Genesis* range of possibilities, emerging through its specific rules and means. Furthermore, it examines how

[13] Due to some technical problems, some audio-video sequences are lost, especially during the first day.
[14] Some of these pictures are available on the Schubert's Facebook profile [2021a] and webpage [2021b].
[15] The difference between the normal and italic text of the first- and the third-part titles have been used to emphasise this concept of transition.

uncommon interactions happening within the performance hall are subject to pre-existing social structures, filtered through digital encoding, and redefined as virtual objects.

The Appendix section reports the timelines of the entire performance – regarding 331 selected interactions – interviews to author and avatars, and excerpts of the questionnaire open answers.[16] Excerpts from my ethnographical documentation precede each chapter. Being related to the following topics, these are introductions to provide useful information and a field perspective. In line with the overall structure, in the first part, they refer to events preceding the performance, and in the third part, simultaneous to it. Furthermore, a prologue describes the moments immediately following the performance, and an intermezzo (at the beginning of the second part) shows the setting immediately before it. These contributions are essential to highlight the underlying contexts, in the fundamental assumption that, rather than establishing a completely new world, virtuality reconfigures our concept of 'real' from pre-existing and developing social dynamics [Welsch, 1997].

[16] These references to the Appendix are indicated in square brackets in the typescript.

Prologue – Just after the performance

We sit around the table in the room next to the performance hall, where the objects were placed and where Lisa, Jette, Vitus and Francis had worked night and day to transport the items. After toasts and hugs following the end of the performance shortly after midnight, Jette lights the candles, and we continue to drink, smoke, and discuss what happened. After some time, Lisa brings some gnocchi with onions cooked in the performance hall, with the pots used during the game. The hatch is now open, and there is no separation between that area and the real world. However, I still perceive a kind of sacredness coming from the hall, mixed with reverence and gratitude. Now that the performance is behind us, that world as much imagined as experienced assumes the aura of an indefinite space between mythical and human, art and artefact, dream and reality, while the mystery of the night cradles its sublimation.

Walking through the rubble is like being suspended inside a museum of crystalline memories, floating in an intangible and foggy world devoid of material reality and, at the same time, experiencing in an instant the whole events of a week, even months. This feeling is not only a matter of proximity. After all, I have already observed the room from inside balconies on the second floor during the performance. There is a sense of resignation and beauty in all this. The breath of life that animated the room has now faded, and what remains will be inexorably swallowed into oblivion in a few days when everything will be dismantled. The avatars have returned to being communicating people according to the standards of Western society, while the rest of us on the staff have remained in our composed condition of homeless inhabitants of the shed, without the onerous tasks that accompanied our journey. The objects have returned to being objects.

The virtual world is progressively abandoning our habitus, giving an aura of suspension which envelops the hall, the shed and all of us. The transit is also evident in the conversations, which foresee the rational observation of what happened. Centre topics are the experiences of Fabian, Yana, Carola, and Max, who describe the different interactions, difficulties, moments of harmony and adaptation to the performance dynamics. Fabian starts a reflection on the ability to recognise the gamer's intentionality in relation to voice. Then, he analyses which aspects of the most cited video games can be found. According to what had already been discussed in the past, the tendency to build in Minecraft *and sociality in* The Sims *seems dominant. I just listen in the small circle of four people now formed, while Lisa and Jette interact more animatedly with the performer. For them, the field is broader, and they wonder about possible future developments: "What are we looking for in* Genesis*?" – asks the first one staring into the void. The next seconds of silence underline that none of us has a clear answer.*

I. GENESIS

1. EXPERIMENT

January 24, 2020, 11:30 a.m. and January 25, 2020, 2:30 p.m. – Rehearsals

My work on Genesis *begins on the first rehearsals of January 24 and 25. I encountered Alex a couple of weeks before, during a concert session held at Hochschule für Musik und Theater Hamburg in which pieces by teachers and students of the multimedia composition class – in which he holds some courses – were performed. In the simulation that he soon proposed me to join, I was going to meet some of that students again and, also, one of the future performers Carola Schaal, the authors Heinrich Horowitz and Carl Hoffmann, the head of set design Lisa Clemen.*

From 11:30 on January 24, the items are arranged next to the entrance, with the only rule of a regular distance and disposition in a row. Consequently, an approximately uniform grid appear. These are occasional objects belonging to Alex himself, mostly different from those used in the performance afterwards. Then, we proceed with dressing and equipping the performers. I accept the proposal to be an avatar, so I am given a white suit, the receiver to hang on my belt and VR glasses. Besides the adrenaline injection and the fear of the new experience, I have a particular feeling, like strange emotional nudity for having to be controlled, which mixes with the physical coldness of the vast industrial shed. At 17:30, the rehearsal begins. We are three avatars, the room is completely dark. The players are supposed to take lamps among the objects and connect them, but confusion prevails, and we start wandering around without a particular destination. Finally, Alex and Heinrich set up some lights. I find it difficult to get along with my gamer. Sometimes, I do not know how to act, being ideally a virtual avatar but receiving too general orders. Moreover, we can talk, which increases the range of possibilities and, consequently, problems. Funny actions prevail, like trying to sing in Russian, jokes on Brian Ferneyhough or acting as Spider-Man. Also, there are some musical interactions between violin and drums, and a folding chair, a carpet and a chest define a rough room. Near the end at 19:30, we walk out of the building in two people, yelling at Heinrich to go to the supermarket.

The second rehearsal on January 25 takes place during the day, from 14:30 to 16:30. Players and avatars switch at 15:30. This time I am just an observer, so I take the opportunity to overview the gaming stations. These are located just behind the performance room because the Internet connection is still weak and needs to be close to the stage. Gamers just need to log in from the website to access the avatar perspective, as in the future project. Following the observations made by the avatars in the previous session, basic instructions are given to the performers this time: look ahead and standstill in the absence of commands; react only to clear orders; interact only inside one room. During the two one-hour rehearsals, musical and funny interactions occur, while a tent becomes one of the main reference places. Also, sexual harassment happens, deliberately recreated by the students as a test in a monitored environment, and doors are used as a canvas for paint writings.

A feedback session follows each of the two rehearsals. A significant suggestion regards making the avatars' perspective like in a first-person video game view by exhibiting the hands in front of the glasses and clearly showing the objects. Other discussions involve how far gamers can push the commands; how to allow avatars to reply without using speech; what happens if the avatar does not follow the assigned instructions; whether it makes sense to create predefined spaces to enrich the room. Alex's answer to the last observation is clear: it is a week-long genesis that metaphorically starts at midnight and, as on a blank sheet of paper, it is up to the people to fill the space, not the authors.

Although the authors conceive *Genesis* as a social study, the performance is not a scientific experiment in its prerequisites, lacking a restricted hypothesis and a clear analytical methodology. Thus, they foresee further analysis and documentation to reorganise the facts and show the events. The empirical purpose supports this aspect:

> Controlling another human being opens up questions that circulate around virtuality, computer games, hierarchies, surveillance control and the independence of human beings. In an analogous way, the setting is generating the topics of physical alienation, avatars and virtual reality. In addition to the components of distance and the artificiality of communication, it raises the possibility of emerging empathy, cooperation and loving moments between the visitors and their avatars. Communication can lead from sober instruction to a familiar togetherness, from getting to know someone to an abuse of power. The spectrum of actions can be monotonous, exciting, constructive, or destructive. *Genesis* wants to reflect this diversity. [Schubert, 2020c]

The experiment implies multiple interpretations due to the many inputs and outcomes involved. Still, the authors aim to recreate an ideal field of study and avoid any predetermined knowledge as much as possible [Appendix II.1]. This process involves three steps: firstly, they reject avatars' speech and conceal their identity to limit stereotypes and prejudice; secondly, they do not allow any physical audience to limit a performative dynamic; lastly, they use an empty and obscured hall to recreate an aseptic space without time.

The first rehearsal does not limit the avatar's performing and gamers' instructions to overview the result on a completely free domain. The difficulties encountered during the play bring to the first restriction of rules. The authors perfect the video game avatar simulation in the so-called 'idle mode' (standstill in the absence of commands), try to narrow the ways of communication (react only to clear orders) and define a performance space to not trespass (interact only inside one room). Other considerations follow on the 30th of January meeting, where are discussed avatar's features, their way of acting and the objects' typology.[17] Regarding the former aspects, the authors evaluate if showing the avatar's skills to give the gamer tips and recreate a role-playing dynamic.[18] They also debate whether to conceal the avatar's gender and identity, avoiding speech and clothes. Then, they list objects to collect and store. The most relevant purposes emerging from the meeting are the construction

[17] Heinrich Horowitz, Carl Hoffmann, and Lisa Clemen join the meeting, taking place at Schubert's home.
[18] In role-playing games, the avatar usually presents skills associated with a numeric description. The gamer can acquire or modify them during the game. For more information, see *The Functions of Role-Playing Games* by Sarah Lynne Bowman [2010].

supporting – through tools and material – and easy-building spaces limiting – like tents (cf. §4).

Afterwards, the authors progressively decide to forbid avatars' speech and conceal any factor related to their identity or gender: these aspects depend on the avatar customisation during the game and are not imposed or predetermined. Thus, the possibility to dress the avatar replaces the white suite initially used. An entire category of the inventory enhances this aim, and performers start their play only with a white T-shirt, white shorts, black shoes, and black socks.[19] When not controlled, avatars are supposed to be in the standard' idle mode' by showing their hands in front of VR glasses (cf. §2). They should also react to every possible order doing it or reply through the wristband device preset messages.[20] On the other hand, gamers must follow two rules: avoiding physically dangerous actions and sexual harassment. If these cases happen, the authors from the control room or, secondarily, the avatars can ban them from the game. Therefore, the authors aim to stimulate control through silence and free editing. Nevertheless, the outlined principles manifest some grey areas due to the avatars' human nature:[21] firstly, psychological limits tend to emerge in extreme situations, overcoming the obeying tendency; then, it is difficult to define to what extent the avatar's knowledge should intervene to fulfil gamers' instructions or when to ask for more details; furthermore, dangerous, or annoying situations depend on avatars' interpretation, so basic rules are relative themselves (cf. §3 & 5).

The stage setting assists the scientific purpose providing a self-standing dimension, independent from players and authors. Thus, it results as aseptic as possible: empty, thus without predetermined areas; almost utterly dark, to establish a static dimension out of time; without the audience *in loco*, to limit the perception of a standard performance. Schubert explicitly wants to reduce any predetermined dramaturgy, performative, and theatrical parts [Appendix II.1]. Nevertheless, this freely editable space is itself a setting, which determines the specific outcomes evidenced in Chapter 6. Also, it still manifests the authors' influence. Firstly, the items are grouped into 13 categories reported on the game inventory.[22] These clearly show the relationship with Schubert's two video game references: *Minecraft* regarding construction and *The Sims* concerning social interaction [Appendix II.1].[23]

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[19] See the second picture reported in the timelines [Appendix I].

[20] Also, they fulfil basic needs like going to the bathroom or eating in the 5 minutes break in between each one-hour slot or in a longer break provided each day to sleep. Chapter 4 treats the wristband device in more detail.

[21] Schubert considers even the possibility of a detailed handbook on avatar's behaviour [Appendix II.1], testifying his original purpose of a strictly virtual character.

[22] These are not available any more on *Genesis* website, where it is possible to overview only the unsorted objects [Schubert, 2020b].

[23] *Minecraft* – particularly the creative mode – concerns material collection and object and buildings construction. The game provides a first-person view in a pixeled world which is freely accessible: each block is a unit to be taken or filled. On the other hand, *The Sims* involves life simulation through avatars created by gamers. They interact in a defined environment with other avatars, objects and spaces around them in a third-person view. The player must fulfil their needs also. These video games are both entailed in the *sandbox* genre umbrella, as "a game universe for persistent worlds [providing] a malleable environment with lots of toys which players can then use to make whatever they want to out of the environment" [Koster, 2005]. For more information about *Minecraft* and its modes, see the overview *Minecraft: Beyond Construction and Survival* [Duncan, 2019]; about *The Sims*, the article *The Sims: Real Life as Genre* [Nutt & Railton, 2003]; about *sandbox* games, the book *The Architecture Co-laboratory: Game Set and Match II* [Oosterhuis & Feireiss, 2006]. A more detailed analysis of virtual video-game environments will be also provided in Chapter 2.

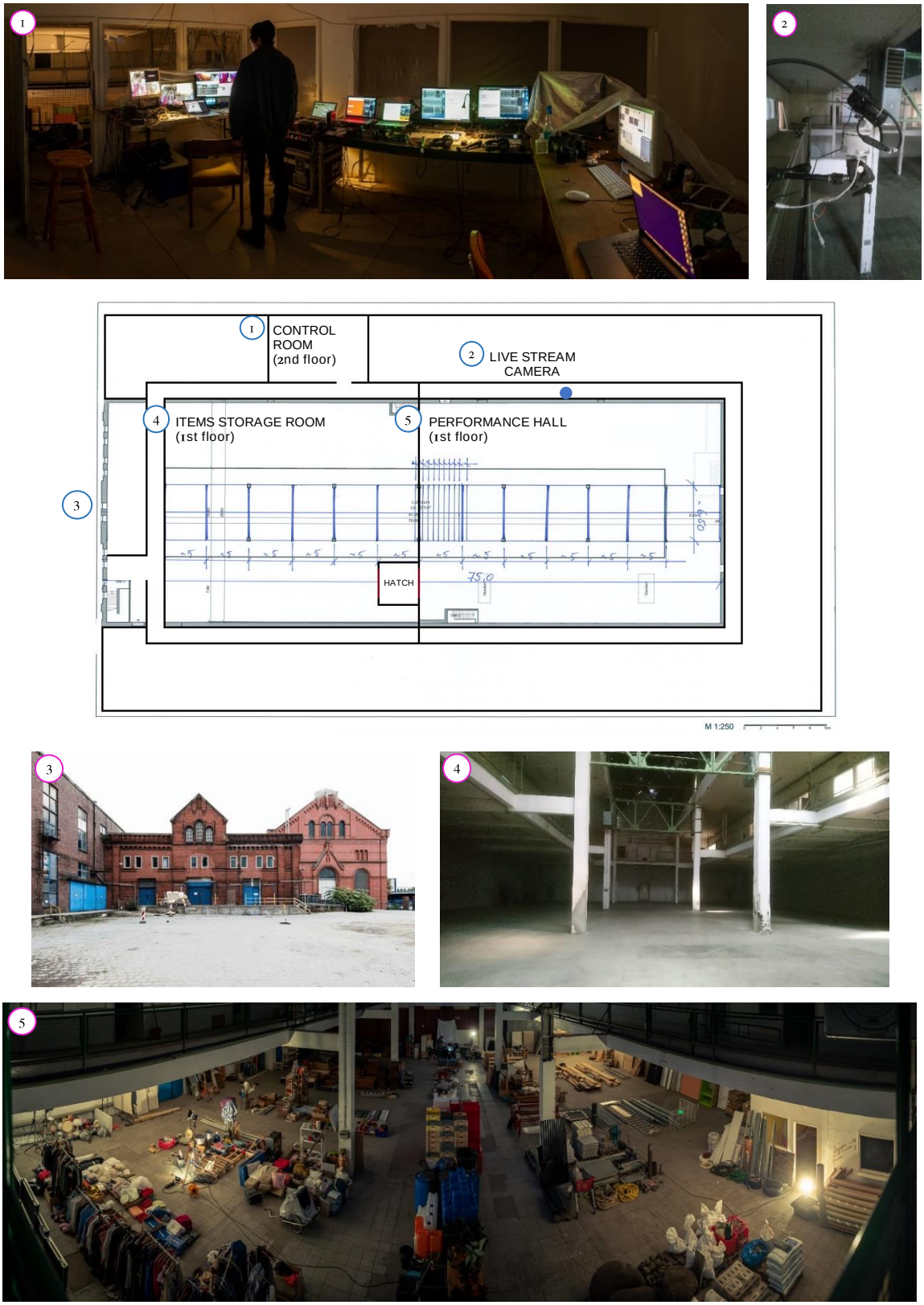


Figure 2. Kesselhalle plan: location of the setting main areas.

Furniture, Material, Walls, and Tools recall the former, whereas the latter regards Musical Instruments, Paint, Media, Toys – on entertainment – Food and Clothes – on avatar customisation and taking care. Electronics and Light may be addressed to both, as well as the general section Accessories. These categories might orient the gamer's action, considering that the subdivision does not consider general categories but selected and specific ones like Walls, Paint and Musical Instruments.[24] Secondly, the performance hall's industrial appearance recalls Hamburg's and author's background linked to urban social movements and *technoculture*.[25] Figure 2 shows how Kesselhalle looks like, as well as the location of the setting areas. The room next to the main entrance on the 1st floor hosts the items. The performance hall is next to the items room: during the performance, the staff bring the objects to the hatch, and then the avatars retrieve them from the hall on the other side. The avatars get the items once the door on the storage room side is closed (watching a green light signal): this action consents to avoid any connection with the external space. Black fabric obscures the glass roof of the performance hall to recreate a static dimension. Every signal passes through the computers in the control room on the 2nd floor. Here, the authors are standing most of the time to assist the players and avoid technical problems while I am observing the performance through the four screens view and the headphones related to each channel. Finally, a moving camera films the performance from the 2nd-floor balcony to offer a live stream overview on YouTube, broadcasting the avatars' first-person perspectives alternately.

In summary, the goal of recreating an aseptic environment becomes part of the authors' expressivity precisely because lacking a scientific methodology. As such, it undergoes a refinement process that does not utterly avoid predetermined theatrical and artistic knowledge. The social experiment remains central. Every action or choice made by all the people who implicitly collaborate to setting and development is part of the social simulation. Thus, *Genesis* is not a 'non-place' – namely without identity, relations, or history [Augé, 1995, p. 87] – but a shared place where the creation occurs. During the performance week, it hosts intimate interactions, defines its history, and acquires an identity through gamers, avatars, authors, and staff experience. This process develops within a hybrid space between 'real' (or physical) and 'virtual' (or digital), a leitmotif of Schubert's artistic production. In *Virtuality und Deception*, he clearly expresses this concept:

> Then I speak of the real world or our environment in this text, I mean an analogous world, neither medial nor otherwise technically mediated, but directly perceived by the perceptive apparatus of the recipient world. Of course, we have constructively generated this perception as well and, therefore, it is not absolute. For the sake of simplicity, I use this concept as the opposite of virtual, artificial worlds. By this, I mean – in this context – realities which are recognizably and knowingly created by people (with technical resources) and which pursue the goal of generating an alternative or complementary truth, experience, perception, or environment. [Schubert, 2021d, p. 173]

[24] Moreover, as I personally stated, the authors add through Max/MSP a message between the pop-ups appearing at the beginning of each game, urging to construct. This modification occurs from the fourth day.

[25] These references also refer to technological dominance and the attempt to not prove anything specific. To deepen these aspects, consult *Generation Ecstasy* by Simon Reynolds [1999] and *Senseless Acts of Beauty* by George McKay [1996]. For more information about Hamburg's environment, see *Struggling for the Right to the (Creative) City in Berlin and Hamburg* by Johannes Novy and Claire Colomb [2013]. The relationships with a rave atmosphere, which Schubert mentions, will also be discussed in the third part.

To what extent *Genesis* world could be ‘directly perceived’ as an ‘analogue world’ stands as an open question, lying in the influence of digital support and users’ awareness of proximity. Even if it is a ‘knowingly created’ environment, none of the subject and object is virtual: virtuality becomes a standing principle when these entities *are rendered* as such. Within this framework, relationships have a good chance of being emotionally recognised due to human beings’ implication. As studied in the third part, the new world has uncommon dynamics and rules evolving from the relationship between internal and external contexts related to real and virtual (perceived) dimensions.

2. Virtual Reality

February 12, 2020, 1.00 p.m. – Research

I spent the months of February and March researching the contemporary art scene, multimedia composition and conceptual reflexivity. Something radically new in these languages fascinates me, especially the approach to past and present works as defined objects with observable and distant shapes. I wonder if this is a way to relativise the weight of history between fetish and artefact, to assimilate certain stylistic traces and, at the same time, express an innovative evolution. The more I observe Alex and other authors' works, the more it seems to me that this process is intrinsically digital: rows of binary codes weave the deep plot through bubbles of the present, in which every reference seems muffled, delimited and rewritten. These isolated and floating entities are grasped by the authors, who connect and fix them in a more-or-less defined structure and a vast, historicised reference system. According to variegated and personal interpretations, certain traces seem still moving within a space to me though narrow. McLuhan is a ghost by now, digital mediums are an integral part of the collective social fabric and communicate no longer to *people, but* with *them.*

I find myself looking at the raindrops outside the window of a library room. They draw well-defined lines streaking the background as they fall, looking like strings of a code. Finally, I ended up in a present bubble too, so I walk away from the library, eat a sandwich and head towards the Conservatory classroom where Alex gives lectures. The course is called 'Remixing Our Past' and deals with some models' reinterpretation through the Internet and digital encoding. I follow the students' seminars on memes, in their continuous adaptation linked to the micro-communities of social media according to the evolutionist principle theorised by Dawkins; on the reenactment of art objects on new platforms in Baldacci's theory, which foresees an over-time reactivation and remediation in new supports and meanings; on the Big Data phenomenon and the relations with data science and data mining passing by excerpts from Manovich; on the vaporwave *movement through Fischer, which theorises the tendency to renounce the desire of future because of an absent past. Today there is the one on contents' fusion in the musical, audiovisual and computer mash-up according to Navas.*

These examples are the beating heart of a living cultural matrix, which is continuously renewed according to contemporary media. While observing these worlds as a TV show eating my virtual popcorn, I come back to my present bubble. After all, I belong to the information society myself, and while I greedily fantasise in a surreal world, I do so according to a digital matrix. I return to the library, where I find myself reconstructing, observing, and analysing contemporary art and social language again. Then, I reflect on what will happen in the performance and which analytical means can be used for describing it. A series of events will develop in the here and now while an absurdly large amount of data will be fired into the Internet hyperspace in a heartbeat. From a junction of the web artery, I will have to extract the salient properties of that encoded flow; from a library or within the

walls of an industrial shed, I will experience an event as virtual as historicised. I ask myself if time is really at issue in this context, where past and future seem overlapped in an endless unit. Millions of people are now in contact through the web, living fictional and digital realities. Then, imagination collapses into the thought of an instant. Looked from this black hole of my memory, the concept of 'real' is not so important after all.

The experiment purpose is the conceptual foundation of the performance, as stated in the previous chapter. On the other hand, virtual reality (VR) is the environment where the experiment takes place. VR principle has been described in various ways by scholars, mainly regarding two aspects: technological tools by which users access the synthesised virtual world and the psychological factors concerning the perception of a shared artificial environment. The former regard "a simulation in which computer graphics is used to create a realistic-looking world" [Burdea and Coiffet, 2003, p. 2], a "real-time interactive graphics with three-dimensional models" [Fuchs & Bishop, 1992, p. 2], or the "participation in a synthetic environment [through] 3D, stereoscopic head-tracker displays, hand/body tracking and binaural sound" [Gigante, 1993, p. 3]. The latter involves "the perceptual […] disappearance of the medium from the conscious attention of the subject" [Cohelo et al., 2006, p. 28], "the strong illusion of being in a place in spite of the sure knowledge that you are not there" [Slater, 2009, p. 3551], or, generally, "the mediated perception of an environment" [Steuer, 1992].[26] Mark Bell also refers to the avatar figure, conceiving VR as a "synchronous, persistent network of people, represented as avatars, facilitated by networked computers" [Bell, 2008, pp. 2-3]. The virtual environment – mediated by the computer – exists independently from the user (it is 'persistent'), and the users' inputs – like data, gestures or verbal commands – receive immediate ('synchronous') feedback.

Each of the mentioned descriptions is strictly related to immersivity and interactivity in virtual reality, enhanced in *Genesis* even if (or, by virtue of) a 3D graphical representation is not provided. The first-person view and the objects realistic reaction to stimuli facilitate the feeling of 'telepresence' as "the experience of presence in an environment using a communication medium" [Steuer, 1992, p. 76]. This transfer refers to digital means and performance setting, but also to the 'inner presence', namely "when the subject mentally represents the possibility of acting upon the virtual world" [Cohelo, 2006, p. 31]. The interaction with items, hall, or human beings stimulates these aspects significantly [Schubert, Friedmann & Regenbrecht, 1999]. Grigore Burdea and Philippe Coiffet side the 'interactivity' and 'immersivity' principles already stated to 'imagination', referring to "the

[26] Steuer also states that this perception refers not only to "an animated but non-existent virtual world synthesised by a computer" but also to a "distant real environment" [*ibid.*], as in *Genesis*. 'Virtual reality' and 'virtual world' are distinct principles also for Richard Bartle, for whom the former "is primarily concerned with the mechanisms by which human beings can interact with computer simulations", whereas the latter is focused on "what awaits when [people] enter [it], not the means" [2003, p, 3]. Following this concept, in this book 'virtual reality' refers to the space perceived through digital means – as in the gamers' view – and 'virtual world' to the self-existing space artificially defined by the authors – as experienced by the avatars in the performance hall. For more information about VR, see the article *Past, Present, and Future of Virtual and Augmented Reality Research* [Cipresso et al., 2018], whereas for virtual world *Toward a Definition of "Virtual Worlds"* [Bell, 2008].

mind's capacity to perceive non-existent things" [2003, p. 3]. Usually, VR requires an initial adaptation to a digital-graphical environment. In *Genesis*, this process is exactly reversed: being none of its subjects and objects computer-designed, gamers can easily imagine virtual reality even if it is distant and mediated.

The avatar differs from the canonical definition of "a graphical representation of a user within the environment which is under his or her direct control" [Allbeck & Badler, 2002, p. 313] because not entirely automatised and digitally structured. Nevertheless, they are a "representation […] that has agency (an ability to perform actions) and is controlled by a human agent in real-time" [Bell, *ivi*]. Having a will, the avatars manifest the double facet of an agency to perform and an agency to interact. On the other hand, the players/agents can control the avatar or interact with him/her, respectively conceiving the avatar as a virtual character or as a human being (cf. §5). The questionnaire excerpt in Figure 3 shows that these aspects' perception tends towards the human dimension, thus recognising a person to interact with.[27] The virtual opposite – visible not only in the red slice but also in the yellow and green

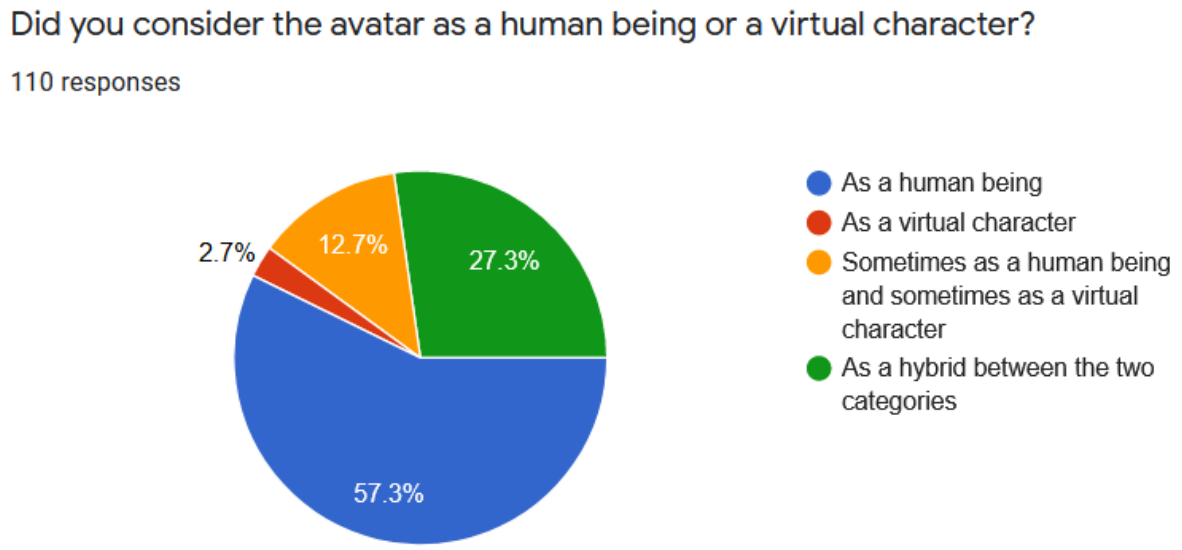


Figure 3. Questionnaire excerpt: pie chart regarding how gamers conceive avatars.

[27] As reported in the Introduction, around one-quarter of the total participants fulfil the questionnaire, whereas a variable number between 55 and 88 users replies to the optional open answers. The questionnaire, realised immediately after the performance, aims to retrieve more details about the hypothesis done *in loco*. Then, Schubert reviews the form especially including the first four open answers, and the other authors evaluate it, significantly adding the sentence "For example, how did you experience your position of power?" to the first question [Appendix III.1]. The questionnaire is sent via email by retrieving the gamers' addresses, the only information given by those who book a ticket. Therefore, it has not been possible to consider quick users. Questions are grouped in four sections: General Information, regarding gamers geographical location, numbers of slots played and game perceived enjoyment; Interaction (to which the here reported pie chart), concerning the relationship with the avatar; Space and Objects, about how gamers interact with those entities; Considerations about the Game, where it is possible to fulfil open answers about various aspects of the single experiences. An open answer is also available in the Interaction section [Befera, 2020]. These answers have the advantage to be more reliable than offline ones, where respondents may be less concerned about the impressions they are making [Garcia et al., 2009, p. 68]. Nevertheless, being the number of answers limited in relation to the total number of gamers, these cases are considered excerpts that significantly outline some tendencies.

ones in different degrees – regards the most similar condition to a video game. These aspects are related respectively to the embodiment *in* or *of* the avatar, which are crucial aspects of VR immersivity. In fact, in the tangle of these agencies and embodiments lays the basis of further interactions: from total obedience (virtuality, embodiment in the avatar) to human relationship (humanity, embodiment of the avatar). Body perception also refers to social interaction:

> When thinking about how social life gets created online and how its attendant communication occurs, avatars are particularly powerful artifacts to consider. They prove to be the material out of which relationships and interactions are embodied: much as in offline life with its corporeal bodies, digital bodies are used in a variety of ways – to greet, to play, to signal group affiliation, to convey opinions or feelings, and to create closeness. At a very basic level, bodies root us and make us present, to ourselves and to others. Avatars form one of the central points at which users intersect with a technological object and embody themselves, making the virtual environment and the variety of phenomena it fosters real. [Taylor, 2002, p. 41]

Thus, the embodiment recreates the perception of a common time and space, which is "a critical part of the technology of place, because perceptions of how things are have to be shared and agreed upon by many people before they acquire the flavour of Reality" [Castronova, 2005, p. 81]. The many gamers playing over time, avatars living the space continuously, authors defining the rules, and staff assisting the performance subscribe to this implicit agreement. Therefore, the game reality stands as real in those defined space and time.

Because of the characteristics mentioned above, *Genesis* tends to generate "an alternative or complementary truth, experience, perception, or environment" – as stated by Schubert in the last quote of the previous chapter – where this new condition is "constructively generated […] and, therefore, it is not absolute" [2021d, p. 173]. Regarding its video game[28] aspects, it entails various digital devices, aiming to the creation of a new world:

> Audio-visual data stimulates eyes and ears to simulate a time-space – a simulated world (SW) – and a series of interfaces map actions in order to integrate the player with a SW in an interactive feedback loop, with resulting emotions that reflect the interaction. [Gregersen and Grodal, 2009, p. 65]

The graphic interface integrates the avatar's gesture, recalling video games' attitudes and playing an essential role in the embodiment. As shown in the picture on top of Figure 4, the avatar's posture while waiting for the user's instruction – the 'idle mode' – is not natural and imitates a first-person gaming perspective. Also, not seeing the person behind the VR glasses complicates the acknowledgement of the avatar identity. The images on the bottom illustrate

[28] The term 'video game' will be considered in the broad acceptation stated by Frasca, as "any forms of computer-based entertainment software, either textual or image-based, using any electronic platform such as personal computers or consoles and involving one or multiple players in a physical or networked environment" [2001, p. 4]. Being it a virtual environment, the definition is strongly similar to what already stated about VR. This is true also for the role-playing concept – in as much as it "offer[s] individuals the chance to explore new aspects of themselves and others through a process known as identity alteration. […] Fantasy provides an outlet for these elements of the psyche to find expression, establishing a venue for players to develop alternate identities in a safe, controlled space" [Bowmann, p. 9] – and for the "user-initiated interactive exchanges with the gaming system [which] serve to enhance their sense of agency and sourceness" [Sundar, Xu & Bellur, 2010, 2252]. For more information about the computer-game facets, see *Playing with Video games* [Newmann, 2008].

the gamer screen interface.[29] Three bars on the top-right corner surround the hands' view, indicating his/her attributes (fatigue, hunger, thirst, and temperature). The avatar set them through the wristband device buttons (visible on the left arm in the picture above), sharing his/her status. This device also enables to send pop-up windows appearing in the middle of the screen for saying yes, no, rejecting an order, thanking the gamer, asking for more details, and questioning an action's realisation.[30] Furthermore, a window on the bottom-left corner allows selecting items, whereas the chat room is on the bottom-right corner.

The dynamic and interactive environment existing independently from the players enhances the virtual reality perception [Newmann, 2008, pp. 107-126]. Moreover, the graphical interface shows attributes and pre-set messages, human avatars act as obeying-orders characters, and gamers select items from an inventory, in line with video game dynamics. The avatar's reactions are essential in stimulating an order-answer feedback loop,

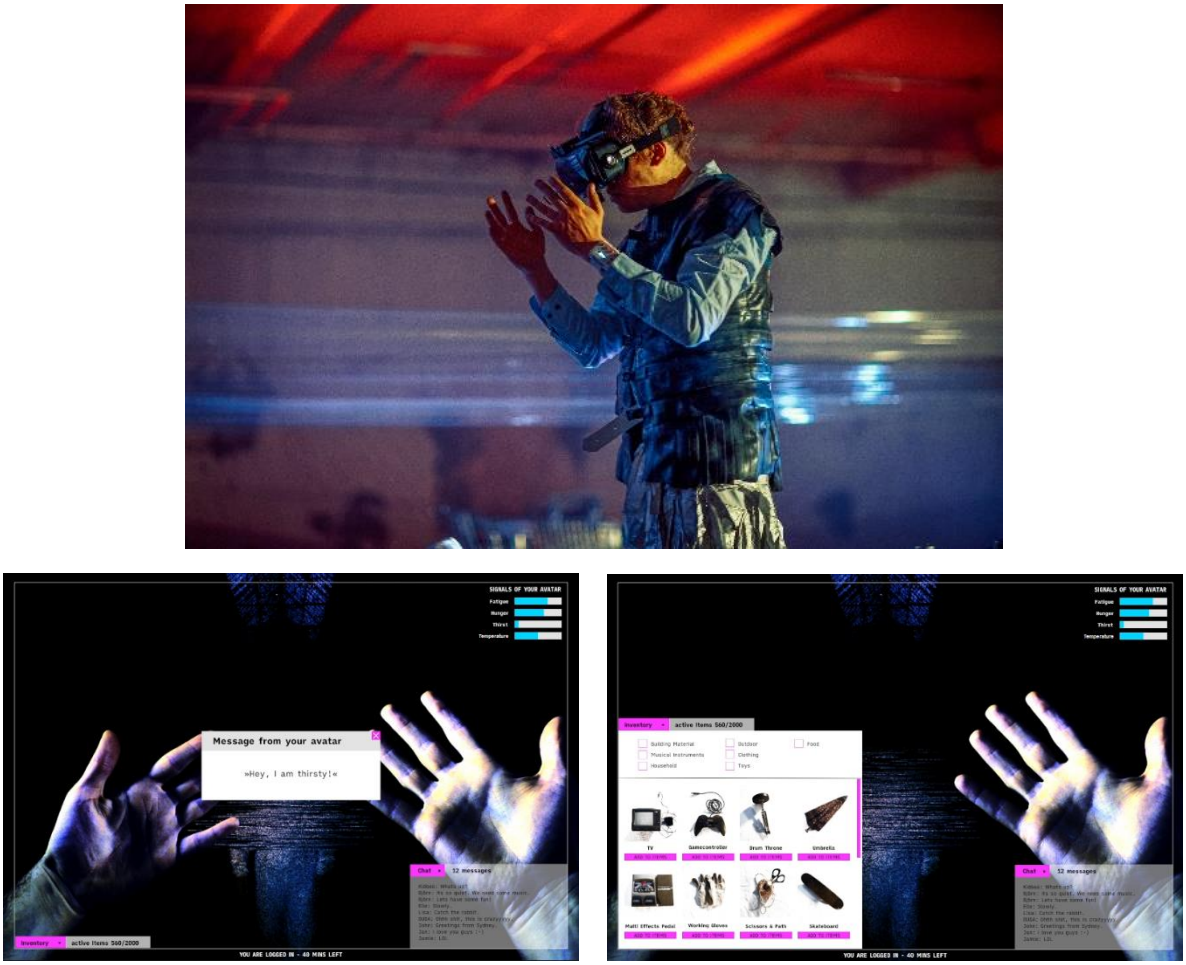


Figure 4. Avatar's 'idle mode': live posture with hands in front of the glasses (above) and gamers' perspective through the graphic interface (below).

[29] These images are obtained from the website press material and are a simulation of the interface used during the game [Schubert, 2020b].
[30] Other pop-up messages sent and programmed from the control room are shown in Chapter 4.

which defines the emotive response and interaction. This process passes through digital signals' communication:

> While video game players are already transfixed in front of computer screens, their physical actions are further limited to an interface – game rules are enacted only when a player sends a digital signal through the interface. […] Video game player's actions are limited by not only the game rules in the virtual space but also the programmed interface in the physical space. However, digital game players often do not realise such limitations because their minimal physical actions are amplified in digital spaces. [Nam, 2019, p. 51]

Besides recalling the telepresence already discussed, these findings highlight video games' boundaries, depending on their virtual-world rules and interface. At the same time, these restrictions define the resulting interactions. In *Genesis*, the first-person view focuses on the controlled avatar; the graphic interface stimulates the consideration of the avatar's needs; the defined borders of the space and the slot duration of one hour consent the interaction with a limited number of objects and users; gamers can select ten articles per slot and items preestablished categories influence the plays. The hall's size and the number of available items allow a weighted number of interactions for each play. Also, the limited slot duration and the interactive feedback enhance the relationship between the gamer and his/her avatar, not the development of an online community.[31] Thus, more than representing a comprehensive picture, *Genesis* highlights many snapshots of different gamers' play, which might be shared – in the same period or, more generally, within the same space. As shown in Figure 5, a few users play more than one slot, resulting in a high fragmentation rate over the

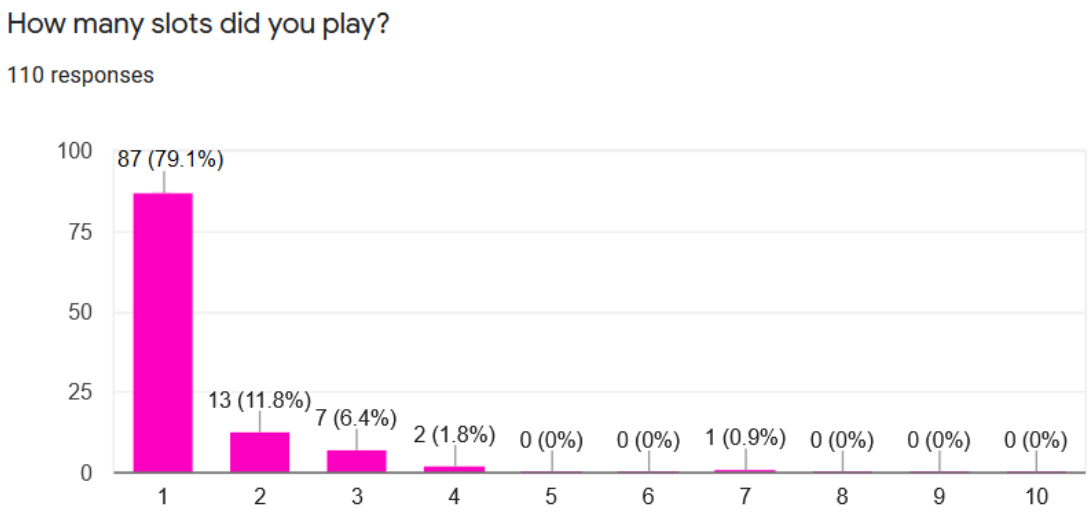


Figure 5. Questionnaire excerpt: bar chart regarding the number of slots played by single gamers.

[31] In the online multiplayer games, scholars have already stated that the environment's nature and social interaction are "influenced by the game's mechanics, the interface, players' own choices" [Williams et al., 2006, p. 357] and by "the design of an environment" [Cheng, Farnham & Stone, 2002, p. 105]. As it will be deepened in Chapter 5 through the analysis of the chat, it has been possible to recognise the emergence of a community only in the last days.

whole performance.[32] Therefore, *Genesis* interplay occurs mainly between gamer and avatar, and, secondly, between the gamer-avatar system and the other entities. This preferential one-to-one relationship defines a game orientation which, besides the directionality from gamer-avatar to space, regards a continuous feedback loop between gamer and avatar as the core aspect of interaction.

In conclusion, *Genesis* proposes a dilemma to playing users regarding how to interact with a human being in an environment that establishes virtuality and control as basic rules of interaction, then, with items, space, and other human gamer-avatar systems. It comes up to be a question for the avatars also, who decide how to act regarding their character and to what extent let the gamer dominate them.[33] Finally, staff and authors living outside the performance hall show another kind of evolving adaptation to the environment. They interact with the performance hall passively – due to performers assistance, space cleaning, moving items to the hatch, and watching the events continuously – and try to limit their influence. Nevertheless, they experience a change related to this minimum contact and proximity, becoming part of a progressive merger of different habits and occasionally joining the game (cf. §7).

[32] The questionnaire excerpt shows one-third of the users, thus a relative number. The number of people booking a ticket also confirms this data: their email address is repeated mostly one time, except for 25 users (two times), five users (three times) and one user (six times) more. The possibility to join the game as a free user applied from the second day also makes this consideration relative. Nevertheless, as already stated, the chat and the interactions do not manifest any community behaviour.

[33] In fact, after a few days of immersion in the virtual world, they manifest a specific adaptation to the environment related to their behaviour. Nevertheless, the experiment still regards how gamer and avatar interact with each other and to what extent they can tolerate their counterpart wishes within the game's rules. For more information, see the next chapter and Chapter 5.

3. PERFORMANCE

April 20, 2020, 12.00 a.m. and April 25, 2020, 10.00 p.m. – Avatars

In the weeks preceding the start of Genesis, *I am assigned to photograph the objects in the inventory and make an initial catalogue. The photos will be uploaded on the website and, from the menu, it will be possible to select the items to be used during the performance. The job is challenging, considering that the COVID-19 pandemic has caused a remarkable reduction of staff. Hence, I ask for someone's support and, occasionally, I receive help from Alex's students Tam Pham, Yuri Akbalkan, Rica Zinn, the author Heinrich Horowitz, and the performer Carola Schaal. The latter provided the longest-lasting physical and moral support and proved to be a kind, energetic and very organised person. In contrast to the other performers, I already know Carola by reputation. She is a well-known clarinettist in the contemporary European scene and a Decoder ensemble member, whose reference composer is Alex. I already saw her performances of pieces like* Sensate Focus, Your Fox's A Dirty Gold *and* Acceptance. *At first, I perceive a sort of mythification resulting from the stage's legacy, where the performers are presented as abstract entities floating in the absolute. However, Carola is very humble, and the human dimension soon takes over.*

Around noon on our first day of collaboration, we have a lunch break and start speaking about everything and anything on the ground, just outside the main entrance. The earth is soft, the sun is pleasant, and a light sea breeze from the north caresses our faces. She asks me what my role is, my goals, how I feel and why I am there. I answer that I am engaged in ethnographic research about the performance and helping with the work setting. Then, we talk about Alex's production, the job's effort, and the benefits of eating little and at regular intervals. Meantime, she bites her spelt with vegetables, and I consume my pasta with pesto and mozzarella. The pandemic is draining the world of music and theatre. Many performances have been cancelled worldwide, but Carola has two projects at stake: the present one and the collaboration with Brigitta Muntendorf, about which she seems particularly satisfied. Finally, we discuss Genesis. *She feels excited and worried at the same time. She had already been the interpreter of* Acceptance, *where she worked on the construction of six wooden sculptures in five-day isolation on the Alps. Here, however, it is about being controlled by an unknown person, which could be very psychologically demanding. In my opinion, this can also reveal unusual perspectives on the relationship between human beings. She agrees but maintains her perplexity: this is just one of the concerning issues.*

Two days before the performance, I have a talk with Fabian also. We are in the external space outside the avatars' rooms behind the performance hall, where I occasionally sleep. The building is part of Kraftwerk Bille, characterised by the combination of Hamburg typical industrial style and street art that adorns its exterior. I grab a beer and sit on the little wall next to the exit door while I watch the four avatars discussing among themselves after a meeting with the authors. There is a perceivable tension, probably due to the upcoming

performance and its very nature. So, I prefer not to disturb their team intimacy, and I stay on the sidelines until they retire to their rooms, except for Fabian, who joins me with a beer. Fabian is an actor of my age. We share the same experiences in the video games world, and we discuss briefly role-playing. He looks very excited by the experiment and keen to make his interpretation converge towards a game avatar acting. Also, he seems confident in his ability to recognise people's voice, developed by working in a call centre for a short time. Nevertheless, he states some grey areas on which he does not know how to behave yet: what will the boundaries between action and interaction be? What will the night shift to which he has been assigned involve? Will it be hard or strange to be controlled by unknown players? How will he act when not controlled?

Carola and Fabian show me the nebulous expectation of the unknown that carries with the novelty: although with necessary precautions (no one will harm anyone), the performance maintains its halo of extremism and fleeting emptiness. We are all fascinated by the imminent future in which we are investing effort and expectations. At the same time, there is a sort of dark energy in the air, linked to the deepest dimension of each self; to the possibility of observing certain fears from within and choosing if and how to face them; to the extreme state of power and liberation related to control, as to its negation. One of Genesis *efforts, I reflect, is precisely to make this inner and potential imaginary, underlying an abstract and virtual dimension, real.*

Genesis entails various performative aspects, strictly related to virtual reality and the experiment purpose. In this regard, it shows artistic references, theatrical contents, and social implications.

In one of the first texts reported on the website, the authors describe *Genesis* as a 'participative concert installation',[34] implicitly referring to an artistic context. This epithet suggests a watching and interacting audience and a temporarily and autonomous space setting.[35] The live streaming of the avatars' perspective and the camera overview has the ambivalent function of scientific data observation and spectators' overview. Also, the self-standing virtual reality, existing independently from players, might recall a *mise-en-scène*. The avatars frequently disregard or freely interpret the authors' purpose of removing their will towards a performative outcome. Thus, they manifest a specific character depending on the circumstances or their behaviour outside the performance (cf. §,5). Furthermore, the performance is supported and promoted by artistic institutions (cf. note 2), and the number of users joining the website shows a high percentage of people related to Schubert's context.[36]

[34] For more details, see Schubert's website [Schubert, 2021b].

[35] For more information about performative installation, see *Entangled* by Chris Salter [2010], whereas for installation art *Understanding Installation Art* by Mark Rosenthal [2003] and *Installation Art* by Claire Bishop, which focus respectively on the medium aspect and viewer experience.

[36] In a personal discussion with Schubert occurring in the days before the performance, he also states that some of the tickets are reserved to musicians, artists and journalists involved with the performance. During the performance, he also identifies many known artists due to their email or voice. Further evidence come from avatars' interviews, stating gamers belonging to the Neue Musik environment [Appendix II].

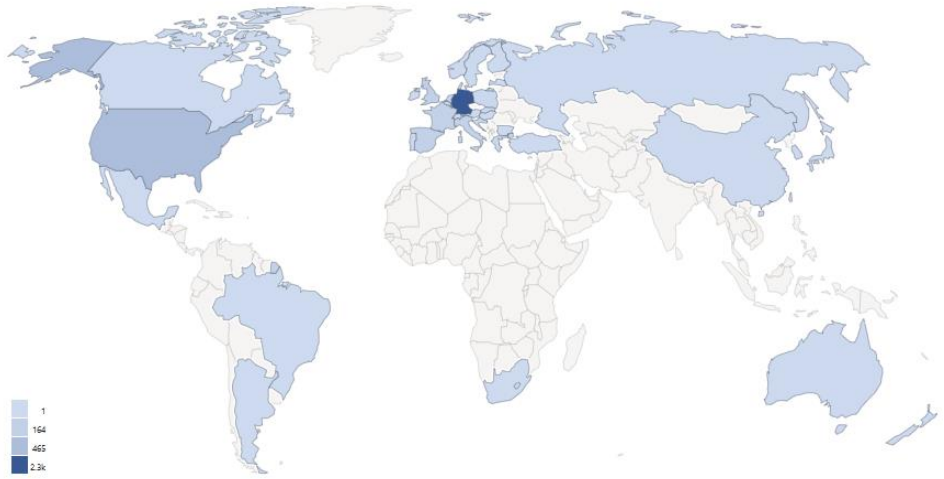


Figure 6. Matomo platform data excerpt: map showing the countries from which users accessed the Genesis website over the week. The darker is the blue, the more the people involved (key in the bottom-left corner).

CHANNEL TYPE	VISITS	ACTIONS	ACTIONS PER VISIT	AVG. TIME ON WEBSITE	BOUNCE RATE
Direct Entry	2,601	8,497	3.3	5 min 32s	38%
Social Networks					
Facebook	405	1,305	3.2	2 min 48s	22%
YouTube	86	401	4.7	5 min 20s	5%
Twitter	79	243	3.1	1 min 58s	32%
Telegram	35	99	2.8	2 min 19s	23%
Instagram	23	97	4.2	3 min 24s	13%
LinkedIn	1	2	2	14s	0%
TOT / AVG	629	2,147	3.4	3 min 2s	21%
Websites					
www.elbphilharmonie.de	156	692	4.4	5 min 30s	13%
com.google.android.gm	21	44	2.1	1 min 34s	57%
deref-gmx.net	15	83	5.5	9 min 58s	27%
www.kraftwerkbille.com	15	56	3.7	6 min 15s	20%
deref-web-02.de	8	28	3.5	9 min 18s	13%
mail.google.com	6	18	3	7 min 28s	50%
studip.hbk-bs.de	5	41	8.2	24 min 31s	0%
com.slack	3	9	3	3 min 5s	33%
mail.yahoo.com	3	10	3.3	6 min 59s	0%
owa.hds.hr	3	19	6.3	12 min 18s	33%
TOT / AVG	249	1,058	4.2	6 min 8s	19%
Search Engines	123	600	4.9	5 min 16s	10%
TOT / AVG	3,602	12,302	4	4 min 59s	22%

Figure 7. Matomo platform data excerpt: online channels from which users access the Genesis website, namely direct entries, social networks, websites, and search engines. The table shows partial, total, and average values.

Figures 6 and 7 highlights the location and number of users visiting or interacting with the *Genesis* website.[37] The map's magnitudes outline that most of them play from Germany.[38] Also, within the total 12302 actions and 3602 visits of the website happening during the performance week, respectively 16,2% and 15,5% of users[39] reached the website from Facebook – presumably, through the *Genesis* page, or authors and performers profiles sharing the event[40] – and the Elbphilharmonie website. This correlation is one of the possible explanations regarding many gamers' artistic intent, which influenced the interactions and the space definition (cf. §7). Still, gathered data do not suggest a deviation from the social experiment. Instead, they outline the artistic intents as part of the overall interactions, sided by explorative, destructive, and cooperative activities (Fig. 8).[41] Thus, the avatars' character and gamers' background become one of the aspects involved, as parameters influencing the games.

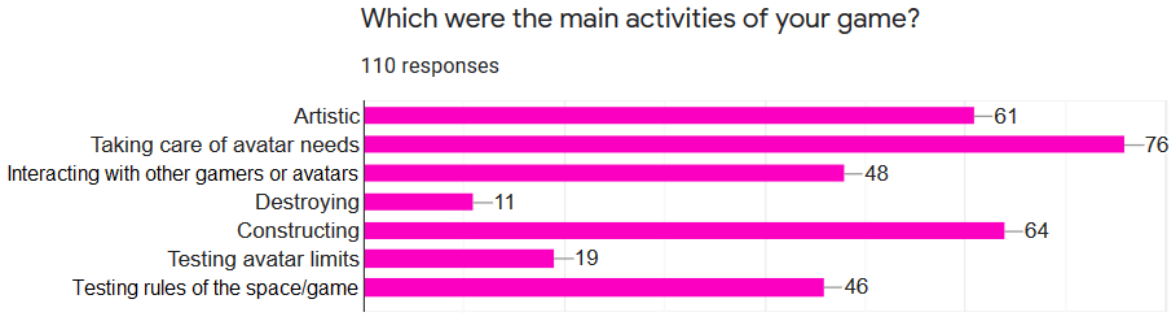


Figure 8. Questionnaire excerpt: multiple-choice answer regarding the main activities of 110 games.

The performative aspect also recalls a bodily dimension, a recurrent factor in Shubert's works. The author expresses its relevance through terms like authenticity and corporeality:

> In my work, one finds not only the virtual but regularly also this working approach's constructivist aspect in the media context. The focus is often on the physicality of the performers and associated questions about their authenticity and virtuality. In most cases, the scope of action and representation is extended or altered by technology. The musicians' appearance moves between the opposing poles of expressive authenticity and obviously manipulated representation. Inherent in them are both dehumanization and optimization. [Schubert, 2021d, p. 190]

The dichotomy between 'expressive authenticity' and 'manipulated representation' reflects *Genesis*'s reality-virtuality poles. Through contrasts and shadings between mediated and

[37] These data are retrieved from Matomo platform, which stores statistics about users' participation on the *Genesis* main website. These data do not involve performance streaming, broadcasted through YouTube. Also, the data granularity on the map is at most limited to the countries' areas. The access to the statistics has been kindly accorded to me by the author and the programmer Dominic Osterried.
[38] Also, 75% of 110 gamers report in the first answer of the questionnaire 'Germany' as the country from which they play. For more information about the questionnaire, see note 28.
[39] Figure 7 does not report these values, corresponding to the percentages of the sum of the Facebook and Elbphilharmonie website visits and actions in relation to the mentioned total.
[40] I.e., see *Genesis* page [Schubert, 2020a], and the Facebook profiles of Shubert [2021a] and Schaal [2021].
[41] The bar chart in Figure 8 does not comprehend the results lower than two people.

human communication, the relationship between human characters occurs. Physical and gestural interactions are other essential topics in the author's production, expressed as "in-the-moment performing", "articulating with the body", and "communicating with the audience"; furthermore, bodily experience merges with a fundamental multimedia approach and digital devices, with the aim "to come up with technology or patches or with a concept for a piece that would allow that same energy" [Kanga & Schubert, 2016, p. 538]. Thus, *Genesis* extends the multimedia approach to social experiment and participative environment, establishing a "continuity from the other works regarding virtuality, distance and closeness of control, and how much is needed to be in a specific space or close to the body in order to feel something" [Appendix II.1]. Also, it recalls the New Discipline theorised by Jennifer Walshe to describe "compositions which have a wide range of disparate interests, but all share the common concern of being rooted in the physical, theatrical and visual, as well as musical" [2016, p. 4].[42]

From a broader perspective, embedding a social experiment in an artistic environment is not uncommon in contemporary pieces, which use many kinds of expression, references, and goals. This trend recalls the 'reflexive modernism' theorised by Harry Lehmann. The scholar underlines the importance of conceptual reflection in contemporary art, where the art system finds "an aesthetic communication becoming probable that neither represents nor a-presents the world, but rather one in which art reveals the world in the state it has reached" [2006, p. 33].[43] As Shubert states, *Genesis* aims to depict interactions as they reflect or redefine sociality facets within a new virtual environment. Furthermore, it does not want to express beauty, eventually emerging from human behaviour, feelings, memory traces or even the evanescence of the space itself [Appendix II.1]. The conceptual reflection is linked to the observation of facts and involves a social interaction external to the author's will. With Söke Dinkla, in contemporary interactive and video performances' practice, "instead of being a commentator standing outside the society, the artist decides to take part in the socio-technological change and judge from within" [1994].[44] This kind of overview reflects the performance's artistic insight, recalling the experiment – due to empirical factors – within artistic and performative content – regarding its institutional, historical, and aesthetical

[42] English translation from the Borealis festival website [2016]. Schubert states this reference himself [2021d, p. 191]. For further analysis on this topic, especially about *Weapon of choice* (2009) for violin, sensor, live-electronics, and live-video, see the article *'... kreativ mit den Vorgaben umgehen'* by Stefan Drees [2018].

[43] In the trend that he names 'conceptual music', the scholar deals mainly with composers. He reconstructs the evolution of the conceptual reflection from the Fluxus collective to contemporary artists such as Johannes Kreidler, Trond Reinholdtsen and Simon Steen-Andersen, passing by many other authors. His model is useful in this context because Schubert himself comes from a musical background. Passing through a theatrical approach based on multimedia, he is now composing performances and installations in which music is often a secondary parameter, whereas the conceptual and digital multimedia are crucial. To deepen Lehmann model, see also *Die Kunst der Gesellschaft* by Niklas Luhmann [1995], taken as reference by the author. The text explains the original theoretical art system's model. Also, Lehmann treats the digital influences on institutions in *Die digitale Revolution der Musik* [2015].

[44] The author debates a historical overview starting from the works of Myron Krueger and the development of computer-controlled Interactive Art in the late Sixties, then talking about the mediation of analogue controllers by the Australian Jeffrey Shaw, proximity and manipulation by the Canadian David Rokeby, touchscreen interfaces by Ken Feingold, and then briefly continuing on the Nineties works.

background. Steve Dixon attributes this approach to a renewed conception of universal metaphors:[45]

> Digital performance is more commonly a quest for unified subjectivity (though doubled, not split, but the many facets of self-exposed in order to converge as one), a structuralist rather than poststructuralist project, a search to express universal myths and metaphors about the human condition. [Dixon, 2007, p. 155]

Genesis aims to the convergence of different subjects through the embodiment principle mediated by VR glasses – so that the gamer and the avatar tend to represent a unified being (cf. §2) – and by the construction of the same space by different gamers. Space, which is the central entity around which the performance revolves around, becomes alive and manifests every action, collaboration or divergence between human beings involved over time. This process entails all the context's factors and underlying poetics from which *Genesis* comes from and relates to: from the social study goal to performance aspects, artistic institutions, digital means prominence, and conceptual approach. Within this framework, it shows a new cosmogony, implying human beings, virtual reality, and the creation of a new world.

[45] The broad analysis made by Dixon in the book *Digital Performance* focuses on performances affected by digital means. In the mentioned Chapter 7, he takes into consideration works of Lacan, Derrida and Causey, concluding that "in digital performance, one cannot but determine theory and practice frequently moving in opposite and contrary directions. Instilled postmodern belief systems stress fragmentation, split subjectivity, and the rejection of meta-narratives and meanings, whereas in actuality what is practised by digital/posthuman performers is commonly the search for the opposite: for cohesion, for meaning, for unity, for intimate cybernetic connections between the organic and the technological" [2007, p. 154].

II. VIRTUAL SHIFT

4. HARDWARE AND SOFTWARE

Intermezzo – The month before the performance

During my period of work on collecting and cataloguing items, I observe and experience the dynamics underlying the organisation of the performance. I am firstly employed in the gathering of the objects kindly donated by Hamburg inhabitants, which will be integrated with others purchased on purpose to fill the gaps. Alex lends me his car, a Dacia with a very spacious boot but without power steering, which is quite comfortable although very basic and tiring in the long run. Because of the pandemic, it is difficult to pick up objects, so we all try to keep distance and use minimal precautions. The people I meet are often acquaintances of the authors, musician, artists, or spectators of the Hamburg art scene. They are very curious about the performance, of which they know the fundamental concept and a little more. I bring the collected objects to a first warehouse not far from Kraftwerk Bille, where they will undergo a second skimming before being placed in their final location near the performance hall. Here, they will be photographed, sorted, catalogued, and finally used. I coordinate with Lisa and Jette for the transport. They are the leading set design managers, who are dynamic and tireless in their tough work. They act according to the authors' initial instructions, assuming an active role in the discussion also. At the end of the first collection, they select the articles to be transported in the shed with Alex, Heinrich, and Carl.

Afterwards, the second part of the arrangement begins. The two girls, Heinrich, and other assistants – including Vitus and Francis, who will then be responsible for transporting the objects to the hatch during the performance – take care of transferring the material from one storage room to the other in the main building. Lisa and Jette draw rectangles on the floor with chalk. Then, they write aside the type of objects to place there, after being pictured in the photographic set that Alex and I arranged. I organise the first cataloguing on an Excel table according to two categories' orders, adding each object's quantity on a side column. Every day, I send the list to the author, who takes care of the new cataloguing and editing of the images thanks to supporting professionals. I see the room slowly building up while the events flow in a terribly frantic way. We consume energies like wax in the fire of a geometric organisation of facts, while the objects arrive, are placed on the floor beside the relative sections, photographed, inserted in the catalogue, placed inside the relative sections, eliminated, adjusted, cleaned up, photographed again, reinserted in the catalogue, re-introduced into the relative sections, checked again, sent, catalogued again and so forth in an endless loop. In the meantime, Julian builds the hatch, which slowly takes shape. Also, Alex and Carl organise the control room by placing a large amount of hardware on the tables, connecting them together and with the devices in the performance room. In a few days, a jungle of well grouped and secured wires stretches along the corridors of the second-floor balconies. Carl makes sure not to let careless passers-by trample through. Nothing will happen without them, he says with a steady voice. I wonder how much data will pass through those conduits, on the website, and then to the entire world in a heartbeat. I figure performers

unconsciously transferring their actions into a handful of binary codes: passing through the hatch, their physical reality and that of the objects will connect to digital language and appear on someone's screen, who knows when, who knows where. Passing the hatch, they will become avatars in space and items in the inventory.

Within this long and immersive time-lapse, unexpected moments of peace happen. They acquire a surreal distension connotation within the rapid and tense working rhythm. On two nights, I decide to sleep in the building, both for the labour and experience. The second of these, I use Max's bed in the avatars wing: he is going back home that day and kindly grants it to me. The first one, instead, I stay there longer to work on the photos. In the evening, Carl offers me a beer, we drink it outside all together with Alex, talking briefly about the progress. Then we work a little more until 22:00 when I head to the second floor to say to Alex that I am planning to sleep there. He agrees and asks me if I am scared, I tell him no. He replies saying that he has slept several times in such an environment too, he knows some people who are worried about it. Then, he finishes working on the photos, and before leaving, he gives me the building keys. I settle down in the performance hall with a mattress, pillows, blankets, and sheets taken from the inventory, I find it interesting to test the environment as it will be for the performers. Before sleeping, I go out with a beer, make some calls, relax, and listen to the night sounds. We are close to the Berliner Tor stop, the S-Bahn rails are located right next to the building, and the trains run at a regular, relaxed pace. I can see the wrought-iron bridge and, behind it, the city skyscrapers with their illuminated signs. In the facing shed, within Kraftwerk Bille's industrial neighbourhood, some people are partying. I view the lights from the windows shining opaquely next to the burning cigarettes. From the outside, the music is muffled, hearing it from afar gives me a sense of peace, like something that I can observe flowing and imagine fading out in the darkness. I simply watch from my state of seraphic meditation, while a river of objects and reflections flows muted in my mind. But I have no strength left to think, so I close the door behind me and, when I lay down, I have just enough time to observe the desolation of the shed embracing the dark, before becoming vapour in one of its inscrutable corners.

Genesis involves many digital devices with different functions. As summarised in Figure 9, the avatar's VR glasses (Fig. 10, on the left) provide an antenna that sends the video-data to a wireless receiver, then to diversity and video switch located in the performance hall (Fig. 10, on the right). The switch sends the information to two video-streaming servers – one for the sequence view and one for a test video – passing by two LTE mobile routers. The website, programmed in JavaScript, creates a link to the video server whenever somebody has an available ticket or joins the game instantaneously as a 'quick user'. The audio connection works on an audio stream client running on a commercial server embedded into the website, which accesses the users' browser's microphone. The four working stations in the control room (the 'partner stations' visible on the top-left picture of Fig. 2) work as the corresponding basis: they receive the player's spoken language, avatars' video and microphone inputs. On the other hand, the arm interface is done in Arduino, whereas the wristband device – through which the avatars can send messages and regulate their bars (cf. §2) – is designed in AutoCAD (Fig. 11). A Max/MSP patch manages those predetermined messages and attribute

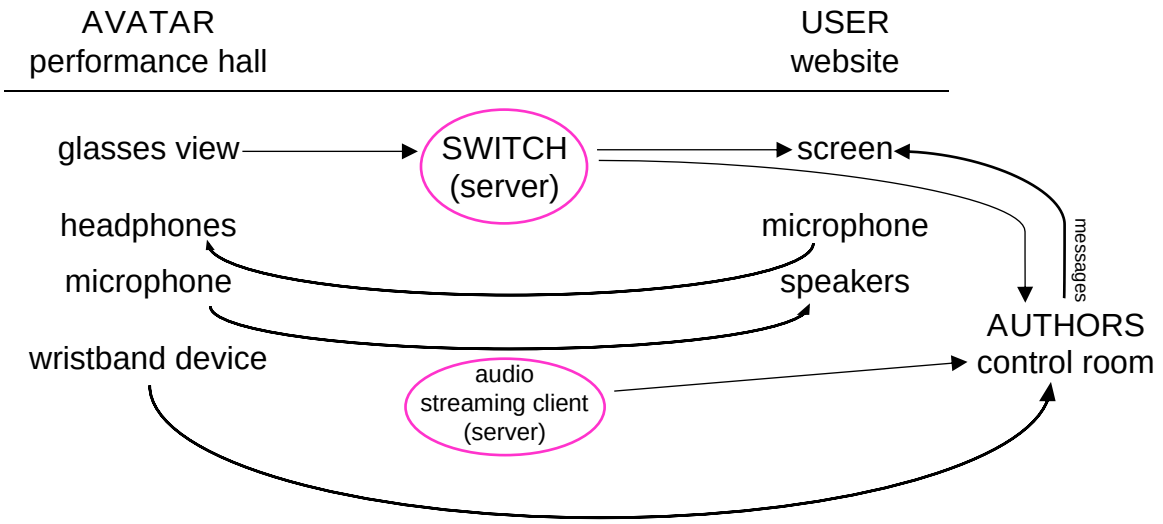


Figure 9. Hardware and software: main functions and connections, stressing the related subjects and locations.

bars regulation. Through the 'node.script' object, it uses the Node runtime environment to link to the website and reports data on the interface. Moreover, a moving camera broadcasts a live stream of the performance on YouTube, as already stated (cf. Fig. 2, top-right corner).[46]

Thus, hardware show and transmit data, whereas software and programming language organise them in digital objects, strings, or discrete units within a defined structure. All these devices are essential for user's interaction. This accessibility has its own rules linked to digital language and its application. Firstly, it refers to the 'metadata': "(literally beyond or with data) is a common name for descriptions of documents, records, and data: it is data about data" [Buckland, 2017, p. 111]. This principle implies the units' discretisation and allows the possibility of reorganising them into branched and easily recognisable structures. In *Genesis*, this process involves physical sources, which are further described, catalogued, and fragmented through JavaScript and Max/MSP. Figure 12 shows two excerpts of the website source code in its last update after the performance. On the left, it reports one item with the related characteristics (such as ID number, name, amount) and the uploaded picture (image); on the right, one user's game description (listing ID number, date, email address,[47] number of items used). Each of these data is a digital input to be processed by the system and represented as a unit. The overall timeline includes each game as a slot of one-hour within the whole performance week. The website inventory entails the items and uses a graphical discretisation visualised through the interface (as pictures with a caption and branched categories). The storage room organisation also reflects the items' grouping on the website (Fig. 14). Its categories refer to the first cataloguing made by the set-design team. Still, they show significant similarities with the authors' final catalogue: furniture is in the top-right corner, materials are mostly in the bottom, and tools, food, clothes, and paint are in a single

[46] The technical aspects' description refers to the interview done with the composer [Appendix II.1].
[47] The email address is obscured due to privacy reasons.

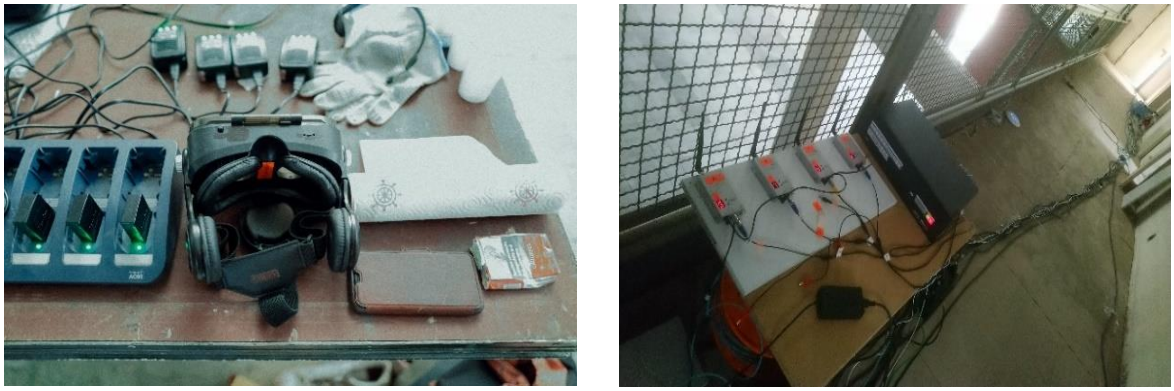


Figure 10. Hardware components: VR glasses and batteries (on the left), and switch and receivers (on the right).

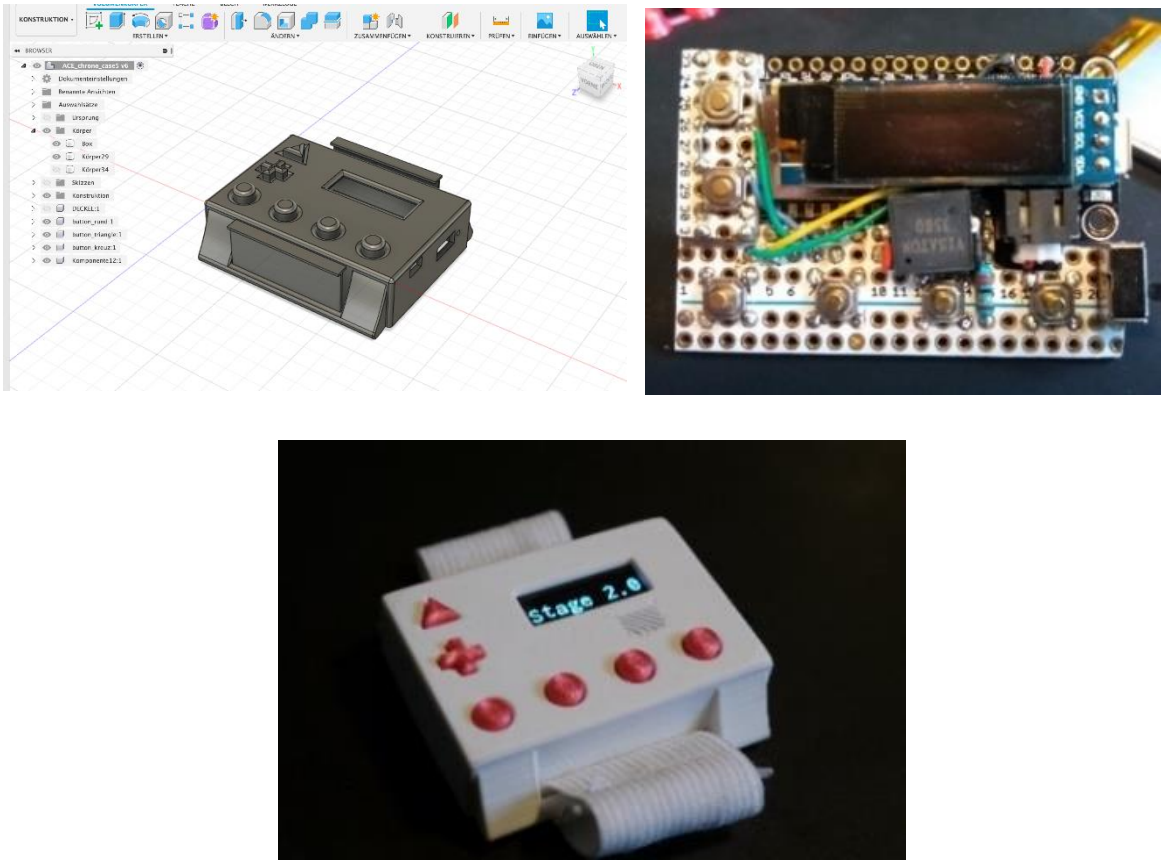


Figure 11. Wristband device construction steps: AutoCAD project (on top- left), electronics assembling (on top-right), and final result (on the bottom).

```
{
  "id": "1115",
  "name": "Screw 4x50",
  "amount": "2",
  "category": "Tools",
  "amountUsed": 0,
  "lastAdded": [],
  "provisionTime": 90,
  "image": {
    "fieldname": "image",
    "destination": "static/images/",
    "filename": "1115_small.jpg",
    "path": "static/images/1115_small.jpg"
  }
},
```

```
{
  "id": 332,
  "timestamp": "2020-04-30T10:45:00.000+02:00",
  "booked": true,
  "used": false,
  "quickBooked": false,
  "base": "base4",
  "email": "es@[redacted]",
  "player": "",
  "kicked": false,
  "confirmed": true,
  "location": "online",
  "itemsUsed": 4,
  "now": true
},
```


Figure 12. Website source code: examples regarding one item (on the left) and one user's booking (on the right).

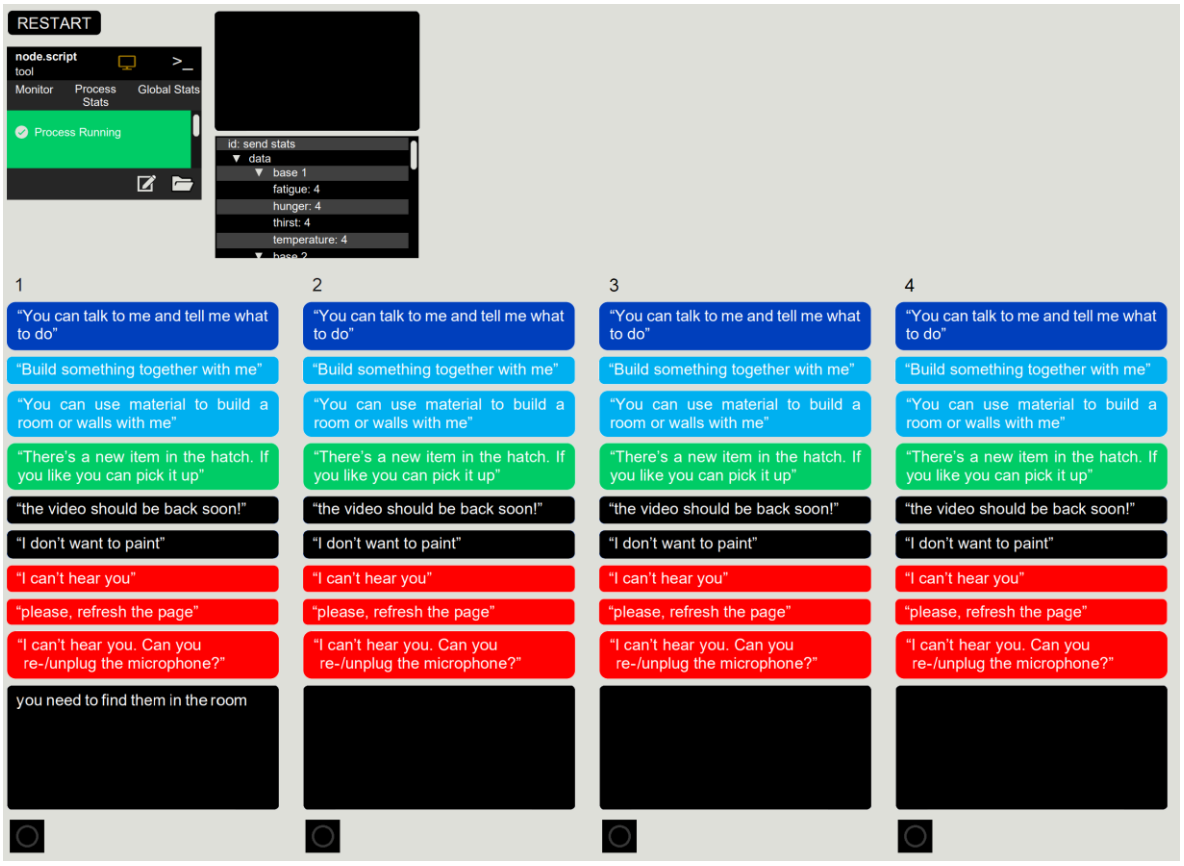


Figure 13. Max/MSP: presentation mode of the patch related to the avatar's wristband device, showing the Node.js running process and attributes' values (on top), and additional pop-up messages set and sent from the control room (on bottom).

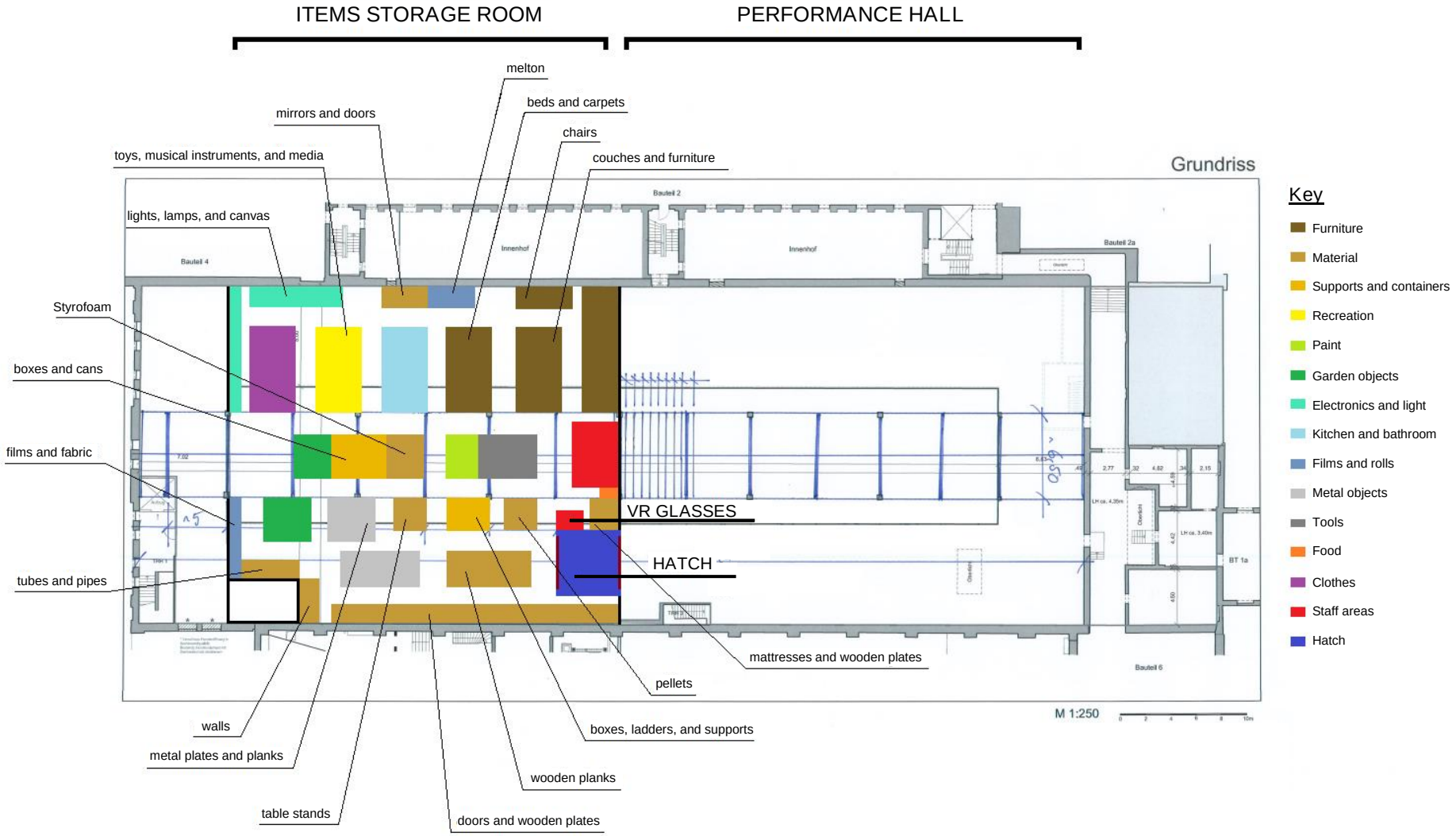


Figure 14. Highlights of some of the items as stored in the dedicated space on the 1st floor and their collocation.

square.[48] This similar grouping suggests a disposition conceived in relation to the following digital inventory already. Thus, items' cataloguing implies discrete units associated with the metadata encoding, in a real dimension projected towards virtual reality. On the other hand, a Max/MSP patch mediates the avatar-to-gamer messages sent through the wristband device. Figure 13 shows an excerpt of its functions: on top-left, the connection to the website through the runtime environment Node.js; next to it, the avatars' attributes with the corresponding numerical values;[49] on the bottom, the pop-up messages appearing on gamers' screen when playing.[50] In this case, the content fragmentation is related to an 'object-oriented program', where "an object is a programming unit that associates data with the operations that can use or affect these data" [Castagna, 1996, p. 40]. Thus, the avatar's feedback implies fragmented units rooted in each object's function and including numerical values.

The mentioned processes recall a concealed second order of interaction, which does not belong only to human beings' will but also to digital means' underlying mediation. The outlined aspects concern the fundamental structural organisation and not the quality of each gamer's experience. Still, it is also because of this structure that players and avatars act in a certain way. Avatars adapt their behaviour to a limited quantity of pre-set messages, and their physical needs relate to numerical values modifiable through the wristband device. These aspects suggest a radical shift in their social response and bodily perception (cf. §5). On the other side, the graphical interface mediates gamers' relationship with avatars and items. It follows an encoded perception of the avatars' persona and the items' digitalisation in predefined categories. Thus, the logic of discretisation implied in the interaction with space, objects and subjects regards the conversion of physical data in digital signals. Through this process, the 'virtual shift' takes place. Figure 15 remarks the control room and hardware setting on the 2nd floor concerning the virtual shift summarised in Figure 16. Items access the virtual world from the catalogued inventory, passing through the hatch. Wearing VR glasses, avatars actions become mediated by the interface. This process is also geographical, regarding the control room and items storage room on the building's left and the performance hall on its right. Thus, the feedback process does not involve only the communication between gamer and avatar, but also the continuous interaction between different areas and people, continuously communicating through this process (cf. §7). Hatch and VR glasses are the primary devices through which subjects and objects fulfil their virtual shift. The gamer is

[48] The final grouping of the author, which I assisted and happened during the last days, shows once again the construction and social interaction's purposes (cf. §1). For example, gardening (in dark green), kitchen and bathroom objects (in light blue) – which I initially reported – are included in Accessories, whereas an entire section is dedicated to walls (in light brown at bottom-left), a small part of the whole items.

[49] 'Base 1' indicates the avatar to which they are associated. Here it is visible only Max, with a value of four for energy, thirst, hunger, and fatigue.

[50] The figure reports the patch's presentation mode, which I have photographed and reconstructed due to the picture's poor quality. It does not show the internal process in detail, but an external and partial overview of the wristband device's functions. This interface runs on one computer of the control room and lacks the fundamental messages sent directly by the avatar (cf. §2). Thus, it could refer to additional messages automatically sent when a specific event happens (e.g. the game starts) or, more presumably, manually by the authors if needed. The first four messages might refer to the former category, the others to the latter. Authors insert additional messages through the 'textedit' object in the last square. Also, the 'I don't want to paint' message remarks the authors' external influence, trying to limit this frequently happening action from the fifth day. It has not been possible to retrieve more information about the patch (or patches) underlying the overall process.

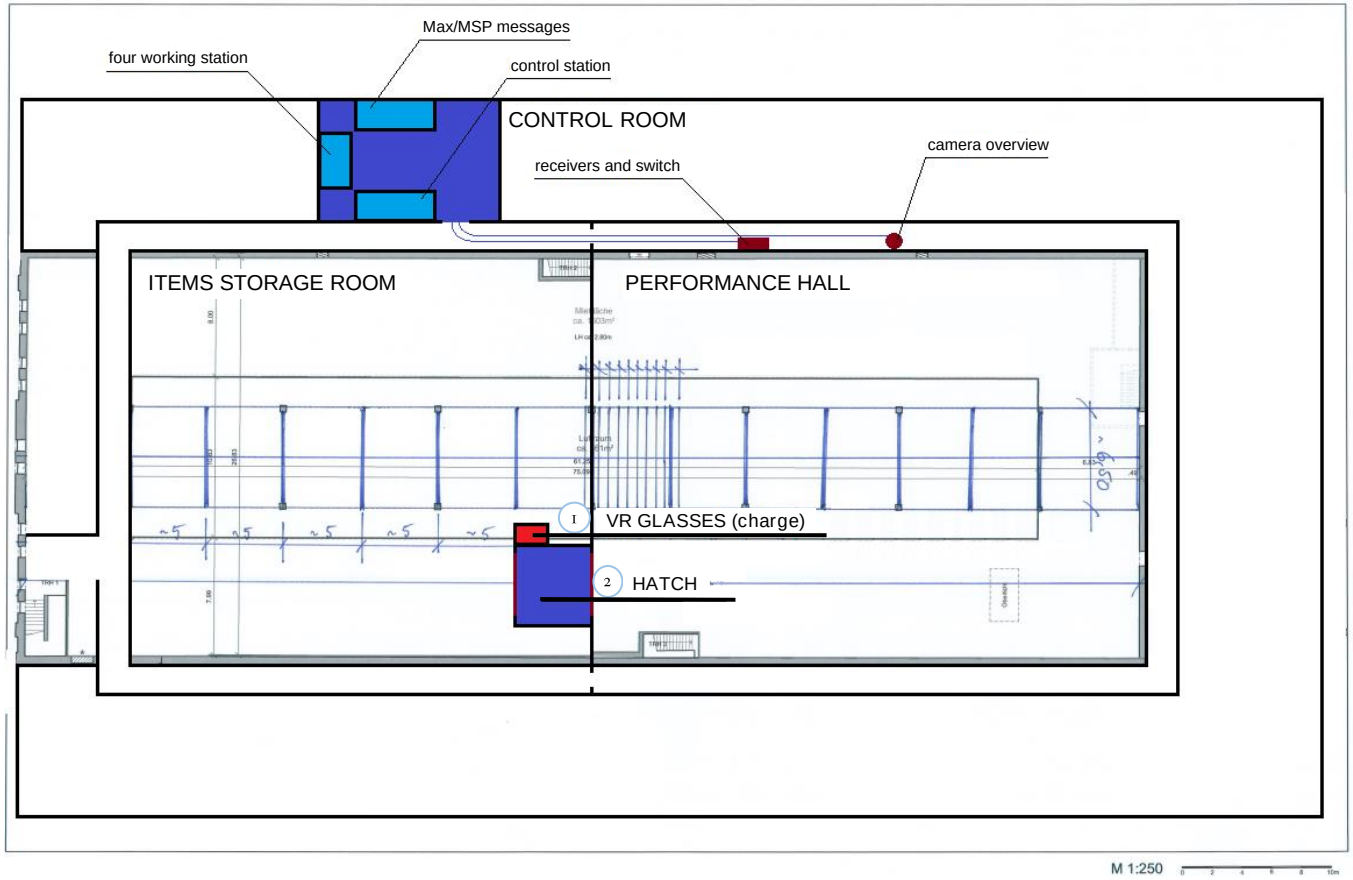


Figure 15. Control room main functions and connection with the receivers, camera on the balcony in 2nd floor of the performance hall, VR glasses charge position and hatch as viewed from inside the performance hall.

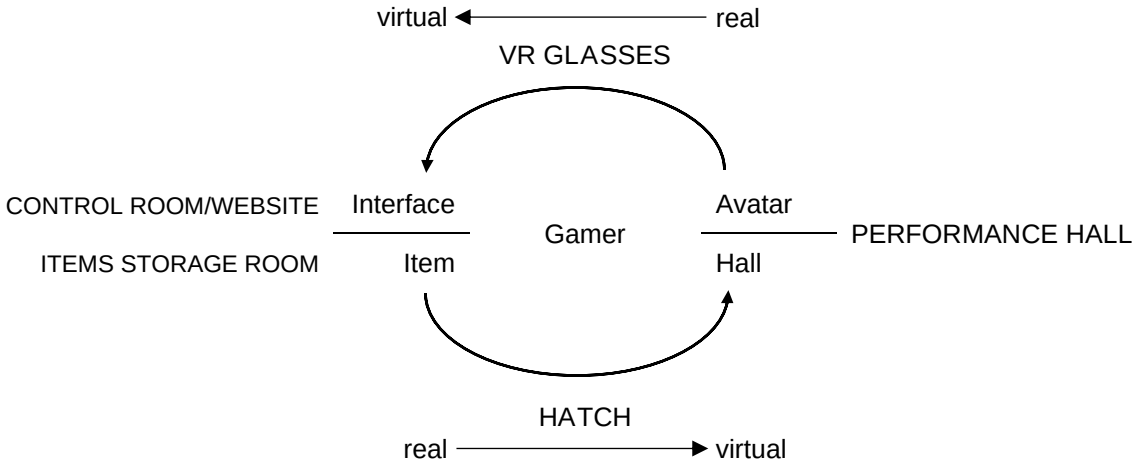


Figure 16. 'Virtual shift' process: scheme showing the entrance in virtual reality through devices and areas.

the central pillar of these shifts as the first data receiver through the Internet connection. Not acting in Kraftwer Bille's physical dimension, he/she relies on the embodiment in/of the avatar to access the virtual reality.

The outlined principles are also attributable to what Ian Bogost calls 'unit operations' about video-game environments, as "modes of meaning-making that privilege discrete, disconnected actions over deterministic, progressive systems" [2006, p. 3]. These "are biased", thus referring to a computer-based mediation and fictitious perception and imply an active role of the gamer in living the virtual reality: "dialectic between [unit operations] and subjectivity that constitutes simulation fever is extrinsic, not intrinsic, to the game" [*ivi*, p. 133]. Thus, the gamer refers to pre-existing habits which relate to the immersivity degree. These tangencies between cultural values follow a 'transcoding' process through informatics devices. With Manovich:

> In new media lingo, to 'transcode' something is to translate it into another format. The computerisation of culture gradually accomplishes similar transcoding in relation to all cultural categories and concepts. That is, cultural categories and concepts are substituted, on the level of meaning and/or language, by new ones that derive from computer's ontology, epistemology, and pragmatics. New media thus acts as a former of this more general process of cultural reconceptualisation. [2002, p. 46]

In this acceptation, the 'computer layer' and 'culture layer' are blended towards creating new meanings. *Genesis* fragmentation of objects, bodies, and interactions helps redefine cultural entities and the transition to a virtual new world thanks to digital language. This redefinition is related to each user's background, which evolves from a predetermined conception of space, items, and people (cf. §6). For example, a chair might be equally used for sitting, to reach a very high place, or to be destroyed: gamers still recognise it as a chair, with a standard function or a renewed one. Social interaction follows a similar principle: "by replacing the rigid cultural-structural codes of identity-construction by flexible and recombinant digital ones, we construct and present selves […] that are free to expand, explore, and innovate, and

are invited to meet others in radically different ways" [Gottschalk, 2010, p. 522].[51] The new dynamics born within these factors are not digital anymore but belong to a merger of the real and virtual dimensions. This revaluation regards the outside world's rules, following the 'membrane' metaphor theorised by Castronova:

> The membrane can be considered a shield of sorts, protecting the fantasy world from the outside world. The inner world needs defining and protecting because it is necessary that everyone who goes there adhere to the different set of rules. In the case of synthetic worlds[52], however, this membrane is actually quite porous. Indeed, it cannot be sealed completely; people are crossing it all the time in both directions, carrying their behavioural assumptions and attitudes with them. As a result, the valuation of things in cyberspace becomes enmeshed in the valuation of things outside cyberspace. [2005, p. 147]

This two-way connection shapes the virtual world over time, as perceived by avatars, authors, and staff living in the building and as experienced by the gamers through the digital interface. The creation of defined space finds its *raison d'être* precisely in the virtual contact between users: information packets sorted by the network switch materialise in a new form resulting from the various interactions. Therefore, relationships between people and space arise from the events happening during the week, settled as a tangible trace. The next part studies these not defined and potentially infinite possibilities.

is statement, referred to *Second Life*, outlines a similar logic of possible freedom offered by *Genesis*. rtheless, the performance is not only about meeting but also boredom and loneliness coming from such an unexpected and possibly distant environment [Appendix II.1].

[52] The author generally refers to synthetic worlds as "crafted places inside computers that are designed to accommodate large numbers of people" [Castronova, 2005, p. 4], talking specifically about video games, many of which taking place online.

III. GENESIS

5. Avatars and Gamers

April 26-29, 2020 – Beginning of the performance

In the days leading up to the performance, the avatars have two rehearsals to test how the game works and take a tour through the inventory tools and hall's technical aspects. The closer we get to the beginning, the more tension arises, as usual in this kind of situations. On April 26 night, we all gather in Kraftwerk Bille. While anxiously waiting, the staff performs the last checks on the instruments, and the avatars wander alone in the items storage room in their intimate rituals. Immediately before the start, I learn about the traditional good wishes in German theatrical tradition through Max, who gives me his hand, hugs me, and tells me to say the word 'toi' three times in a row. This catapults me into the suggestive dance between authors, staff, and performers, which similarly takes place for about 5 minutes before the beginning. Max is the first to enter, followed by Carola and Fabian, each 15 minutes apart. Yana is the only one to start later, at 7.45 a.m. After the first technical problems, Alex and Carl are in turmoil and talk on the phone with Dominic, who manages the website. In the first slots, a living room prototype emerges in the middle of the hall, consisting of a sofa, table, and chair. I follow some plays, then I realise that it is inconvenient going home, and I think of staying there for the night. Alex will do the same, so we decide to take two mattresses and some blankets from the inventory. He will sleep in the control room, whereas I in the next one. I find my comfort zone in a corner after cleaning up pieces of fallen wall and dust. The partly torn wallpaper represents a beach with a palm tree in the foreground, I feel to be in a liminal area between Miami and a 90s bedroom where some kid hung a Grand Theft Auto *poster. Cosy enough.*

The next morning, I get up early and meet Alex, who tells me that he had worked through the night due to technical problems. Then, I have a coffee and eat something on the first floor. There are tables with a stove, a coffee machine, water, and other food for refreshment at the items room's end. Jette, Lisa, Vitus, and Francis, who take turns in carrying items to the hatch, are usually there nearby, as the avatars in the short breaks. When I go back to the control room, I also find Carl, who had gone home for the night. Heinrich, who found a place in a corner where the avatars' rooms are located, arrives shortly afterwards. In the first days, Alex and Carl continue to look after solutions to the impending technical problems, while Heinrich follows the performers more closely. Everything is very hectic, and it is difficult to get in touch with them. On the other hand, I find a place on a stool in front of the computers, where I can simultaneously observe the avatars' perspectives, the total overview and listen to the players' speech. There is also the audio of the performance hall, which I can hear live anyway being next to it. Overviewing the performance is like watching a looped movie, which slightly changes for each slot depending on players, avatars, and current state of the space. After a while, it becomes a simple routine: I sit down, note hour, avatar, and description of the event, then I report similarly another slot and so on until lunch, dinner or break time. Fortunately, what happens is always so new and exciting that this routine is somehow fun.

In a break, Alex asks me what I think about what is happening. I tell him that I like how new rules are being re-established in the hall. He nods and says that it is like being in a rave. Being in a rave... I look at the bed next to the control room stations, the cups scattered around, the beer crates to be consumed, the people sleeping on the sofa on the first floor, the large amount of hardware, and the industrial shed itself, where we are living. That is true, we are all *in a rave. And it is not so striking that this crazy environment with its own rules is totally normal to us: we are adapting to spaces knowledge from within, renovating its content as another organic source of the evolving system.*

As stated in the previous chapters, *Genesis* involves the relationship between three different communities, which influence the space definition and relate to each other in different ways. The scheme in Figure 17 summarises these relationships: the authors and staff define the game's form, based on consequent slots and defined settings; the avatars are considered as part of this setting and receive guidelines from the authors; space evolves through the gamers' instructions and the avatars' reaction. Thus, the process at issue involves continuous feedbacks between gamer and avatar, who are the main subjects involved in the performance evolution. On the other hand, authors and staff participate by living in the neighbour spaces and occasionally entering the hall. Chapter 6 regards the analysis of the interplay, and Chapter 7 the authors and staff communities' dynamics. Instead, this chapter focuses on avatars and gamers separately. The performance's available data highlights different avatars' characters, implying their behaviour, role interpretation, necessities, and background references. Also, four gamers' typologies emerge from the play, hypothesised for outlining the most relevant tendencies.

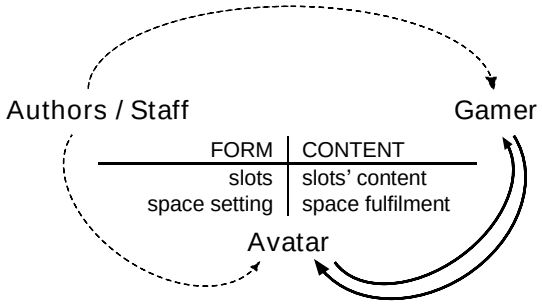


Figure 17. Roles of the subjects involved in the performance definition and evolution. The solid arrows emphasise the feedback relationship between gamers and avatars during the performance, whereas the dashed arrows indicate the rules imposed by the authors to the other subjects before the performance.

Avatars

Albeit the avatar and the gamer act together on space, objects, and other gamer-avatar systems (cf. §2), each of them manifests specific features which influence the system outcome. The avatars state the relevance of their background and personality: none of them considers himself/herself entirely a virtual entity but always refers to mixing virtual aspects

and human nature. The following considerations derive from the analysis of the appendix's interviews and the game video sequences described in Chapter 6.

Carola talks about "the human being behind the avatar" [Appendix II.2]. Her loneliness perception inside the hall highlights the virtual space's hollowness and emotional distance when digital influence takes over. This feeling disappears when establishing a connection. To not surrender to this inhuman state, she frequently uses her will to eat the desired dish or generally escape boredom. Also, she symbolically connects to loved ones outside the hall through significant objects. When not controlled, she frequently plays with the squirrel-with-gloves puppet, a present from her parents available in the inventory, which previously entered the hall. Also, she forces a gamer to let her prepare breakfast with coffee, cereals, milk, and fruits on Monday. Her character shows assertive emotional behaviour, not particularly interested in acting or space setting but searching for human connection.[53] For example, on the third day, she voluntarily asks for a more detailed explanation of the gamer feelings by sending a pop-up message. Through this action, the gamer changes his mind and remains there to share his emotional insight into the pandemic period.

Yana manifests the split awareness between space's physical perception and gamers' screen-view pictured in her mind. The last image changes for each gamer, requiring a mental twist regarding the perception of herself. This consciousness might shift to a deep inner experience, like the symbolic interaction on the last day afternoon: the player becomes a voice-over which guides her by attributing conceptual meaning to objects and actions. She tends to mix the borders between her everyday life and the virtual space. Some interactions are explicitly in line with this attitude, such as when, on the third day afternoon, the gamer sets a snack time with chocolate milk while watching TV and reading Vice. She describes the transitioning process from outer to *Genesis* reality in detail, highlighting a routine beneficial for entering virtual space and setting her mind to it. Her character is the most related to a canonical actor, considering that she frequently associates the performance with a job. Also, despite the piece concept, she constantly thinks about the artistic product's nature [Appendix II.3]. Also, she manifests a significant gestural expressiveness, outlining a process's fulfilment by stretching her arms and hands or talking without words through rough melodic patterns.

Max remarks that avatars are always human beings and not playing a role. He focuses on not performing but letting people play with him since creating a character would pose many questions not related to the performance concept. Nevertheless, he is the most active avatar, feeling responsible for "keeping the performance alive" even when there are free slots [Appendix II.4].[54] To this purpose, he imagines impersonating one of the gamer's behaviours previously experienced or fulfilling unfinished actions. For example, he builds an unassembled tent left aside during the first night. These factors highlight the real-life expertise of Max as a director. He feels virtuality in the players' presence, from whose audio connection is impossible to escape. This constriction becomes fun when someone knows how to play, therefore pointing towards a goal and making sense of the game. Thus, he aims to get players into the game by instructing them. As Carola, he wants to live the performance

[53] These aspects recall the isolation and inner dimension she already faced in *Acceptance*. For information about the piece, see the composer's website [Schubert, 2021b].

[54] Not by chance, he defines *Genesis* as a 'show' in the interview.

flow limiting the interruptions as much as possible. Because of this, he acknowledges the distance attributed to his character by the other avatars.

Fabian knowledge about video games strongly influences his avatar conception. He states the continuous comparison between a video-game character and his way of acting. For example, he looks at the objects around the hall to offer a stimulus to the player. In contrast with the other avatars doing the same, he thinks about the environmental storytelling offered through video-games' landscapes. Also, in the idle mode, he thinks about how a video-game character would act, performing short and useless actions such as "standing or moving in a rule set without doing anything, sitting on the bench and smoking, for example" [Appendix II.5]. He privileges constructive interactions instead of people not considering his needs and existence. He also testimonies the aim to face his fears when confronting the destructive energy of some gamers. For example, this happens in violent actions occurring on the night between the 4th and 5th day. The friction between these attitudes and his reluctant feeling culminates in the kick out of the gamer asking dangerously to cut a plugged light's cable.

The outlined facets show different behaviours lying in between a video-game character and a human being. Avatars reflect their expertise outside the performance: Max, as a director and a performer in long-term shows; Yana, as an actor of interactive plays; Fabian, as a video gamer and an actor; Carola, as a performer experimenting within intimate and immersive dimensions. Furthermore, they process the performing task through their thoughts and needs, frequently disregarding the rule of obeying given orders. This dynamic becomes an integral part of the performance itself. Figure 18 shows how avatars and gamers define their relationship. The case in the middle outlines an undefined action. This might happen when a gamer does not interact – because having insufficient knowledge about how the game works, being uncertain on what to do, or only not playing – and the avatar awaits orders in his/her idle mode as a virtual character. When one of these subjects remains in this passive state while the other manifests a clear will, the interaction moves on the X-axis, unbalancing the

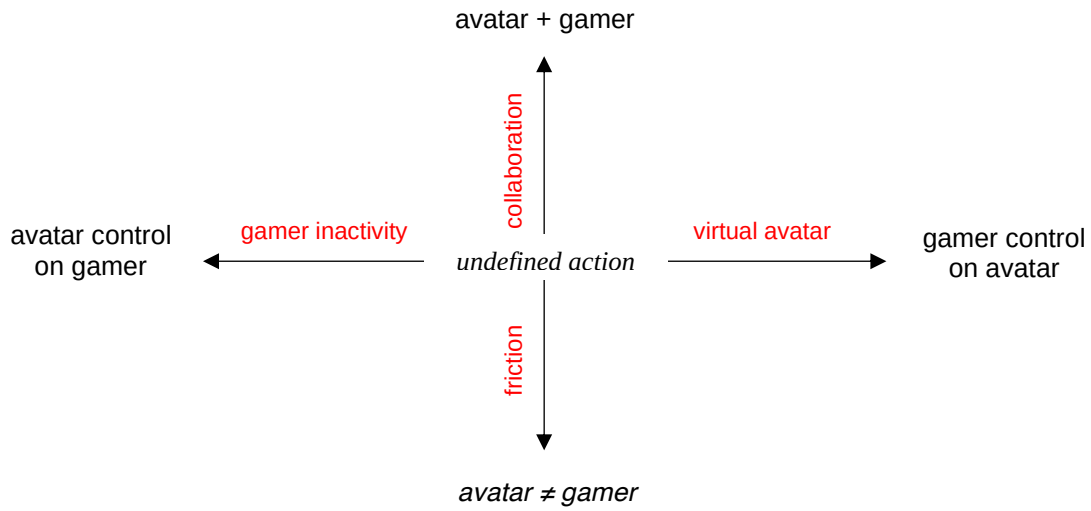


Figure 18. Scheme showing the extreme cases involved in the interaction between avatar and gamer: in the middle, where the avatar awaits orders and gamer does not know how to play, evolving in the X-axis towards the only avatar activity (on the left), or solely gamer awareness (on the right); on the Y- axis, where both express their will, in accordance (on top), or contrast (on bottom).

dominance dynamic: on the left, the avatar manifests a strong will, making his/her human needs more evidently; on the right, the gamer has a clear purpose on how playing with items, avatars, and space. The former is the case of the 'boring lady' playing with Carola: the avatar takes over the game or acts in an unenthusiastic way because her feelings do not match the gamer ones. She also plays some games wishing specific food and obtaining it through insistence [Appendix II.2]. On the other hand, the gamer conducting a slot is the basic rule of interaction and might enhance profound emotional experiences. On Sunday, when Yana experiments the surreal training, she only obeys, observes, and deeply lives the events described by the gamer [Appendix II.3]. This option could also be harmful, such as when gamers force Fabian to destroy objects and against his will [Appendix II.5]. Regarding the Y-axis, it shows when both subjects have a clear purpose: it might be the case of a productive collaboration (on top) – when their wishes match – or unresolvable friction (on bottom) – when their needs strongly differ. The former case emerges when, with Max, "everything [makes] sense because the room became an instrument": his wish to make space develop, construct, or play through a clear goal, is fulfilled by the gamer's attitude [Appendix II.4]. The latter case regards controversial experiences, sometimes resulting in the gamer kick out.[55]

The lowest value of avatars' will, resulting in a digital-like character, is the possibility nearest to the authors' original purpose and the video game concept. The middle part is also relevant to Schubert: it shows "an insight and a memory which the player will continue to have, a chance not used or the impossibility to connect through the setting" [Appendix II.1]. The other cases are outside the authors' concept, involving the performers' determinant influence. This further layer of decisions broadens the range of interactions between human beings through feedbacks and digital interface. Naturally, most of the actions lie in the shadings of the extreme cases shown in Figure 18 and continuously move from one situation to another. For example, the gamer's initial loss might improve towards a better knowledge of how to interact within the same play; or a dynamic of control of one of the two mentioned subjects could turn into collaborative interaction, domination of the counterpart or unresolvable friction. In a rapidly changing relationship, these categories could even be snapshots of an entire slot. Still, they outline a general trend, highlighting the core dynamic of each gamer-avatar system.

Gamers

The approaches of the avatar and the gamer differ regarding how they access virtual reality. Avatars act within a physical hall and perform as virtual characters. They wear digital devices but use them only to answer. Instead, gamers approach the virtual world through the interface, the embodiment *in* or *of* the avatar, and physical entities' imagination. Thus, the default setting implies the gamer as a human being and the avatar as a virtual character. Nevertheless, gamers often perceive the avatar as a human being and try to collaborate (cf. §2). The questionnaire's open answers and the chat show how real and virtual entities' perception

[55] This extreme possibility happens when the gamer asks Carola to hug and kiss Yana (Day 1, 20:00) and when Fabian's disregarded need to relax and have a constructive game brings to an unbearable tension, resulting in the gamer kick out of the game on the cutting cable request (Day 5, 4:30).

includes various gamer's perspectives. When asked about the relationship between them and their avatar,[56] they answer:

- I only realised after the game that there was a human behind the avatar. I felt bad for giving him nonsensical commands.
- I thought [that avatars] should just be me, so I didn't think there is a relationship. And talking to myself was a bit weird.
- I felt very conflicted between wanting to be entertained and imagining how the avatar feels.
- The avatar had been another person the entire time. I didn't feel like I 'was' the avatar like in games.
- I would have liked to hear some spoken words from my Avatar from time to time. In that way, I would have felt more connected.
- I felt close to my avatar and enjoyed every (positive) feedback on its success in doing something or understanding the situation. Still, I felt distant because the avatar does not talk back, but only writes feedback. Strange. [Appendix II.1]

Or, when asked how it makes them feel during and after the game, answer:

- It is a bit strange to know that you say to the avatar to do something and the avatar just does it. At the same time, you exactly know that it is Human.
- I felt awkward. It wasn't a comfortable experience. I don't know if I pitied the avatar more or reflected more on my stupid actions. You realise that, when you rule over a human 'avatar' during an hour, even prepared before, you experience emptiness when the game starts.
- Hearing his breathing, hearing how fast he was drinking made me feel a bit more compassionate than I had realised before. […] I found my 'avatar' very sympathetic and friendly. It's a strange feeling to be so connected so quickly and yet be so disconnected… [Appendix III.2]

Or, talking in the chat on May 2 at 10.37 a.m., they report:

Gabriel: Should we feel 'together' with the avatars?
Gabriel: Are 'we' the community?
b: I don't know, I feel connected... I don't see them as machines.
Gabriel: Ok. I was confused by the term 'avatar'.
b: You can also just let them go to bed when it's late and tell them [something] without them having to actually DO something.
b: Yes, humans are called avatars.
Gabriel: I also feel connected, especially since I started hearing him/her breath.

Even if gamers generally know that avatars are human beings, they always refer to virtual aspects. They manifest a wide range of relationships: stating control as in a video game; requirement of a more visible human behaviour to establish a connection, for example through speech; acknowledgement of communication through the feedback dynamic; feeling guilty of wielding power on another human being; searching for entertainment as in a play, and, at the same time, being worried about avatars' control. These statements recall the questionnaire's diagram shown in Figure 19, highlighting four possibilities of control and their quantitative values.[57] Presumably because of the mentioned difficulties in wielding

[56] All the testimonies reported in this chapter refer to the questionnaire's open answers [Appendix III] section. For more information about the questionnaire, see note 28.

[57] These four categories reflect salient gamers' behaviours as observed during the game: showing a contrast of purposes (conflictive); not showing friction but a good affinity (collaborative); explicitly manifesting a cooperative intent (collaboration); finding a god communication through the feedback process (communicative). Thus, the question aims to obtain a scalar magnitude from the gamers' perspective (by one

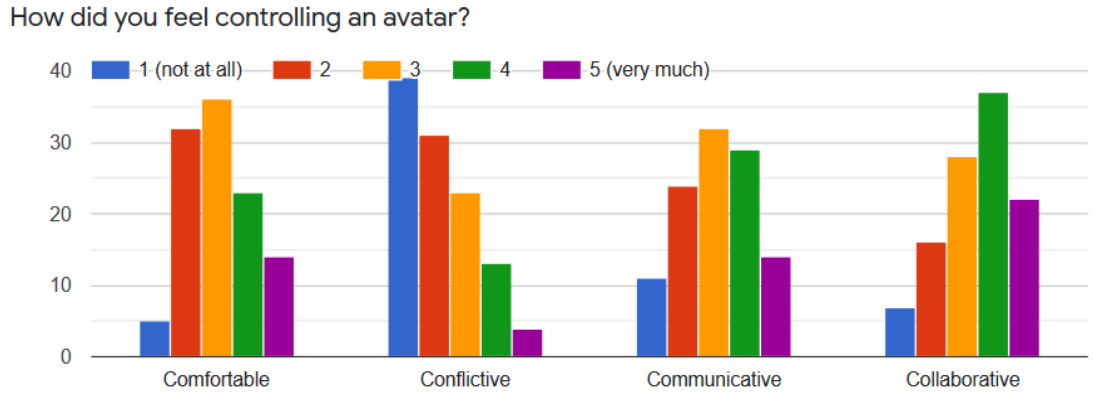


Figure 19. Questionnaire excerpt: bar chart representing an estimate of gamers' perception of controlling an avatar.

power, interacting, and communicating, the Comfortable and Communicative fields are focused on the central values. On the other side, most of the gamers feel a collaborative interaction instead of a conflictive trend, as outlined by many other testimonies:[58]

- My avatar here was quite helpful. She would suggest things to me when a task required a tool and try to answer my questions. As I played only on the last day the game was running, I asked her to remember scenarios she had experienced earlier, and then reproduce those. Through her writing/drawing, we also tried to communicate about her experience, length of time spent there, and other personal aspects. She didn't admit to having personality/character/identity, but still recounted earlier moments. The tasks I asked her to do required some amount of knowledge, such as, 'improvise experimentally'. Since she could execute these commands without resistance or requiring more details, it was certainly a constructive collaboration.
- I understand that more interesting situations might have raised from a more direct control, but I couldn't get over the (slight) feeling of violating another human even though I know that the avatars retained the ability to refuse. Nonetheless I still found the experience interesting and valuable despite (mentally and personally) insisting on treating it as more of a collaboration than a control situation.
- I was happy to create some sort of partnership. And since it was he (or she) who could 'do' things, I could not go into details through our communication it was clear that I formulated my needs and questions as precise as I could, but it was his/her duty to solve problems creatively. We had a good time though.
- I felt more like a team being able to construct things at a location only one person is present. Felt more comfortable when I found out my avatar can communicate with me. Maybe the position of power is less important when both sides agree on the roles and means of collaboration (and have the option to disagree).
- I was in control of the proceedings, but my avatar corresponded to my ideas and questions. Without their creative personality and cooperation, it would have been much less constructive. It was a healthy flat hierarchy where two people work together on one project with clear roles to each of them.
- I kept trying to find out whether the 'avatar' still had enough strength and desire, whether he had other wishes or wanted to implement my idea. I found it great that my 'avatar' was willing to share his own ideas and became a co-player. The game fluctuated between giving instructions and creating something together. [Appendix III.1]

to five rating for each category) and confirm or refine the original hypothesis. This methodology refers to all the following charts.

[58] The results of another bar chart about the question "How would you describe the relation with your avatar?" confirm this statement, where many gamers describe the relationship with avatars as 'friendly', 'empathetic', and 'constructive'. For more information about the questionnaire, see note 28.

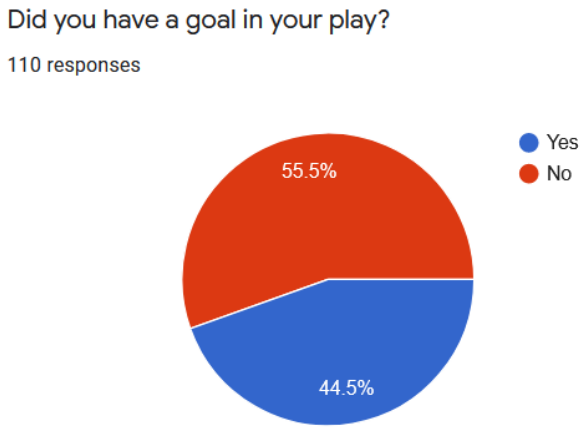


Figure 20. Questionnaire excerpt: pie chart showing how many gamers have a goal during the slot.

These statements also show the avatar's active role in helping players and are in line with the collaboration reported on the top of Figure 18. Not every player has a clear goal since the beginning, as shown in the pie chart above. Some of them define it during the game; others continue to wander around without a clear purpose.[59] Albeit having a goal could be incisive regarding 'make sense in a game' [Appendix II.4], the other cases are part of the range of the interactions as well, and equally important in the overall space definition. Besides the outlined high degree of collaboration, gamers descriptions highlight other possibilities entailed in Figure 18 scheme, also showing the transitioning between one state to another:

- From misplacement to collaboration:
  - [I felt] very uncomfortable at the beginning, I started to enjoy it once building and interacting with other avatars towards the middle of my slot.
  - I got comfortable quite quickly. I wanted to continue afterwards. I didn't expect this, but I actually felt close to my avatar, as we had a bond and I needed to take care of her. Very interesting, since I didn't know her at all. [Appendix III.2]
- From collaboration to avatar dominance:
  - It was a bit boring most of the time. The avatar seemed to engage with the activities a lot, which was cool, but the activities were not interesting to watch. The communication with the avatar was really cool. We would decide what to do next together based on what the avatar wanted and what I suggested, but once we decided on what to do next, my role in the play seemed irrelevant. [Appendix III.2]
- Between collaboration and gamer dominance:
  - [I felt] ecstatic at first (discovering the potentiality of this virtual artistic device), then uncomfortable of being hidden as a player and engage (at a small scale, but still) in a relation that felt like going in a single way only. I tried to balance that position of power which was mine by trying to 'build' something, inside out and outside in. [Appendix III.1]

[59] As the avatars state, sometimes the gamers need to be instructed to play, with a loss of time and quality [Appendix II.4]. Albeit the length of the slots is useful to show a snapshot of a relationship and allow the space to be fulfilled by different gamers, many of them manifest the difficulty in understanding the game in such a short time, made worse by the occurring technical problems. Their testimonies also highlight how time seems to be never-ending when the game is senseless, or too short when it is enjoyable [Appendix III].

- Not connecting with the game:
  - I was really excited initially and thought the whole set up was very innovative and interesting, really well made in a way. But I was also craving for a little narrative/purpose/background information, some rules at least or goal, this way I would have had something to do or aim for or even be able to break the rules or anything. But the narrative/overall setting was so vague, or maybe just the very general tasks to build a utopian space with very known and daily accessories was not so interesting to me when left alone. If communication with the others would have been allowed or made a more central aspect of the game/work, maybe that would have been different. Like that, I was quite lost in it and became bored quite quickly. [Appendix III.5]

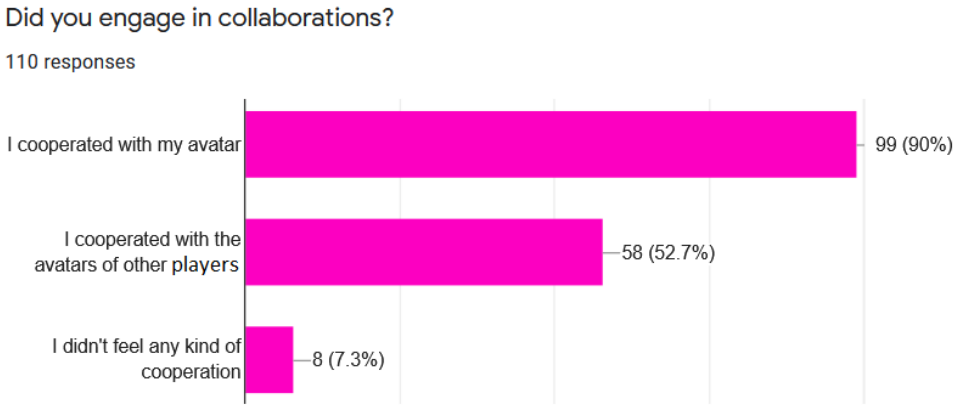


Figure 21. Questionnaire excerpt: bar chart showing percentages of three options regarding collaboration between gamer and avatar.

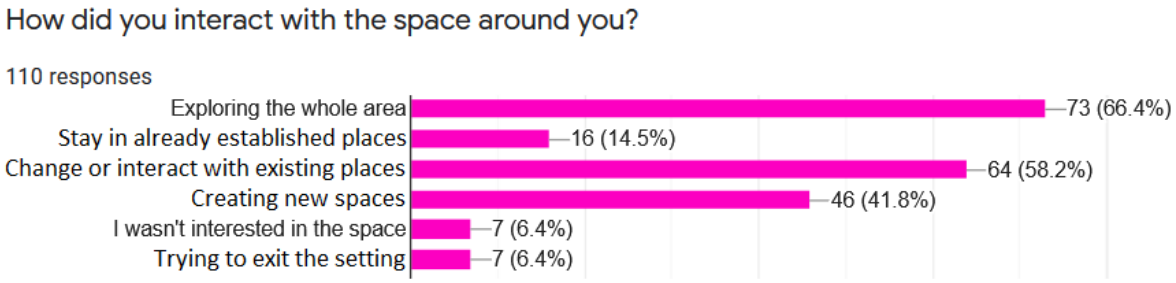


Figure 22. Questionnaire excerpt: bar chart indicating the percentages of six ways in which gamers interact with space.

The questionnaire data allows analysing the mentioned aspects in more detail. The bar charts in Figure 21 shows once more that many gamers feel cooperation with their or other avatars. This constructive social attitude contrasts with the control tendency, even if similarly expressing a human relationship. On the other hand, Figure 22 outlines the interaction with space, oriented mainly towards exploring, defining it from scratch or modify what already there. These trends might be linked to a clear goal or evolving during the slot. According to all the considerations done so far, it is possible to recognise four gamer categories according to those already stated by Edward Castronova about virtual worlds:[60]

[60] Castronova borrows this quote from *Designing Virtual Worlds* by Richard Bartle [2003, p.130], reviewing it in a slightly more general acceptation.

1. Explorers: People who come to see what is there and to map it for others. They are happiest with challenges that involve the gradual revelation of the world. They want the world to be very big and filled with hidden beauty that can only be unlocked through persistence and creativity.
2. Socialisers: People who come to be with others. They are happiest with challenges that involve forming groups with others to accomplish shared objectives. They want the world to have extensive social infrastructure and shared activities: towns, clubs, arenas, weddings, hunting parties.
3. Achievers: People who come to build. They are happiest with challenges that involve the gradual accumulation of things worthy of social respect. They want the world that allows all kinds of capital accumulation and reputation building. They want the ability to increase the power of their avatar, to build new structures, to hoard wealth, and to change the world itself.
4. Controllers: People who come to dominate other people. They are happiest with challenges that involve competing with others and defeating them. Also described as "griefers," they want worlds that allow users to intervene in the activities of other users, so that a record of domination and control can be established. To them, it is all sport. [Castronova, 2005, p. 72]

Albeit these categories allow a further observation of general trends regarding interactions with space, items, and people within the performance, they do not describe *Genesis* comprehensively. In fact, they consider the social dynamics of a persistent online community almost completely absent in this case, mainly due to the short playtime of the slots.[61] Lacking a clear connection between players over time and not being long-term goals a relevant factor, it is necessary to redefine concepts like "map [the virtual world] for others", "accomplish shared objectives", obtaining "social respect" within the game and "hoard wealth". Destroying option is missing also, which might reflect an achievement. Thus, the mentioned categories can be reviewed as follows:

1. *Explorers*: People who enjoy exploring inner or outer spaces and revealing them to others. They want the world to be filled with hidden objects that can only be unlocked through persistence and creativity.
2. *Socialisers*: People who come to be with avatars or other gamers through avatars. They are happiest with challenges that involve forming groups and shared activities.
3. *Achievers*: People who come to build or destroy. They are happiest with challenges that involve the fulfilment of a goal worthy of social respect, especially outside the game.
4. *Controllers*: People who come to dominate other people, avatars, or other gamers. They are happiest with challenges that involve competing with others and defeating them.

[61] This consideration is inferable due to many factors. Firstly, the events analysed in the next chapter do not show significant evidence of an interaction between players over time. Avatars also state a few exceptions, recalling gamers who replicate the same action or follow a goal over different slots, playing in the same room, or knowing how space evolves through the live streaming [Appendix II]. Then, the chat available to gamers shows only in the last days a communication oriented to a shared will. On May 2, for example, they talk about building a place to sleep, they discover the avatars' identity, and a user proposes playing a board game (cf. §6). For further information about long-term online-communities development, see *The Social Structure of Online Communities* [Bainbridge, 2020].

The bar charts in Figure 21 confirms a high percentage of socialisers (with both avatar and gamers, to a different extent). Moreover, Figure 22 shows examples of explorers' and achievers' behaviour (respectively, in the answers 'exploring the whole area' and 'creating new spaces'). Finally, the avatars' testimonies reported in the previous paragraph outline the Controllers category.[62]

Traces of these typologies can be found in avatars too, in relation to the previous descriptions: Max is an achiever, preferring clear goals and trying to direct the game; Fabian is an achiever too, who also appreciate social interactions; Yana is a socialiser and an explorer, liking to discover new dimensions inside and around her; Carola is a controller at times, who generally enjoys human contact. Besides these examples, all of them can shift from one category to another, depending on the situation. Albeit they frequently enjoy the interaction, avatars do not recognise to play but letting gamers play with them. Their role implies receiving orders and reacting consequently: despite any decision-making, they are still avatars. Each of them also tends to observe what is happening from an external perspective. Yana talks even about picturing the gamer's computer view, whereas the others know how to influence gamers through his/her point of view [Appendix II]. These aspects suggest that it is not only the gamer perceiving an embodiment in the avatar but also the avatar re-embodying in himself/herself as a controlled/observed being. This process occurs due to the performers' perception of the live streaming camera and the gamer's screen view. Furthermore, it confirms the gamer-avatar system hypothesis, outlining the two poles' different perspectives regarding the different access to digital means. The gamer perceives both visual and auditory perspective of an obeying-orders character, whereas the avatar only hears the voice and sound environment of the gamer, at most imagining how his/her perspective might appear. Therefore, the performers' reception of virtuality is not passive but becomes increasingly lived in being playing observers – not players – of themselves.[63]

[62] Although important in the game concept, not active gamers have not been considered due to their scarce role in space definition.

[63] Probably due to this dynamic, Carola talks about the 'microscope' metaphor, referring to the overviewing of every feeling as bigger than in real life; Max analyses the control mechanism of the player as in a 'human study' and Fabian is able to face his fears and reshape his perception of society [Appendix II.2; II.4; II.5].

6. Space Definition

April 30, 2020 – Inside out

On the second-floor balconies, there is a small door leading directly into the performance hall just after the control room. This entrance has been left ajar to allow cables passing through. Alex and the team in charge of the documentary sometimes cross it for shooting footages and pictures. Approaching that threshold, the sounds coming from the hall become sharper, among the discs' looped music – probably due to occurring malfunctions of the players, as Alex says – the musical instruments used, the speechless phonemes of the avatars, and the noises coming from the various interactions. At the same time, the closer you get to the door, the greater the sense of mystery connected to the unknown world that is taking shape behind it. Having watched most of the performance from the control room screens, I associate each sound with the picture of what is happening, although I cannot hear what gamers say. The world of Genesis *is developing its distinct sonic landscape, clearly identifiable to those who live nearby.*

When I decide to enter the hall on the fourth performance day, I realise that the direct perception of events is quite different from how they look on a screen. In the absence of the users' audio, that soundscape appears rather silent and repetitive when totally devoid of words. This makes it particularly suggestive and ethereal, as suspended in an intangible dimension. The looped music of discs, videotapes, and keyboard samples enhance this feeling and remain in the background, whereas avatars' gestures acquire depth. Walking along the second floor's corridors, I observe from above these primordial creatures walking around through roughly delineated but clearly recognisable areas, looking for some hints, capturing a subject of interest, and then interacting with it slowly, silently, scrupulously trying to trace the next move. Colours are incredibly vivid and generate kaleidoscopic shades on surfaces while blurred by the fog machine's mist, making the landscape evanescent and indefinite, at times impenetrable. Avatars occasionally appear as the only moving elements framed in this static audiovisual landscape. It is precisely this stillness that renders a dimension beyond time and space. I observe its symbolic, mythified, objectualised and virtualised living inhabitants returning to life when crossing the hatch, as new creatures ready to endlessly reborn in one or another overworld resulting from the project system. And, above all, I, defining which are the boundaries and, at the same time, secretly conspiring against any given order.

When I go back to the control room, I find Alex and Carl joking in German, as they frequently do while working. Although I understand little of their puns, the atmosphere amuses me. Their hearty laughter can be heard all over the building, they do not seem to care about it. Sometimes, Alex looks at me, and suddenly in a serious way, justifies their bizarre behaviour by saying that it helps to release tension. These tones and statements remind me of the inevitable distance between the scholar and the studied environment that scientific and ethnographic research carries with. From my stool, I am isolated in the space

of analysis and organisation of facts, far from the surroundings. I feel as defragmenting events, arranging them in a precise order that gradually takes shape in relation to facts. During the week, my world coincides with that partially filtered and reorganised performance. I alone inhabit that world. And only from that abyss of solitude I can connect with all the inner selves that are simultaneously flowing in communication with it.

The interaction between gamer-avatar systems and the virtual world is the main factor that influences the space definition. The relationship between these two poles, analysed in the previous chapter, generates various dynamics that modify the objects position, assembling and usage. As shown in the following excerpts, items and relationships have a significant link with common habits, but their function frequently evolves towards unusual actions. This principle depends on the digital means that come into play once the avatar crosses the hatch and the gamer connects to the website. As a transcoded entity, each subject and object maintain a strong connection with its original affordance and his/her agency and background (cf. §4 & §5). Of course, space's open editability and the authors' declared intention to avoid predetermined structures are an integral part of *Genesis*. Still, the virtual world embeds this freedom within specific thresholds. Therefore, the present chapter first identifies the performance's structural elements, which both influence and reflect the overall events' dynamics. This formal evolution is mainly attributable to the avatars' schedule and items' progressive entrance, respectively underlying the cyclical slots' repetition and objects' accumulation within the space. Secondly, the game's analysis shows interactions' recurrence and variety, outlining their evolution over the week.

The most relevant predetermined factor in *Genesis* evolution is the slots' organisation, related to avatars' schedule. The interactions depend on which and how many avatars perform. As shown in Figure 23, avatars inside the hall are usually two or three, rarely four (from 18:45 to 20:55 and 22:00 to 00:40), one (from 4:55 to 5:25 and from 6:30 to 7:15), or zero (from 5:25 to 6:30). They rest 5 minutes every 55 minutes slot, 1.05 hour in between the working period and 6/7 hours to sleep.[64] Even if the option most sticking to the authors' concept would have been to let them stay inside the hall continuously, this schedule allows a "reasonable compromise for making sure that avatars [stay] healthy" [Appendix II.1]. Also, it guarantees different combinations of avatars and the possibility to interact with another avatar most of the time. The schedule organisation outlines the emergence of a temporal structure, which frames the interactions. The overall cyclical repetition shows significant differences in the first and the last days. Except for Yana, the avatars' opening entrances and closing exits occur 15 minutes apart from each other, recalling a mirror organisation. These shifts also relate to the cumulative form principle stated by Mark Spicer, which "crucial feature […] is the ability to introduce parts in multiple layers" gradually [2004, pp. 29-32].[65]

[64] These data have been retrieved from the schedule given to the avatars during the days immediately before the performance, hung in the performers' room. During the performance, this plan slightly changes according to the avatars' needs and to the fact that Alex and Heinrich entered the hall for substituting one of them.

[65] The author adapts the concept defined by Peter Burkholder regarding art music [1995] to pop-rock, progressive rock, post-punk, and techno music. Even if *Genesis* is not a musical piece, the concept has been

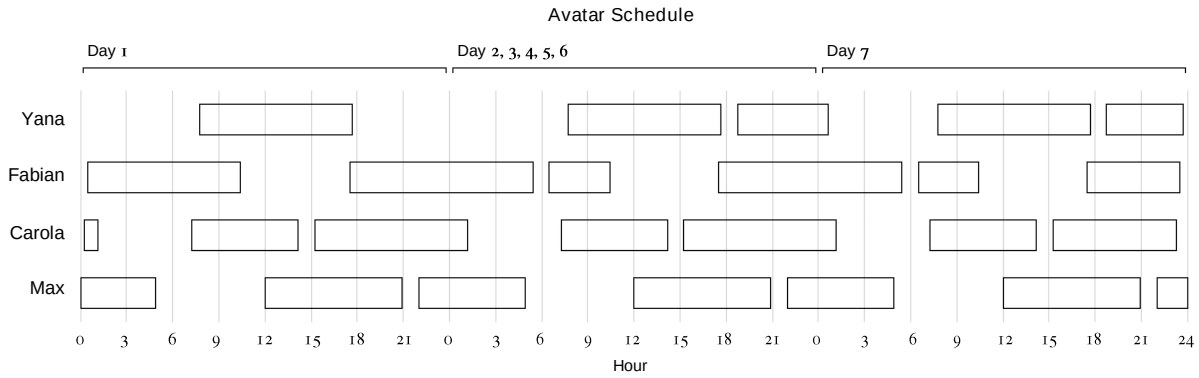


Figure 23. Avatar schedule over the seven days. The blocks correspond to the performing period.

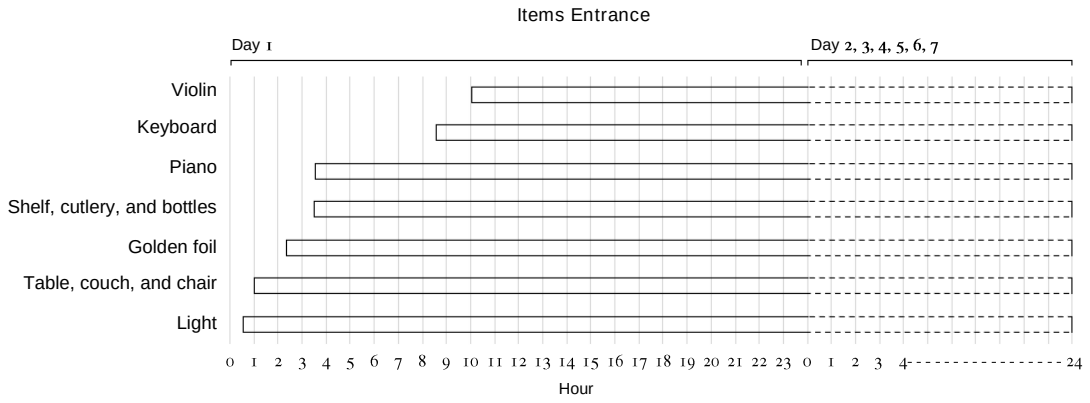


Figure 24. Entrance of some items as selected by gamers during the first day. The dashed lines highlight their permanence inside the hall for the whole week.

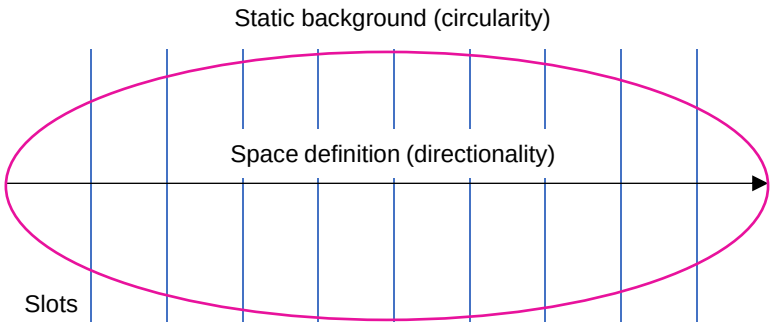


Figure 25. Genesis form: scheme showing the merging of repetitive patterns (pink circle) and evolving space definition (black arrow). Slots (in blue) take place within this basic structure.

In this case, the 'avatars part' fulfilment takes place once all of them enter the hall, then becomes cyclical. Still, their reiterated schedule is always different due to the items' progressive hoarding and space development. Objects continuously grow in number and

retrieved because Schubert comes from musical composition, and the mentioned genres strongly influence his work's formal management and compositional approach [Drees, 2018; Hurt, 2015].

never leave the hall during the performance (Fig. 24), while areas and actions continually change. Thus, it is possible to observe two different kinds of accumulation within repetition: the avatars layering, perceivable only in the beginning and the end, holds the same pattern and becomes embedded in the static dimension of the virtual space; on the other hand, the items staggering underlines an ever-growing accumulation that starts from the beginning and continues over the whole performance. Within this trend, the climax coincides with the maximum number of collectable objects at the end, when the last space setting occurs. Figure 25 highlights these trends. Space evolution follows a directionality principle through items accumulation (black arrow). In contrast, the avatar's schedule defines the background by repetitive patterns that recall circularity (pink circle).[66] The overlapping of these parts and layers determines the structure in which each slot takes place (blue vertical lines). Therefore, each slot reflects a specific moment of the performance timeline, when a certain number of items are in the hall, specific avatars perform, and a determined space setting occurs.

These quantitative considerations enlighten the formal background in which the slots take place. Still, the performance's primary goal is to describe each interaction's quality (cf. §1): within this structure, space evolves with its own rules as defined by playing human beings. The timelines reported in the first appendix show 331 selected interactions.[67] Each vertical line corresponds to one interaction, occasionally enriched by the relative snapshot in the figures. The underlying tables highlight the event's hour, the controlled avatar's channel,[68] the interaction category, and a brief description of the main events. Boxes in blue evidence interactions related to the pictures. The nine categories refer to the overall trends, as follows:

- *Constructing*: assembling furniture or different kinds of material to establish an area, identified by the gamer and recognised by the next ones.
- *Artwork*: composing an object with artistic value made by assembling items, painting, or modifying the structure of present material.
- *Music*: playing an instrument or reproducing music through keyboard samples, projector speakers or vinyl, CD, DVD and VHS players.
- *Playing*: ludic experiences with games, sports, board games or improvised performances without artistic intent.
- *Partying*: having fun with the avatar or other gamers by drinking together, dancing or celebrating an event.
- *Caring*: taking care of avatars by feeding, clothing, warming up or making them relax in different ways.

[66] This kind of structure recalls the 'ergodic form' principle theorised in my dissertation, to indicate musical systems based on discrete elements evaluated quantitatively in relation to digital means, which includes their linear concatenation and circular repetition [Befera, 2019, pp. 78-81]. In this case, the circularity strictly relates to virtual reality and fragmentation to the slots and items digital transition (cf. §4). Again, these aspects are related to *Genesis* insofar as it involves discrete digital structures, recalling the musical background of Schubert.

[67] This selection highlights space evolution and the quality of the overall plays. For example, frequently happening hugs have been evidenced only when relevant. Also, some games are lost due to technical problems or a low audio or video resolution.

[68] Ch1 corresponds to Max, Ch2 to Carola, Ch3 to Fabian and Ch4 to Yana. It has been evidenced only when the avatar plays with a gamer: only this case is relevant for space development, the core concept of the piece. The avatars also act when not controlled joining other games, fulfilling orders of previous gamers, cleaning or, especially Max, performing to animate the show [Appendix II].

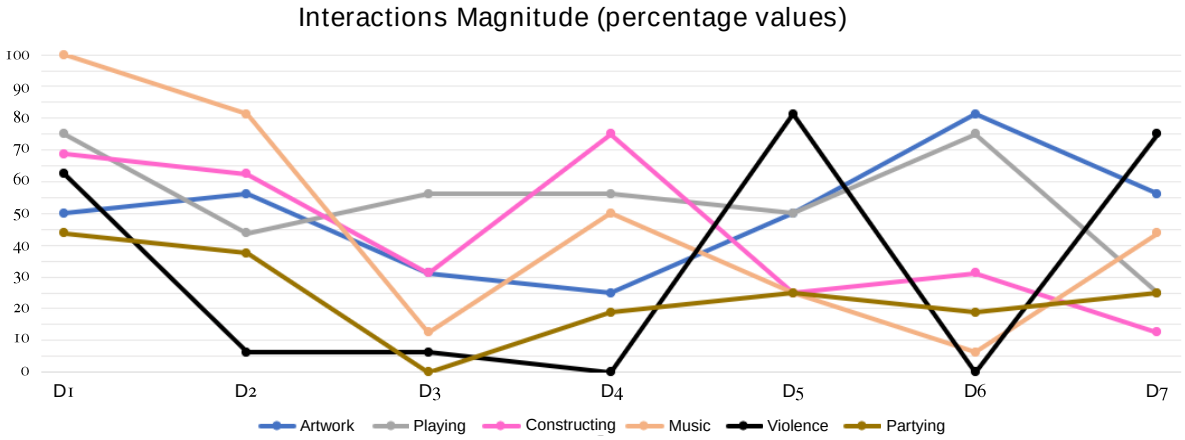
- *Connecting*: establishing a connection with avatars or gamers by meeting, physical contact, or verbal/written communication.
- *Violence*: acting against another human being or item by disturbing or destroying, having the goal to dominate, or not caring about things or people.
- *Conceptual:* aiming to break the fourth wall by surpassing the setting borders or communicating conceptual reflections beyond space's materiality.[69]

Each category might involve one or more avatars: playing instruments, partying, and constructing take place usually between more players, whereas conceptual, violent, and artistic interactions tend to be individual. Generally, these interactions do not persist over the slots wilfully. Nevertheless, categories like constructing find a more effortless continuity due to the same articles implied in diverse projects. The continuous transition of objects from one function to another defines the hall through gamers' and avatars' actions. This process implies the acknowledgement of closed systems composed of different elements. Users use, modify, or destroy them mostly without a long-term project. Also, interactions depend on their goal and what available in the hall and inventory. Interactions with objects and human beings determine the entirety of the performance.

The selected plays' magnitude (Fig. 26) highlights the overall trends occurring over the seven days.[70] The initial overall fall is ascribable to the growing number of free slots related to booked but not used tickets. The first days are characterised by musical, playing, and constructing interactions, moved by the necessity to build recognisable areas and easily interact through games or instruments. Parties play an important role also, especially during the second day when Carola's birthday takes place. This trend decreases on the third day and sees a rebound on the fourth day when constructing a vast area in the middle of the hall. The fifth day shows a high degree of violence during the night. Then, artworks and playing interactions prevail, returning to collaborative and sharing moments. The last day shows the lowest value of constructive dynamics since space is well defined already. On the other hand, except for the playing category's decrease, partying, artwork, music, and violence reach a high value. This tendency highlights the creation mood as well as the chaotic experiences manifested in the end. Hereafter, the analysis of some performance's excerpts shows facets and development of the mentioned categories.

[69] These categories stand on a different level in comparison to the four gamer's category outlined in the previous chapter. For example, controllers could be addressed to violent actions as well as achievers with a clear destructive goal; destructive slots are not always in contrast with the avatar will, and sometimes show a collaborative intent; socialisers might interact by playing an instrument, partying, taking care of each other, or simply connecting; explorers are frequently related to construction, but also to concealed artwork or conceptual messages.

[70] The graph shows every single avatar involved in each interaction and controlled by a gamer. For example, if two controlled avatars join a musical interaction, it counts as two. This approach is useful to highlight the actual number of gamers involved in each category. The reported trends are an estimate that does not consider the whole plays and the videos lost due to technical problems. Nevertheless, through the considerable number of shown interactions, it is possible to analyse the general trends and make data accessible, reflecting and questioning the considerations done during the observation *in loco*. For the sake of clarity, some categories have not been reported: caring and connecting interactions happen too frequently during the seven days, whereas conceptual ones are too scarce to be functionally represented in the graph. For more details about these categories, see their analysis reported below.



Category	D1	D2	D3	D4	D5	D6	D7
Artwork	8	9	5	4	8	13	9
Playing	12	7	9	9	8	12	4
Constructing	11	10	5	12	4	5	2
Music	16	13	2	8	4	1	7
Violence	10	1	1	0	13	0	12
Partying	7	6	0	3	4	3	4

Figure 26. Appendix timelines analysis: magnitude of six interaction categories over the seven performance days. Values are reported in percentages in the line graph and real values in the table.

Constructing

During the performance, identifiable areas move, merge and are dismantled, redefining their borders and connotation. As stated, most of their setting occurs until the fourth day, except for a few significant ones built later. Defining recognisable areas results from the gamers' primary necessity. As highlighted in Figure 27, the first action is illuminating the dark space through a floodlight. Then, during the first four hours, a living room – with a table, a green couch, a wooden chair, and a light in the middle – and a kitchen – with furniture, cutlery, and bottles – appear.[71] On the second day, gamers refine the kitchen with pots and furniture and set up a table where tools will find collocation. Both these zones remain in the same place for the entire performance. Instead, the wall – which is the first constructed element, assembled using electric drill and screws[72] – and the tent – already selected during the first day – start their transition through different places and modifications. The former, edited in various ways during the fourth day, converges in the big room in the middle of the hall (named 'castle' by the gamers), whereas the latter moves in different locations until becoming part of a garden zone. On the third day, a mattress, a pillow, and sheets complete the bed

[71] As Horowitz states, the authors set the bathroom reported in the timelines with a bucket and toilet paper in a hidden cove. Also, staff members complete the kitchen.
[72] As it will be also treated during the next chapter, Juliette Krauss does this action, who has previously worked on the item selection and organisation.

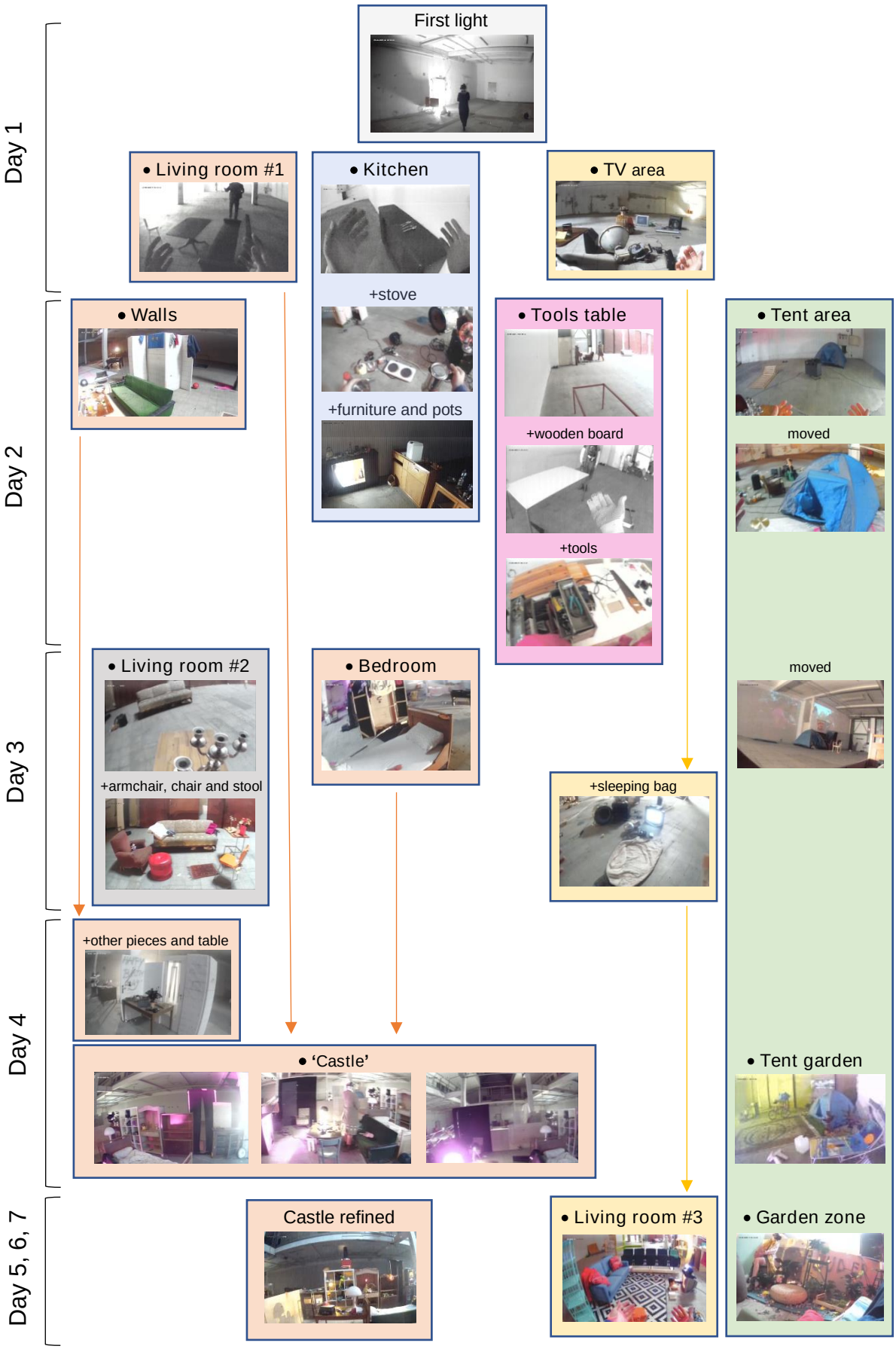


Figure 27. Performance analysis: main spaces definition over the seven performance days. The colours outline one area's development, which shares one or more parts with the previous pictures.

arrangement, defining a rough bedroom where avatars rest at times. Furniture and a couch previously used as a sculpture compose a second living room next to the hatch. The vast area built on the fourth day is the 'castle', formed by several furniture and wooden boards arranged on a rectangle, which embeds the first living room, the bed, and the walls. Gamers variously embellish and frequent it during the following slots. On the final days, the most important emerging areas are the third living room – which becomes a cosy TV place with a blue couch, cinema seats, carpet, and shelf – and the garden zone – composed of all the plants and gardening tools located around the hall. Moreover, the inflatable unicorn and a toy tunnel enrich the playground, which assembling starts with the inflatable pool and sand entrance on the second day. Finally, the canvases created with tape or fabric of different material are minimal spaces hosting different interactions, mainly regarding painting or writing.

These areas are explicitly recognised not only by the gamers who design them but also by the next ones searching for a kitchen to cook, a bed to rest or a couch to play, smoke or drink. They might also stimulate specific actions related to that area, such as using toys in the playground, relaxing in a tent area, using a tool lying on the table, or watching TV in a living room. Gamers discover these areas mostly while playing, exploring the space, or asking the avatar to fulfil a specific action related to them. On the other hand, gamers could be aware of the setting by watching the live stream or joining the chat.[73] For example, on May 2, they text from 10:13 a.m. to 11:43 a.m.:

b: We could start a project, and I continue it.
Mario: I like this small kind of room... Maybe we could make it more beautiful... Or we create another room next to it. Like a bedroom?
b: I think it would be nice to have a place for everybody to sleep, yes.
b: But I actually thought about freaking out a little with paint haha.
Mario: It's so difficult to 'build' a room...
Mario: I ordered some walls to create a bedroom.
b: Nice!
Scrome: Hi all.
Mario: I try to build a bedroom. If anyone wants to help me, feel free!
Mario: Anyone playing right now who can help me carrying those things?
Scrome: I'll help once I start playing in a moment.
Mario: You see the bedroom on the left I'm trying to build.
Mario: The carpet is the wrong way round.
Mario: Now, the avatar is having a rest for five minutes :-)
Mario: It was a lot of work.

Or, on May 2 from 3:37 p.m. to 4:22 p.m., they plan:

Helena: Hi! I am playing now.
Helena: We will build a garden.
Mario: Very good idea!
Helena: Do you want to join?
Helena: We build a garden around a picnic blanket. You can join!"
Helena: Anybody wants to send his/her avatar to the garden and give my avatar a massage. We can, of course, take turns.

[73] There is no evidence showing that people watching the live stream are the same playing since it is not possible to know who the YouTube users are. Thus, this consideration belongs to my own experience of watching the video from the control room and briefly chatting with some known users.

In the first example, they presumably refer to the carpet with three red pillows assembled during the sixth day (71),[74] even if that area does not provide walls. In the second, they are probably talking about the plants disposed around the blanket (74), a transition area between the last two gardens on the bottom-right corner of Figure 27. These excerpts show two examples of borderline categories among constructing, connecting, and caring. Gamers establish a relationship starting outside the play, share the areas setting and regard the avatars wellness through a bedroom to rest or a relaxing place to have a massage. Furthermore, they outline that assembling a few elements commonly related to a specific place is enough to define it. For example, some plants make a garden; three pillows on a carpet, a bed; stove, and cutlery, a kitchen; a couch, and a table, a living room. Within an empty and undefined virtual space, gamers necessitate reference points presumably related to their background. Once roughly established, they might modify, dismantle, or use them for interacting. Thus, each object acquires a function in relation to broader recognised areas. For example, before becoming part of the second living room, the couch lays alone beside the hatch without a clear role. A gamer then uses it as part of a sculpture, putting it in a vertical position to surround a mannequin (26). A similarly isolated piece of furniture becomes the surface upon which carving the gamer's name (54) before becoming part of the castle. After replacing its cut-out pieces with tailored soccer ball parts, a folding chair becomes an installation and loses its sitting purpose (78). Therefore, it is possible to infer that when a recognisable system embeds an object's function, the action of removing it becomes destructive, sometimes with the further purpose of rebuilding something else. Through these processes, objects acquire different forms, many of which uncommon. Still, even if the virtual reality freedom extends every item's affordance, the game setting limits the cases, determining the manifestation of a restricted number of categories.

Artwork

The mentioned objects' revaluation is a fundamental aspect of the artworks realised during the performance. Gamers frequently aim to construct self-standing units using various items found in the hall or ordered from the inventory. These assembling might have an artistic goal, where aimed at beauty or manifesting a conceptual insight. Occupying part of the hall and defining a limited area, they become spaces also. Nevertheless, gamers do not conceive them as inhabitable but to be observed and artistically enjoyed. Moreover, these compositions are not sculptures because lying in an interactive space and being physically modifiable. Instead, following the definition of Claire Bishop, they are attributable to installation art:

> In a work of installation art, the space, and the ensemble of elements within it, are regarded in their entirety as a singular entity. Installation art creates a situation into which the viewer physically enters and insists that you regard this as a singular totality. Installation art therefore differs from traditional media (sculpture, painting, photography, video) in that it addresses the viewer directly as a literal presence in the space. [2005, p. 6]

[74] From now on, these numbers in brackets will indicate the related picture in the timelines [Appendix I].

Each installation provides various objects perceived as a ‘singular totality’ due to their shaping. Rather than being oriented from the beginning, gamers seem to organise these assemblages of elements step by step. Consequently, they highlight a layering process that involves an ever-growing amount and typology of material. The first one to be realised, for example, entails oriental-costume pants, a gong, and a soap-bubbles tube on the inseam (12). These elements form a recognisable figure, considered a totem, and celebrated with an ending soap-bubble rite. The installation shown on top of Figure 28 starts with a careful disposition of the miniature family in a plastic box with glue. Then, the gamer put it in a cage on a table in front of a world map. The composition on the bottom of Figure 28 entails pages ripped from The Book of the Universe, wet with Campari, then sfumato and finally framed with wood and Styrofoam. Even if progressively modelled, each of the mentioned shapes reflects an entirety born from the gamer’s ideas. Nevertheless, the layers remain clearly visible in the final installation, manifesting a stratified form in the overall development and its micro-units composition.

The most used constitutive objects are lights and mannequins: the former to realise more visible or coloured artworks; the latter to represent human figures. The installation composed on the third day regard both these aspects. The gamer places a trunk on an iron block and tapes it to form a cage and make it standing still (34). Then, he inserts Styrofoam with pierced pieces of a broken violin around its neck and spreads pages of a score in a circle around its base. This sculpture is entirely dismantled on Saturday, lasting three days due to the well-made assembling. Gamers’ acknowledgement of a defined figure which is part of the hall also depends on the floodlight pointing at it. The sixth- and seventh-day installations also use mannequins. They respectively regard a trunk on an armchair with a sink and a green costume (70), and a sitting body with a white suit and a red helmet, surrounded by a lobster puppet, an inflatable unicorn, and a keyboard to complete the work (82). These artworks frequently

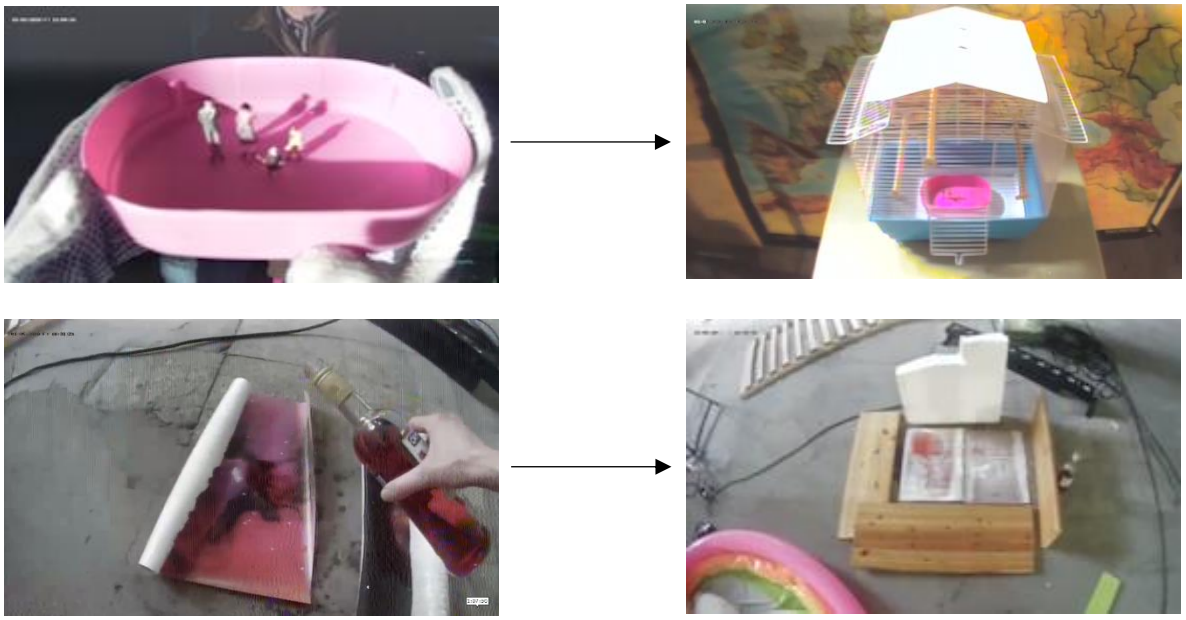


Figure 28. Performance excerpts: different construction phases of two installations.

imply items not usable in a standard way, such as the mentioned sink. A microscope with golden fabric and a mask follows a similar principle (58). These objects' presence in the inventory highlights the authors' aim to promote creativity beyond common habits, enhancing this kind of outcomes. Presumably, the growing number of unusual installations increasingly influences incoming gamers to experiment with something similar, towards the peak of artworks on the sixth day.

Music

Playing an instrument is one of the first action tried in the game, frequently used to establish a connection with other players. Keyboard, violin, and piano are the first instruments to enter the hall, implied in solos and duos during the first morning. Except for Carola, a clarinettist, and Max, an amateur violinist, none of the avatars is a musician. In contrast, some gamers are presumably expecting them to be professionals or virtual characters who can use any available item. Thus, the playing interactions sound frequently rough and hard to render when asked for specific pieces.[75] These cases might also result in nothing happening, and they usually follow in a more general musical instruction, elementary teaching or changing the game's topic. Generally, noise is one of the most frequent sonic results due to the avatars playing difficulties or gamers experimentation. This trend aligns with the *Genesis* concept, which considers instruments as all the available means, also beyond their common usage. Moreover, as stated in Chapter 3, some gamers come from Schubert musical environment and presumably reflect their personal research in the game. Thus, playing continues to be a systematic way of interacting but also embeds various facets. For example, at 10:55 a.m. of the first day, a VHS player left on the keyboard pitches generates a wide cluster. In the afternoon, another gamer replicates this principle by taping the octaves, thus avoiding dissonance and creating a drone on one fundamental tone; shortly after, he leaves only one pitch still. Drum sections and percussions – within which bass drum, cymbals and congas are the most used – acquire an important role, presumably due to the effortless rhythm generation. They also determine experimental outcomes. For example, the bass drum generates feedback through a microphone inside its soundbox – after cutting out a circle on the membrane – or a deep drone using an electric planer on its surface (day 2, 23:43). Other commonly used instruments are synthetic organ, another littler keyboard, accordion, an organ pipe, electric guitar, and recorder, also frequently mixed with unusual objects: an organ pipe played with the blow of cloud machine (day 2, 15:24); a megaphone siren on which screaming or singing a melody (day 2, 21:46); objects in the kitchen hit with drumsticks (day 3, 13:32); a microphone receiving a fan vibrations and noise (day 5, 0:48); a broken piano played with sticks (day 5, 17:35); a vinyl scratched with glue (day 7, 2:08); chains tied on the knees, floor tom, megaphone, and voice for improvisation (day 7, 8:25); a vibrating heart pillow used on the electric guitar as an EBow (day 7, 22:35). Once again, all these examples highlight the revaluation of objects, getting another function due to the situation. For example, a knocked-over vertical piano, dismantled and with broken hammers, loses its traditional keyboard usage. Thus, it shows the possibility of being played with sticks or

[75] For example, see when Fabian tries to play Anna Magdalena Bach during the first day.

plucking the usually covered chords in the lower part. Or, when trying to create an installation of a self-playing organ pipe, the cloud machine becomes a means to produce sounds, determining a shift in its primary usage. As stated, the affordance changes due to the users' goal, view. and freedom.

Besides the single interactions, gamers use CD, vinyl, VHS, DVD players and keyboard samples to set a musical background on which conduct another action. These plays regard dancing, creating an atmosphere or, rarely, playing on their base. As the mentioned drones usually left on when the slot finishes, these tracks become part of the musical background in a looped repetition.[76] Thus, the hall's sonic environment[77] recalls the three categories defined by Murray Schafer of 'keynote sounds', 'signals' and 'soundmarks'. *Keynotes* represent the 'ground' of a sonic environment, which "are overheard but cannot be overlooked, for keynote sounds become listening habits in spite of themselves". They are fundamental to define the space but remain in the background as the mentioned tracks or actions performed by other avatars. On the other hand, 'signals' "are foreground sounds and they are listened to consciously". They regard each sound made through an avatar to which gamers are paying attention. Finally, a 'soundmark' "refers to a community sound which is unique or possesses qualities which make it specially regarded or noticed by the people in that community. [...] Soundmarks make the acoustic life of the community unique" [1994, pp. 9-10]. If observing the performance from a global perspective, soundmarks are identifiable in the mentioned looped inputs, as well as the silence emerging from their absence. These sounds characterise the static and circular dimension of the space, continuously repeating itself over time.[78] These three layers are continuously overlapping in relation to the listeners' attention, depending on the sonic experience's basic dynamic and the events happening around them. The avatars are in contact with the sonic environment of the gamer also. The audio signal transmission occurs from the avatar's microphone to the gamer's speakers, and from the gamer's microphone to the avatar's headphones. The former channel makes the hall and actions sound available to gamers, whereas the latter transmits the gamers' room sounds, involving orders, room noises or played music. Reproducing music for the avatar offers other possibilities of interaction, such as playing a track to let the avatar dancing alone (day 1, 20:54), playing a piano piece for the avatar lying on an armchair (day 2, 16:45), improvising while the avatar is playing congas and the gamer is singing in a jazz style (day 2, 18:41). Once again, these aspects highlight the two-way connection between gamer and avatar, which does not involve only the gamer's immersivity in the performance virtual space but also the avatar's perception of the sonic/playing environment of the gamer.

[76] The malfunction of the disc players – that Schubert hypothesises regarding the endless repetition of the same vinyl tracks small fragment – enhances this loop.

[77] I refer to the definition that, adapting Murray Schafer's theory, Barry Truax defines as "an environment of sound (or sonic environment) with emphasis on the way it is perceived and understood by the individual, or by society. It thus depends on the relationship between the individual and any such environment. The term may refer to actual environments, or to abstract constructions such as musical compositions and tape montages, particularly when considered as an artificial environment" [Truax, 1999].

[78] Due to the lack of an online community (cf. § 5) able to define and legitimate soundmarks, I refer to my, Schubert, and avatars experiences because living the hall or neighbour space and constantly listening to its sounds.

Partying and Playing

The categories mentioned above refer to the spatial and sonic background's characterisation in or around which each interaction occurs. On the other side, the following ones emerge from the setting and are mostly temporary, inherent to the slot in which they take place. Partying and Playing category highlights two different kinds of entertainment, regarding ludic or recreational interactions.

The most relevant parties happen during the second, fourth and seventh nights. The first one coincides with Carola's birthday and involves the realisation of a celebration writing on a canvas, followed by toasts and dancing. The second one concerns a group of people joining the game from the same room, trying to set up a rave party with techno music and drinking. The third one regards the conclusion of the performance and the chaotic and primitive atmosphere spontaneously arising from the noise sounds played before the end.[79]

The Playing category relates to gaming, sporting, and performing. Gamers play sports and board games after ordering or spotting inherent items, mostly with at least another avatar – except for a few cases like the sandcastle construction, toy tunnel crossing, puzzle fulfilment or domino single-play. The table soccer and side-by-side tandem bike frequently draw users' attention[80] towards uncommon applications. For example, the former is used with tubes and soap bubbles (day 3, 18:43), the latter with a plant in the middle and an umbrella on the handlebars (day 5, 17:27). Other games entail means found in the room, such as skating on a wheeled table (day 1, 23:12); using a bra as a jumping rope (day 3, 17:58); playing four in a row on a door (day 4, 9:17); making a shopping-cart run and trying to jump in the pool before the time to play finishes (day 4, 11:38); playing basketball with a soccer ball and a cradle as a basket (day 6, 15:28).

Performances also regard 'playing' because enacted for similar purposes: set for fun and not for making art.[81] Among these: yelling while playing melodica and running with a raised Goku doll (day 1, 11:17); lighting the flare and wandering around with music (day 2, 14:15); exchanging terrain sacks with milk (day 3, 20:44); performing a parade with flowers and cymbals while another avatar accompanies with bass drum rhythm (day 4, 13:18); wearing a shark costume showing a sheet with the writing 'I'm shark Jesus' (day 5, 17:18); pretending to be a priest through a dedicated costume (day 5, 22:09); riding an inflatable unicorn and caressing its neck in a sexual way (day 6, 20:14); kissing a mannequin with a spooky mask 'as a friend' (day 6, 20:59); wearing a tent by breaking its upper part with a crowbar (day 7, 22:46); asking to play electric guitar with anger and break it on the mixer (day 7, 22.55).[82]

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[79] As it will be discussed in the next chapter, all these events involve different relationships with contexts external to the virtual space: respectively Carola's acquaintance organising the birthday, the group of people playing in the same room, and Schubert intervention during the final day.

[80] Are also used boccia play, puzzle, chess, ping pong and badminton, soccer ball, golf balls, bowling pins, soap bubbles, origami, table soccer, and side-by-side tandem bike. In some other slots, items are not used, such as in thumb war and morra.

[81] Some interactions are in between the two categories analysed in this paragraph, as the many slots played with the mirror ball, used both as a ball for playing or as a tool for dancing; performing events within a party, as the 'zombie dance' requested on the sixth day; making figures with hands in front of the mirror on the sixth day; using puppets as marionettes, like the lobster play on the first day, lying a child mannequin on a bed on the fifth, and the fight between a mouse, a bear, and an owl or the seventh.

[82] The last action, which is borderline between playing and violence, is not realised because too dangerous.

What makes the performing events different from gaming or doing sport is establishing a context in which a scene can occur. For example, the religious performances require the dedicated costumes of a shark Jesus or a priest with stole and Bible; the Jimi Hendrix re-enactment needs an electric guitar violently played. This aspect refers to a rough dramaturgy organised by gamers, which seems to conceive a general purpose and not a detailed plot. Narrativity and roles evolve during the play depending on the items discovered in the inventory or space. Thus, another layer of interaction is observable: a play inside the performance, which explicitly aims to attribute a character to avatars beyond their standard role and create a representation ideally superimposed to the game setting. Other interaction's typologies follow a similar principle, having a purpose even if without a theatrical approach. In these cases, it possible to recognise what Grant Tavinor defines as 'emergent narrative' in video games as "small local narratives strung together into an arc that is unique for a particular player. […] Though they may share elements of the game fiction with other players, the sequence and combination of their activities are unique to their character, and this constitutes the story arc of their character" [2009, p. 123]. Once again, this concept also involves the avatars' active role: considering *Genesis* as a 'spatial story' – namely responding "to alternative aesthetic principles, privileging spatial exploration over plot development" and being "held together by broadly defined goals and conflicts and pushed forward by the character's movement across the map [Jenkins, 2004, p. 124] – they provide hints to players by pointing at certain items or places [Appendix II]. Thus, if the gamer directs and plays the plot simultaneously, the avatar fulfils the game preprogrammed intelligence role by expressing a visual preference. The game provides an overall arc regarding each slot, which depends on 'micronarratives', as memorable moments related to sensations or perceptions that shape the player's emotional experience [*ivi*, p. 125]. Nevertheless, the performance's events happen extemporaneously, without a recognisable directionality or logical consequentiality. There is no planned resolution, and plays seem to be concatenated events happening one after another. Thus, except for the general interaction with space, a plot is absent even when the gamer has a clear purpose. These plays still submit to the general performance fragmentation and do not question the prerequisites of the medium in which they take place. Performing inside the performance or playing inside the play remain events embedded in the virtual reality dynamics and, flowing in the overall timeline, reflect one of the players' experiences within the game.

Caring, connecting and violence

Caring, connecting, and violent events explicitly relate to human-being impulses. The first two categories reflect a collaborative intent, whereas the last one implies acting against avatars, objects, or any established order.

Caring takes place mostly in relation to the energy bars and is functional to strengthen human characters' perception. Gamers tend to respect their avatar needs and invest items and

time for their health.[83] Feeding is the most frequent way of caring, continuously executed over the week. Many meals happen at the usual time for breakfast, lunch, dinner or even snack, manifesting a coincidence with gamer habits through the embodiment. This trend also relates to days of the week, as the Sunday cooking session and eating on the couch (day 7, 10:25). Some gamers show an outstanding high consideration of the avatar's physical state. For example, on the third day morning, the hangover of Carola is treated with a dedicated breakfast during the entire slot. More creatively, another gamer provides a singing show while an avatar eats, then offering food and even spoon-feeding her (day 4, 11:05). When not used for parties, alcohol might assist the relax after finishing a project, frequently combined with a cigarette. Alternatively, it outlines the enjoyment of a particular atmosphere, like that created in a tent filled with the cloud-machine mist (day 6, 20:40). Both these events express a rite, stating a task completion or enhancing the calm moment within a space. Relaxing also involves lying on the bed, couch, tent, chair, or carpet for some minutes or watching a movie or a documentary. These plays are frequently enriched by other enjoyable actions, like eating cereals and chocolate milk, reading Vice, and holding a puppet in front of the TV (day 3, 16:11), or sitting on a chair and observing the falling fake snow thrown by another avatar (day 7, 16:39). Finally, caring regards massaging, which takes place usually between two avatars; reading a book, which concerns gamer's speech, being the avatar not able to pronounce words; doing exercises such as stretching and running; cleaning up; regulating the temperature through clothes, practising sport, or using tools like heater or hairdryer.

Connecting category entails the human relationships between gamer and avatar and gamers through avatars. Firstly, gamers might try to know more information about the avatar. Not being allowed to answer or speak, the avatar usually communicates the impossibility to reply or writes the general name 'Avatar'. Still, external information fulfils some gamers' curiosity on the sixth day. They share the retrieved data through the chat:

b: I figured that actually one of them can play the guitar pretty well...
b: I googled their names.
Mario: Where did you find their names? Are they artists from Hamburg?
b: In the 'about' sections.
b: Berlin, also Munich.
b: Actors and performance artists/musicians.
b: Yana Thönnes, Carola Schaal, Fabian Oehl, Max Pross.
Mario: Ah, thanks a lot![84]

Writing is the most common way to reply to gamers questions and communicate with other people inside the hall. This kind of exchange has different implications, involving different means not only to ask the avatar for information or personal details. For example, a gamer communicates affection to other avatars through the text 'I love you' written on a sheet of paper (day 5, 0:35); a blanket on the ground reports a 'thank you' message for the avatar (day 6, 15:41); a door becomes a canvas on which write 'happy birthday' (day 3, 20:12); Fabian

[83] Some questionnaire's testimonies evidence gamers annoyed of taking care of the avatars, feeling forced when the avatar is not working as expected or manifests disappointment [Appendix III]. This behaviour is presumably related to the consideration of the avatar as a virtual character who is supposed only to obey orders.
[84] Lacking a widely shared online community overviewing the chat (cf. §5), this consideration is not relevant for further interactions. Note also that the chat's most active users are a few people, such as 'Mario' and 'b'.

draws a graph about his experience intensity and has to re-enact the action on the peak (day 7, 8:30). Another level of interaction involves contact beyond sight. The frequently happening hugs and shaking hands refer to this category, as the body exploration through the senses when touching VR glasses of other avatars (day 1, 14:50; day 2, 4:40), asking for describing the clothes' texture (day 3, 2:54), or the smell of another avatar (day 3, 17:46). Some gamers might push this principle too far, asking to sexually interact with another avatar by kissing or having sex with him/her.[85] Through the embodiment, these interactions try to further push the game limits by acquiring an olfactive and sensory dimension otherwise absent: gamers feel touch or smell through their imagination and the avatar's feedback. When not related to temperature regulation, the customisation of the avatar's outfit follows the same principle but about appearance (day 6, 20:53). Another way of socially interacting is drinking together, beyond relaxing or partying. For example, beer or alcohol exchange highlights the will to meet somebody else by sharing an object. This usual way of communicating might evolve in different and unusual interactions, such as howling while lying on the ground (day 1, 23:20). Finally, at times avatars are asked for their opinion – on creating a name, such as 'Gustav' (day 1, 14:40), on their favourite place (day 6, 15:27), on what kind of room do they want to build (day 6, 17:37) – or share intimate states of the gamer – for example, about his deep fears about the pandemic (day 3, 12:50).[86]

Contrary to the mentioned categories, violence outlines a disconnection between gamer and avatar, or gamer and space. Most of these actions regard cutting or breaking objects by throwing them away or using tools, such as a drill, saw, crowbar, and hammer. Particular examples are the swordsman duelling with all the objects encountered in the hall (day 7, 20:39) and the piano breaking with the hammer (day 5, 4:04). Violence can also involve avatars, annoyed through an item – as slapping with a wurst (day 1, 20:51), constraining someone with rope, tape or handcuffs (day 7, 22:13), or moving the bed when another avatar lays on it (day 7, 22:28) – or manually – as the fights for the mirror ball (day 1, 23:13). It is also possible to disturb another avatar with noise, such as screaming, breaking, or hitting something. For example, a gamer orders to destroy a tray to wake up an avatar who is sleeping and not paying attention to her help request (day 3, 12:30). As already stated, the violence peak is observable on the fourth night/fifth morning. During consecutive slots, Fabian dances on a broken table, generates feedback with a microphone inside the bass drum, and breaks objects against the wall. The last request of cutting the plugged light cables follows with the gamer kick out. Some other plays entirely imply a violent mood, as in the fourth day early afternoon, when a woman asks to destroy or cut different objects and kiss or have sex with other avatars while searching for techno music.

[85] It has possible to retrieve two of these rejected orders: on the first day at 20:00 and the fourth day at 12:25.
[86] This slot recalls what Gottschalk defines as 'hyperpersonal' relationship happening in cyberspaces, "meaning that individuals need little encouragement to quickly reveal sometimes exceedingly personal and intimate information about themselves" [2010, p. 520].

Conceptual

This category outlines those actions questioning the performance established limits or communicating conceptual reflections beyond space's materiality. Some gamers, for example, try to exit the hall without success. These actions' fulfilment occurs on a more abstract level. For example, the meaning of some social or political messages goes beyond the simple interaction between users: the text 'LEAVE NO ONE BEHIND' written on white fabric on the first and the third days refers to a slogan related to the 2030 Agenda for Sustainable Development published by United Nations, which aims to end social and economic inequalities between Countries; the phrase 'transformation now' written on the avatar's palm (42) remains visible for next players, recalling a revolutionary turn which could be both personal and social; the circled 'A' drawn with lather on the ground on the seventh day is the symbol of anarchic movements (80); the word '¡VENCEREMOS!' carved on a shelf with a planer presumably regards the hymn of the Chilean left-wing party Unidad Popular (day 7, 12:30). This kind of messages could also imply a philosophical reflection about the game prerequisites. For example, writing 'you are able to act responsibly without authoritarian laws' (day 1, 13:34) or trying to write 'the limit does not exist' (day 7, 14:53) show a critique of the game rules about space limits and avatar obedience. Moreover, some gamers aim to transfer subjects' and objects' role to another medium: writing on the mirror 'I'm an avatar' (11) highlights the avatar function by superimposing the concept on the reflected image; the Polaroid pictures impress figures of objects and avatars on another layer, which is static and in contrast with the game flowing;[87] a frame at the avatar's face height represents a symbolic picture not directly accessible by the gamer (48). Surpassing the borders might also imply communicating with people outside the performance hall, as the authors, staff, or anonymous acquaintances. Gamers leave thanks to organisers on the hatch on the fourth day – where cameras are supposed to be – and a date request for an unknown person saw at a bus stop in real life written on a bus stop sign inside the hall (72). Finally, an entire game might imply metaphorical actions, which acquire significance for the performing avatar. On the seventh day afternoon, the gamer asks to reach the place where the avatar had the greatest emotional response and observe the object related to it. Yana goes to an old Mac computer on a shelf and looks at it. Afterwards, the gamer asks to move the Mac where the avatar was and vice versa, considering the replacement as a symbolic shift. The avatar observes the object as herself laying on the ground beforehand, and the Mac is supposed to look at the avatar in the same way. In a further step, the gamer asks Yana to compose a piece on the keyboard. This action establishes the avatar as a female composer, among other greats like Wagner and Stockhausen. The gamer indicates these dogmas as an omniscient being, and the avatar lives his plot on the moment. Thus, she makes a spiritual journey, implying a role turn and a new identity fulfilment: from a virtual-performing character, she acts a re-embodiment of herself as a composer.[88] These interactions outline another communication level, expanding the space rules and borders to an abstract dimension. Also, they frequently determine a role turn: about the avatar as a concept or a willing character; about the authors or people outside the room as subjects with whom interact; about the gamer as an unknown

[87] The Polaroid does not work, so the pictures are unavailable. The conceptual intent is still relevant.
[88] Yana herself recognises this play as a strong emotional experience and an inner journey [Appendix II.3].

director, beyond the given order. In this case, the layering process refers to different ways of communicating and superimposition of different meanings. Each revaluation entails the characters' function and the game rules but tends towards new dynamics and conceptions.

The mentioned categories and subcategories show a possible grouping of all the available events of the performance. They also outline the layering of different kinds of interaction which, happening consequently or simultaneously, define *Genesis* form and content. Some of them show multiple facets due to different goals or unclear intents.[89] For example, putting the Bible on a stove to burn it has the ambivalent nature of violent and conceptual action; searching for the highest place where to put a chair show both a conceptual aim for 'the highest' and the constructing wish; it is not clear if hitting various objects around with a fencing sword has the goal to destroy or to play. As shown, gamers conceive items as part of a system – which is inhabitable, observable, modifiable, usable, or destroyable – or separated units – to embed in a further system or singularly employed to interact. These processes evolve from the possibilities offered by the space when a gamer joins the play. The performance dynamics often determine a redefinition of the objects' function so that they diverge from common usage. Besides those already stated, Figure 29 highlights other examples, reporting the transit from a hypothesised standard function to the enacted one.

Interactions might persist over different slots, involving the same object or similar content. Usually, this connection seems not explicitly planned.[90] The continuity arising from this attitude results still fragmented, not regarding the game – or the slot – as a whole. The short- and long-range relations already highlighted mostly regards the emerging areas in the Constructing section. The ones reported hereafter take as reference specific objects, showing random enactments of these connections in relation to previously made actions. The many canvases realised during the performance through different material are privileged supports to enact this kind of interactions, allowing direct communication through words. Figure 30 shows two writings made on different days on a bedsheet. The relation between their contents testifies a discourse between two unknown users: the text 'trying hard' follows 'seid fruchtbar und mehret euch' (be fruitful and multiply) – which refers to the biblical Genesis excerpt, presumably in an ironic way. Some other long-term trends manifest a development related to a specific dynamic. For example, the piano in Figure 31 implies playing during the whole performance – even when broken – but also brutal actions. Its progressive destruction outlines growing violence in its regard, presumably related to the previous slots' result observation. Finally, Figure 32 highlights different functions of the golden foil both in the short and long-range. Except for the waves made by three avatars as a play, it mainly defines an area or a background, being a fabric and due to its visual impact and versatility. Thus, it creates a loose

[89] The timelines report these interactions with more than one label.

[90] There are a few cases in which actions intentionally persist over time. Among those, a gamer asks for a distinctive sign to recognise the avatar in a further play, and the avatar draws two lines, which becomes his name (day 3, 15:56). On the last day, the avatar let the gamer recognise him through this secret code (day 7, 1:24). Other gamers try to stimulate next reactions by creating a guest book on post-it notes (day 3, 12:11) or reporting the request to leave a message on a sheet of paper (day 4, 19:07).

	Pot: from utensil to musical instrument Caring → Playing
Book: from reading to bricolage Caring/Connecting → Artwork	
	Domino blocks: from game to heart picture Playing → Connecting
Pillow: from cushion to installation part Caring → Artwork	
	Pieces of cutlery: from utensil to message Caring → Conceptual

Figure 29. Performance excerpts: uncommon usage of different objects: transit from a (hypothesised) standard category to the enacted one.

- Day 5, 22:26
Writing 'seid fruchtbar und mehret euch' (be fruitful and multiply) on a sheet covering the bed

- Day 6, 16:40
Writing 'trying hard' besides 'seid fruchtbar und mehret euch' on the bed sheet

Figure 30. Performance excerpt: writings on a bedsheet made in two different slots on days 5 and 6.

Figure 31. Performance excerpts: path towards piano destroy.

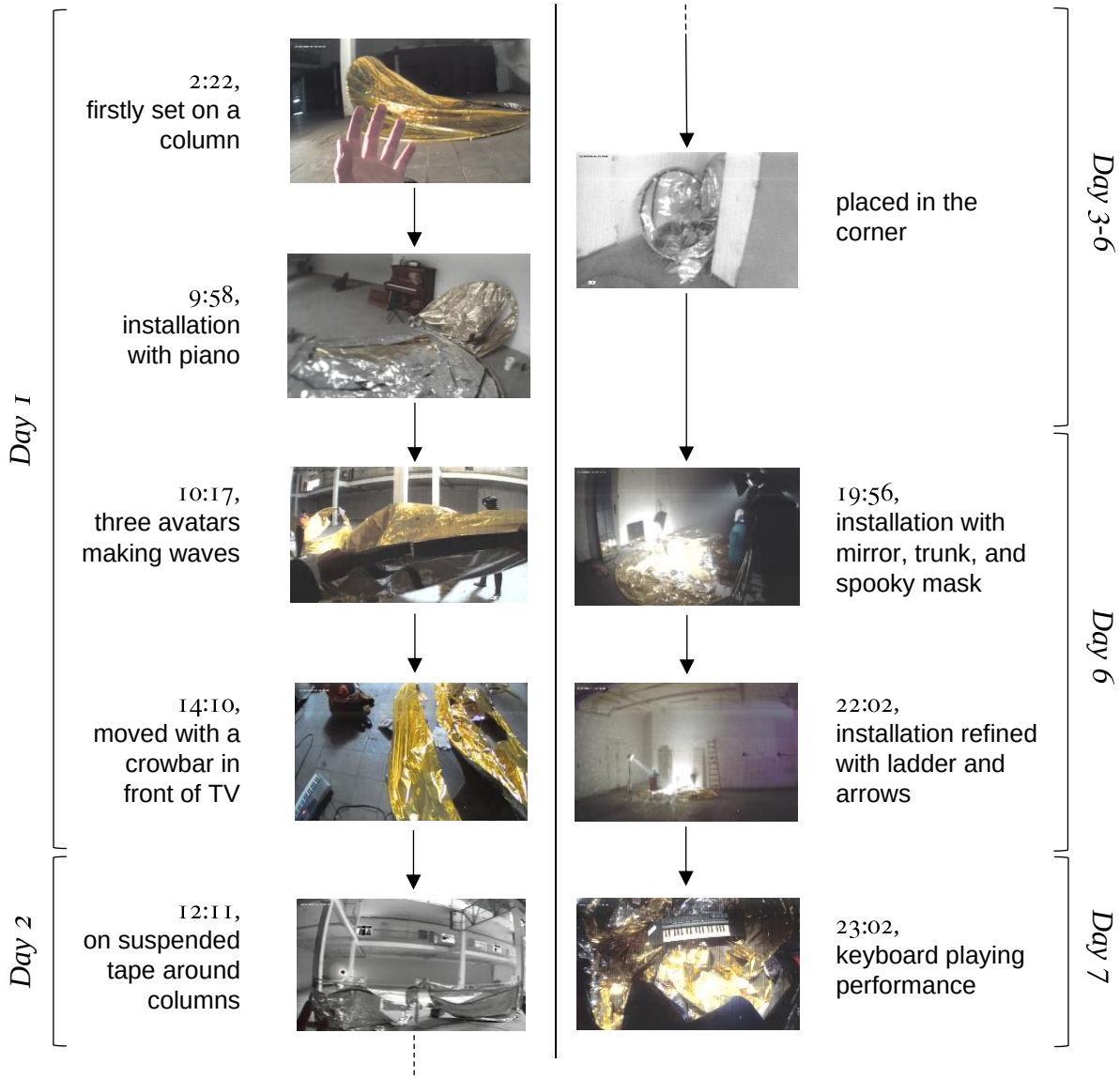


Figure 32. Performance excerpts: golden foil story during the whole performance.

connection in the content but a strong one in the form, always manifesting a random evolution of its state.

Randomly generated interactions – within one slot or between more slots at a different distance – reflect a specific virtual space development. Borders and rules of the game influence this intrinsic formal organisation, recognisable from a broader analysis. Gamers' actions become part of this structure by assembling, destroying, or interplaying, as shown in the various mentioned categories. They normally transit from one state to another, as objects and avatar do. Generally, plays evolve from the performance hall's current state, connecting to the previous setting and evolving other gamer's actions. These dynamics establish structural treads, clearly visible from an external overview. Nevertheless, the studied cases rarely reflect a planned performance development over time but mainly stick to their slot. The growing quantity of items and avatars' human nature also generate an increasing number of variables, so that it becomes increasingly challenging to control space evolution. This entropy also regards the very system of the game, which is unknown to gamers. As in video games, the underlying structure is "preprogrammed in hardware and software, leaving no space for the player to redesign the complicated game rules. [They] do not reveal their internal algorithm, which is called a 'black box'" [Nam, 2019, p. 53]. In *Genesis*, the 'black box' refers to the hardware and software used: virtual space exists through those devices and their binary architecture. Thus, space responds to codified principles behind its physical nature, even if not directly programmed. Players cannot edit the game code or rules and fulfil actions within well-defined boundaries. The experiment exists precisely because of these borders and manifest recurrent typologies of interaction concerning those borders' nature.

As stated in Chapter 4, gamer refers to units with a different magnitude, in order of size: to items, systems, and the whole hall. Each of these units is subject to a layering process that defines its structure and remains visible in the final assemblage, reflecting the various interactions. Even avatars, who are the means to fulfil an action or communicate, follow a layering principle in their staggered and regular entrance in virtual space. Thus, entering *Genesis* implies referring to new rules related to the digital means structure. This process regards the discretisation not only of digital units but also of items and avatars. Crossing the hatch determines each physical entity's intrinsic fragmentation and a further redefinition from this undefined structure. The renewed function partially refers to users' common habits. Therefore, the gamer and even more the avatar – who is the only one living the virtual space both directly and continuously – experience another reality or see his/her reality from another perspective, which would not be possible to discover otherwise. Finally, a defragmentation of the various units within space occurs. This new organisation does not follow a defined computer logic but a randomly enacted human one. Thus, it is impossible to establish the end to the process but only overview how it continuously changes and endlessly reorganises its shape over time.

7. Outer Communities

April 1-3, 2020 – Catharsis

During the second day, Alex and Heinrich leave the control room to deliver a gift for Carola in the hatch. She is celebrating her birthday during the performance, and some acquaintances arrange party through the game. I feel disappointed by those attitudes apparently out of the experiment assumptions, so much so that Carl, observing my expression, jokingly suggests to reporting in my notebook that it is all fake. Returning then serious, he acknowledges that it is actually a very special moment. Over the next few days, I realise that this exchanging process between the virtual and the outer worlds is indeed an integral part of the performance and a valuable source for its evolution. When I am not in front of the computers, I continue to observe what is happening around me. The four avatars are in close contact with the staff located immediately outside the hatch, through which they enter and exit the performance hall; they frequently meet the authors also, to discuss what happened in their slots. On the other hand, the staff members sometimes reach the screens in the control room – considering that they are usually watching the limited broadcast on YouTube without audio – and the authors join people around the first-floor tables to talk with avatars and staff. These micro-communities belong to the physical environment they have settled in over the last month. From that specific area, they move to other ones establishing a contact: we are all immersed in our own space and, simultaneously, in the whole space of the performance. So, what are we? Real or virtual?

The performance's spirit extends inexorably toward our routine, blurring the everyday perception. We are contaminated by the hall contact, like a virus that expands from what we see through those screens. Not even those monitors have a boundary function anymore, and that virtual creature, as much assisted as observed, has finally assumed its own will and is now coming back to claim the soul of its creators. As in a cosmogony, men have generated a virtual space in which they can acquire a renewed free will. Recognising that space, they spontaneously pursue a connection with it in order to define their own selves. This process does not involve friction but fluid and aimless streaming in a physical and temporal space. On the fifth day, after entering the performance hall several times, Alex returns to the control room dressed in the same pants he had worn during the game. When I point this fact out, he realises it and wisely acknowledges that Genesis *is changing us, inside and outside. This prophecy sticks in my mind as a point in a flow, which enlightens our ongoing changing habits and, at the same time, that we are not nearly aware of how this process is happening.*

During a lunch break, I meet Max. It is just him and me, and I take the opportunity for posing a few questions. The conversation is somewhat fleeting, he seems on another dimension and impatient to get back to his task. When I ask how he is doing inside the room, he tells me that it is a lot of fun. Alex and Heinrich also seem to be enjoying the game and frequently grab the opportunity to perform as avatars by filling some gaps. So, as the technical problems diminish, the control room becomes more and more empty except for Carl

and me. On the other hand, the first-floor tables and the performance hall become increasingly crowded. The population of Genesis *is moving. So, I realise that everything related to space is part of space evolution. Unwritten rules and social dynamics that have slowly come to define us have changed our nature as inhabitants. Voluntarily, we have catapulted ourselves into that virtual reality, sacrificed the body, seen the dream, and enjoyed the abyss. Finally, we have accepted the border. From the rules we have defined, from that methodical and meditative repetition of events, catharsis finally arises. I cannot say what moves the circumstances, if the end's perception, as a chasm beyond which things will no longer be the same, or the need to celebrate, live, or simply surrender to the moment. The fact remains that the last slots are a continuous ascesis between disorder and absolute: from a guitar played with a vibrating heart and an accordion to the feedback of a switched-on microphone oscillating in front of an amplifier; from the continuous background loops from the deep bowels of the performance to Alex entering the hall and playing the gong loudly and at regular intervals. And also dance, fog, yells, alcohol, and broken objects: from what expected to the most nebulous chaos. I stand still in front of the screen for at least an hour and a half, watching that series of events while I feel the stomach rising into my throat and the entire body tingling to the point of absence. Then, slowly, all the stimuli fade away, and the avatars exit the hall one after another until only Max remains. Maybe due to the lack of ideas or to the burden of being the last one, his gamer seems rather clumsy in taking pictures and arranging open maps on a table together with an inflatable watermelon and a crocodile puppet. After the final crescendo, that slot is a sudden jump into nothing, to which I cannot give the faintest attention. Then, Max enters the hatch and closes the door behind him. The last image glimpsing through his glasses is a steady, bright light against a dark, opaque background, in which only a few shadows are discernible. I cannot find any idealism in that light but only a profound sense of transience.*

A few weeks later, on my way to Alex's to realise the interview, I see the same pants he had worn during the performance laying outside the house, ready to be given to charity. Just as those pants would have remained out there for some time yet, Genesis *would have continued to inhabit our consciences as a trace in the memory, marked by months of devotion and tending to a cathartic state where nothing else exists. Volatile virtual spirits, inhabitants of empty space, castaways of identity stretched towards a mythical world: that is what we have been. And still bodies, bodies so alive...*

The membrane principle stated in Chapter 4 – meaning a two-way relationship between virtual reality and outer worlds – involves the many contexts gravitating around the performance. The first micro-communities to be entangled in this dynamical exchange process are those already outlined in Figure 17, born and evolving within the performance experience: authors, staff, avatars and gamers (cf. §5).[91] As shown in Figure 33, each one of these groups belong to different areas: the authors overview the performance and assist the gamers from the control room, and frequently reach the tables on the first floor for

[91] Due to the lack of an online community, gamers might not be considered as an organic social group. Nevertheless, they are described as one unique category because sharing the same space and rules of interaction.

refreshment or talking with the avatars; the staff moves around the storage room to pick up items and bring them to the hatch, and awaits for gamers' orders from the first-floor tables; the avatars work in the performance hall and live the neighbour areas before and after performing; the gamers play from their home station and join the performance hall virtually through the website. In line with the (re)definition of objects' and spaces' function over the performance week, virtuality achieved through digital technology mediation is involved in the (re)construction of social worlds related to it [Pink et al., 2016, p. 120]. Social relationships frequently regard contexts outside the performance, which are related to gamers interactions as a reference background or in the attempted communication with people not strictly pertaining to the game.

Communities of play and practice

Communities hold different kinds of connection with the performance space, which is the central pole around which each person interact. The working group inside the building (namely authors, staff and performers) and gamers playing through the website manifest different social behaviours depending respectively on the physical or digital connection with the virtual space. This dichotomy is strictly related to the categories considered by Celia Pearce of 'community of practice' and 'community of play'. The former generally defines "a group of individuals who engage in a process of collective learning and maintain a common identity defined by a shared domain of interest or activity" [2009, p. 5];[92] the latter, related to technological mediation, specifically involves "improvised interactions […] at the heart of play-based emergence. Players are inventing new games and new play activities out of an underlying instinct to optimise for intersubjective flow.[93] While they are not necessarily setting out to create new games or game mechanics, the unconscious meta-goal of achieving intersubjective flow becomes the driver for emergent, spontaneous, and unanticipated behaviour" [*ivi*, p. 133].[94] Following these categories, authors and staff are not playing but collaborating towards the performance enactment goal. Their tasks are practical and aimed at the game setting and assistance. They also live the project continuously since months before – in meetings, rehearsals, and setting up – and during its happening – in providing what is necessary to make the game work. Still, their activities tend to specific goals: the authors, to defining the performance before its start and monitoring it afterwards; the staff, to managing the logistic part and then taking care of items delivery. On the other hand,

[92] The author refers to the term defined by Jean Lave and Etienne Wenger in relation to learning processes in communities, then applied in Internet studies and computer-mediated communication [1991].

[93] "Flow is a psychological state in which the individual loses track of time and becomes completely absorbed in the activity at hand. Flow is achieved when the level of challenge is maintained in balance with the level of skill" [*ivi*, p. 131].

[94] The author borrows the 'play community' concept, defined by Bernie DeKoven as a community which "embraces the players more than it directs us toward any particular game" [1978]. Moreover, she adds: "obviously, communities of practice and communities of play share much in common, and one could even argue that play is a type of practice; however, the adoption of a new term suggests that play practices warrant their own understanding of how communities form and are maintained, a subject that becomes particularly pertinent in the context of technologically mediated play" [*ivi*, p. 5]. Thus, the 'play' concept is defined by exclusion and concerns of digital networks.

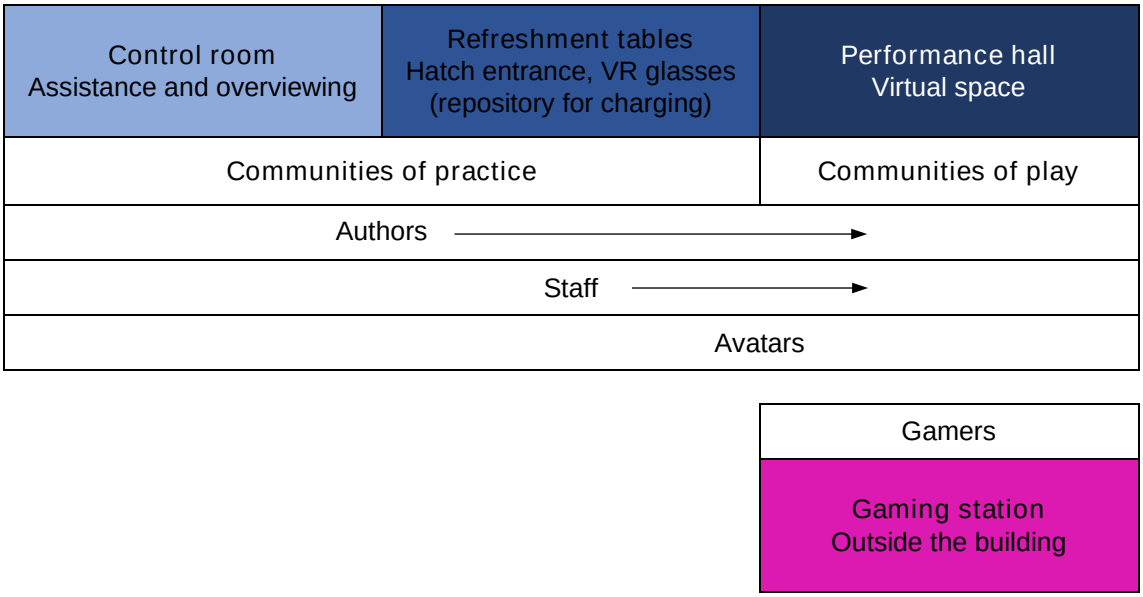


Figure 33. Communities' typology and main location, taking as a reference point the performance building.

gamers participate in the performance specifically to play. They interact by improvising through what they can retrieve, adapting to the situation to maintain a proper flow and, therefore, frequently changing goal. Intersubjectivity is firstly related to the controlled avatar and takes place mainly within one slot (cf. §6). Groups emerging from relationships between different gamers act – as commonly happens in web-based video games – "as a microlevel, short-term social network" [Taylor, 2006, p. 42], thus briefly interacting or trying to fulfil together a transient goal. If the gamer is not in line with the avatar and, consequently, the game flow results interrupted, the performance's overall concept is still flowing, also embedding such a disconnection. Finally, performers fulfil both the practice of working and playing by participating in space definition. They recognise the job task as a fundamental part of the process, also expressing fun in some actions and an active role in virtual space development [Appendix II]. Figure 33 highlights the mentioned relationships, showing how this social behaviour relates to the area to which communities usually belong. The performance hall represents the junction point between physical and virtual spaces, being simultaneously the room in which performers and objects are located and the virtual space through which they become digital avatars and items. As a physical space, it relates to the close communities that, practically involved in assisting and overviewing, undergo the performance schedule and live in the hall's sonic environment. Thus, the looping process stated in the previous chapter involves their routine also, there transferring the floating atmosphere emerging from that virtuality.[95]

[95] This development is increasingly visible in people living the building, as highlighted in the ethnographic documentation reported at the beginning of the chapter.

Nearby communities

This polarisation process becomes evident when, as highlighted by the arrows in Figure 33, some people from the staff try the game and Schubert and Horowitz join it as avatars, so approaching virtual space. The former case is observable in the plays of Juliette Krauss, Lisa Clemen and me: the first one assembles the first wall parts through screws and an electric drill (day 1, 17:27) and constructs a seesaw with a rope on a beam (day 4, 3:10); the second one hangs fairy lights between two columns (day 4, 1:46); the third one composes an installation with a red light and paper inside a half rubbish bin (day 7, 19:56). Knowledge of the inventory and the continuous space setting overviewing inevitably influence the staff members. This conscious participation – which is also part of the range of possible interactions – significantly highlights the movement of a community living the space physically towards virtual reality.

On the other hand, authors interact within the space when performing. This possibility can occur by replacing the avatars – wearing the same clothes – or playing when the avatars are not supposed to be in the hall – with a randomly chosen dress. Figure 34 shows two excerpts of Shubert's performances (day 6, 13:33 h; day 7, 23:13), with a neutral suit selected by the author. In the second picture, he plays the gong when not controlled in the last slots, before the avatars finally leave the hall one after another. It is the moment in which there is the highest number of avatars and items, and the slots are particularly dense due to noise, dancing, breaking objects and yelling: repeating that specific sound in a regular rhythm significantly underlines the climax through a spontaneous interaction.

The relationship between performers represents another social dynamic. It takes place mainly in the performance hall and the area immediately behind it, where their rooms are located. When not working, they can meet and discuss outside the hall, getting to know each other and develop trust and team unity.[96] Even if the longer period to get in touch in real-life is before the start of *Genesis*, they can often talk when their long breaks coincide. Due to the continuous participation in the game, they develop an ambivalent relationship, beginning outside it and continuing inside, and thus related to both virtual and physical social dynamics. During or after the performance, each one of them recognises the hall as an intimate place to

Figure 34. Performance excerpts: two games in which Schubert joins the performance during days 6 (on the left) and 7 (on the right).

[96] None of the avatars knows the other performers before meeting on *Genesis* [Appendix II].

be joined regularly and where to make routine actions like sleeping or eating [Appendix II]. Except for Fabian, avatars acknowledge shared practice and space, which defines them as a community. This process culminates in what they perceive as a particularly intimate moment: on the last day, while not controlled, Fabian, Carola and Yana sit together in the third living room, and Carola lies her head on Fabian's shoulder, establishing a physical and spontaneous contact (19:48).

These interactions highlight a growing interpenetration between virtual space and nearby physical areas beyond digital borders. At the same time, by opposition, they enlighten the emergence of a defined environment within the hall, with which it is possible to entertain a dialectical relationship. On the contrary of web-based video games, characteristics such as "self-identification as a member, repeat contact, reciprocal familiarity, shared knowledge of some rituals and customs, some sense of obligation, and participation" [Kozinets, 2010, p. 10] are not met by online gamers but by all the people living virtual space physically during its existence (and before): avatars, authors, and staff. Their continuous connection with space provides a social substratum filling the lack of a gamers' community, which is almost absent due to their fragmented and temporary interactions. Thus, Genesis arises as a hybrid environment that is subject to a transcultural process:

> *Transculturation* expresses the different phases of the process of transition from one culture to another because this does not consist merely in acquiring another culture, […] but the process also necessarily involves the loss or uprooting of a previous culture, which could be defined as a deculturation. In addition, it carries the idea of the consequent creation of new cultural phenomena, which could be called neoculturation" [Ortiz, 1995, pp. 102-103].

This process sees a progressive development, being virtual space nature established over time. Its identity is simultaneously fulfilled through the users' fragmented plays – within gamer-avatar systems, as shown in the previous chapter – and the relationships with nearby communities taking place in the meanwhile – who accept and recognise the hall as a specific context with which interact. Thus, virtual space becomes the place in which communities of practice and play can mutually redefine their nature: the former towards the performance rhythm; the latter aligning to the game rules. These transient contacts, happening over different periods, leave a physical trace in the space and might persist as a significant memory.

External contexts

Computer-mediated communication hosts self-contained cultures and is itself conceivable as a cultural artefact in so far as its implications also depend on the offline context in which it is used [Hine, 2000, pp. 14-40]. Relationships that gamers hold with virtual reality involve

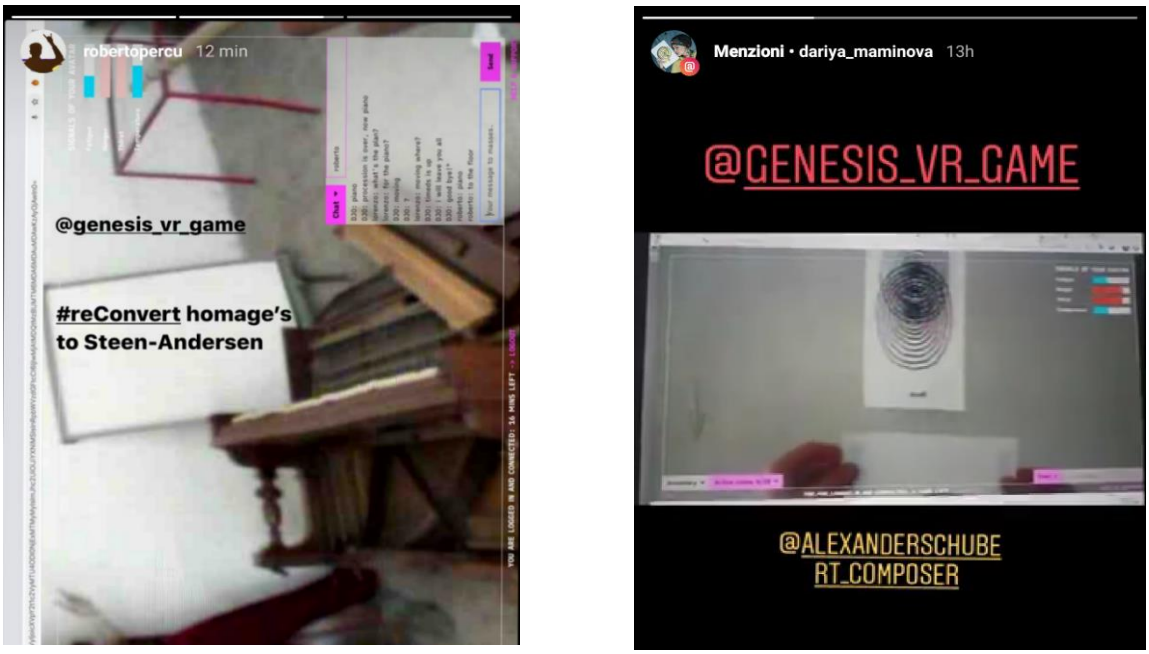


Figure 35. Instagram stories: two examples shared by gamers to show their interaction.

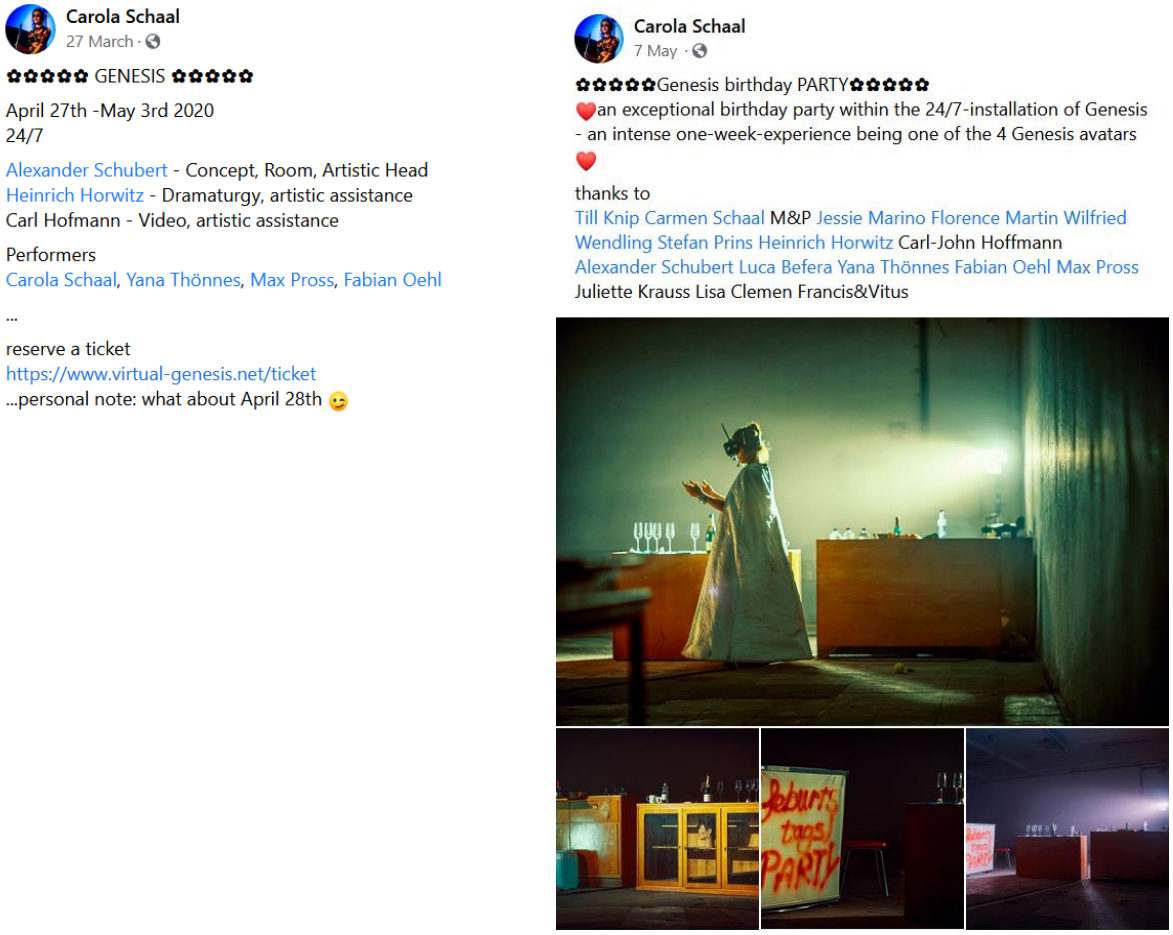


Figure 36. Carola's Facebook posts: Genesis promoting (on the left) and thanks to all the people participating in her virtual birthday (on the right).

other environments outside the game also, which might be still digital – regarding social media – or physical – regarding a face-to-face meeting.[97] Background's influence is one aspect of these dynamics and might emerge from interactions' content.[98] For example, the gamer assembling the sculpture with a mannequin, tape, a broken violin and scores on the ground (day 3, 14:15) is a violinist and multimedia artist who frequently represents distorted bodies and instruments as a unity.[99] He also states the intention to construct something with an aesthetic value. This kind of reference is also observable in the musical interaction with the electric guitar, played with a vibrating heart pillow and an accordion on its neck (day 7, 22:35). In this case, the gamer is a composer and a guitarist who frequently uses noise and expresses a clear pre-determined goal.[100] The pillow has the function of an EBow, and the accordion is an experiment to generate another inharmonic layer. Furthermore, the two gamers playing the bass drum, piano and then knocking it over the ground (day 4, 13:44) are percussion duo.[101] As evidenced in the Instagram story shown in left Figure 35, this gesture is a homage to Simon Steen-Andersen's *Piano Concerto* (2014), which takes as a starting point the audio-video recording of a grand piano falling on the floor.[102] Another Instagram story shown in right Figure 35 gives evidence of the relationship with the artistic background of the gamer, who similarly uses concentric circles as an expressive means (day 5, 7:37).[103]

Also, this kind of interactions with external contexts could occur before the performance – as the event promoting done by authors and performers – or after it – communicating a message related to one or more games. The left picture in Figure 36 shows an implicit invitation made by the avatar Carola Schaal on April 28, when her birthday takes place.[104] Not mentioning the celebration, Carola is talking to her acquaintances, who are already aware of what that date means. In response, they set up a party by writing on a canvas 'Geburtstags Party' (birthday party) and organising an area with a table and a candle holder (day 2, 20:00). She also receives some presents: a friend of hers plays a fugue from home while she lays on an armchair (day 2, 16:45); the authors deliver a sparkling wine bottle to the hatch (not included in the inventory), opened within the hall for toasts. Finally, she thanks all the people contributing to the event, sending a message to the cited people and, also, to all the Facebook contacts that can read the post (Fig. 36, on the right). Communication through social media

[97] For further information about this aspect, consult the book *Netnography*, where it is already stated that "a majority of people who belong to online communities meet other online community members face-to-face" [2010, p. 14]. It is not possible to retrieve evidence of gamers face-to-face meeting, except for known ones.

[98] This emergence as already been stated in relation to avatars – regarding how they characterise their behaviour (cf. §5) – and authors – concerning the relationship with institutions and previous works (cf. §1).

[99] The following information has been retrieved by talking to the gamer, who I personally know, on December 20. The gamer prefers to remain anonymous.

[100] The following information has been retrieved by talking to the gamer Luca Guidarini, who I personally know, on December 2. He kindly allowed me to report his identity.

[101] The reConvert duo kindly allowed me to report their identity on December 21. For more information about the project, see the related website [Colombo & Maqueda, 2020].

[102] This story also shows a chat discussion about what to do with the piano, outlilning a short community interaction.

[103] The artist Dariya Maminova kindly allowed me to report her identity on December 21. She also states the recording of some excerpts to be further shared on social media. Thus, she aims to share the experience with her real-life environment. For more information about her projects, see the related website [Maminova, 2020].

[104] The following data regarding Carola's acquaintances have been retrieved by talking to Carola herself on December 21 and by the interview [Appendix II.2]. She kindly allowed me to report her Facebook posts.

implies transferring the game content to another web-based platform, thus involving an external audience. In these cases, relationships mediated by digital platforms – such as social media or, in the authors' interaction case, game virtuality itself – are a mediation to connect with known people or make others aware of the special event.

The various mentioned communities are considerable as satellites of the performance, mutually related and highly significant for space definition. The multifaced quality of connections is referrable to the 'socialities' principle mentioned by Sarah Pink et al. concerning digital technologies communication:

> The concept of socialities refers, not to a specific type of social relationship per se, but rather to the qualities of social relationships. It is an open concept that enables us to recognise that social relations between people are multiple, can be fluid, and change at different rates. Hence, it also allows us to conceptualise how the ways in which people become related or 'connected' to each other through and with digital technologies might be similarly changing. [2016, p. 107]

This general concept helps to identify the many interactions happening in the performance hall and around it, characterised by a fluid interpenetration: gamers adapting to space dynamics and rules according to what they can retrieve and to their background; authors establishing a connection with all the people similarly involved in the setting and relating with external institutions and contexts; avatars maintaining a double facet in between performers and virtual characters, implying both the mentioned dynamics; staff organising the setting and being continuously in touch with items and people around the building; authors and staff joining the game at times. All these communities are in various and continuous relationships with each other, at the same time contributing to space definition. Therefore, *Genesis* proves to be not entirely sealed within the virtual world: the aseptic setting is a means through which socialities can redefine themselves with new communication ways. Participation results as transient for gamers – who refer to other contexts outside the game – and continuous for avatars, authors, and staff – mainly related to virtual space dynamics. It follows that the more the immersivity is extended over time, the more it is established a self-referential social group that belong to the inhabited space – as implied in the persistency principle regarding online communities; the shorter the immersivity results, the more the users tend to connect their experience with other social contexts outside the virtual reality.

All the performance events and interaction enacted through different communities described in the previous chapters reach their climax in the last hours. This series of episodes is the endpoint of a one-week accumulation, thus releasing a significant amount of tension. It emerges from partial crescendo, reached over the last slots. The interaction with the electric guitar at 22:35 previously described precedes the keyboard setting on the golden foil on the floor, played with the feet. Meanwhile, Fabian makes a turned-on microphone oscillating in front of a speaker to generate regular feedback's impulses. Then, Max tapes all the keyboard pitches and Carola, wearing a tent as a bat costume, refuses to destroy the guitar on the mixer

but yells in the meantime. At 23:11, Alex enters to play the gong around, enhancing the tension, while avatars are in the middle and dancing or standing still together. While the keyboard drone-cluster keeps going and the feedback and the vibrating-heart-played guitar are occasionally heard in the background, some plates are broken. Then, slowly, everything calms down. At 23:15, the keyboard is disconnected, and Carola goes outside. Shortly after, Max and Yana blow up an inflatable watermelon, and Fabian sits on the sofa with a beer until exiting the hall at 23.30. Meanwhile, only a music box sound is audible in the background, contrasting with the loud noise of some moments before. Then, Alex comes out, and only silence remains. Yana follows at 23:45. In the last minutes, Max makes pictures with a Polaroid and puts the watermelon, Germany maps, and a crocodile puppet on a table frame. Then he exits shortly after midnight. The accumulation process developing over the performance week reaches its climax between 22:45 and 23:15 when the match between the highest number of avatars and items inside the hall happens. The presence of Alex is also relevant in increasing the number of events and establishing a connection with the external areas.

In terms of actions and sound, this kind of chaotic moments emerges at almost regular intervals during the second, fourth and seventh days. On the other hand, caring, connecting, and playing interactions continuously take place over the whole performance; gamers create communal places mainly during the first four days; artworks are particularly numerous on the sixth day. These trends become normative: the more the performance progresses, the more recurrent typologies of interaction emerge, and each game becomes a variation of the same category. This perception implies a circularity taking place at different ranges, while space variety keeps progressing through items accumulation and different reconfigurations. When the climax finally occurs, it embeds this implicit normative process and, at the same time, its collapse, determined by an unprecedented – and unpredictable – quantity of events. The following minutes are a gradual return to the initial state, establishing a macro-formal circularity. But now, that virtual world that is going to disappear implies all the relationships and events that happened in one week. Presumably because of this, the last light seems so intensely shining, leaving a sense of vivid transiency and entirety.

Figure 37. Performance excerpts: snapshots of the last slots, showing the avatars gathering (on the left) and the final frame (on the right).

CONCLUSIONS

Genesis shows various influence rooted in the social experiment but also involving significant performative aspects. The authors' setting does not avoid a theatrical outcome entirely because of the home audience, stage preparation and actors' interpretation of the avatar's role. Nevertheless, due to real-time interactivity with avatars and space, virtual immersivity and social interaction prevail on other factors. Digital devices – from VR glasses and pop-up messages to screen view, vocal communication to headphones, servers to the website through receivers and switches – filter and fragment each interaction in codified units, further transcoded according to environmental rules. This process is in line with the hall setting, specifically built to mirror each physical entity's virtual shift – namely avatars, items, and space. The hatch stands as the primary threshold through which redefining materiality and habits. Also, closed borders (both physical and temporal) and aseptic prerequisites of the hall imply a space out of ordinary time and space, thus fostering the projection towards another world.

On the other hand, involving human beings as avatars enhances social relationships remotely enacted. The first-person view and the dynamic of control determine a strong sense of embodiment, which can be *in* the avatar – when perceived as an obeying-orders character – or *of* the avatar – when gamers conceive him/her as human beings. Furthermore, avatars often manifest a clear will, which becomes another variable in the gamer-avatar relationship. Thereby, different kinds of interaction occur, frequently changing within a single slot: from the domination of gamer or avatar – respectively, when the avatar acts as an obeying-orders character and the gamer holds a passive role – to collaboration or friction – when both gamer and avatar manifest a clear will. The gamer-avatar system's internal dynamics are projected towards objects, space, or other gamer-avatar systems, progressively defining the space over time.

Therefore, social dynamics leave a tangible trace on recorded footages, which stand as evidence of the whole process. The analysis and documentation refer to these stored memories, providing a reconstruction of the performance *post factum*. From this external perspective, it is possible to infer a formal structure simultaneously presenting cyclical and linear principles: the former, regarding repetition of interactions' typologies and slots' distribution over the seven days; the latter, concerning items accumulation and, thus, the ever-different space setting. On the other hand, gamers mainly focus on the playing moment, adapting to what is happening and retrievable inside the hall. The short length of the slots and the few numbers of recurrent gamers determine the lack of a planned continuity. Each interaction results as a snapshot of the entire process, being highly significant in the performance evolution inasmuch intrinsically transient. Within this narrow range, gamers move strictly from a given state to another.

So, there is not a persistent online community related to *Genesis*. Instead, people living in the performance hall and the neighbour rooms establish a close connection with the game over time. Besides avatars, also staff and authors deeply influence the game: firstly, they plan

and set up the performance since months before the beginning; then, they adapt to space by continuously participating in assistance and changing their habits towards the performance articulation. They manifest a deep permeation with the virtual environment, also visible in the authors' tendency to play as avatars and staff to participate as gamers. Thus, the performance hall progressively becomes a gravitational pole, expanding beyond its own physical and conceptual borders. Outer contexts are similarly involved in this process. Firstly, the background of each subject influences how relating with space: authors define rules and stage in relation to previous virtual reality experiments, *technoculture*, and urban social movements; gamers, many of which referring to the authors' artistic environment, bring their knowledge and habits inside their play; avatars' background influences their role interpretation. Secondly, gamers and avatars share contents related to their plays through social media or messages left inside the hall.

The virtual shift process entails a transcultural interconnection between various social environments, not only belonging to the hall but influenced by and tending to a broader range of contexts. *Genesis* world becomes the axis around which subjects gravitate, filtering and redefining each interconnected network through its specific rules. The performance transcodes and redefines every action, giving the possibility to widen pre-existing social dynamics. The new world progressively establishes its identity as an organic being, expressing a vivid and pulsating facet in variable space organisation.

Future perspectives

The present text lay the foundations for further studies on the piece, making the vast amount of data accessible in line with the authors' concept. Still, *Genesis* leaves the field open for several other insights.

In the artistic field, emerging possibilities could be examined again through new performances. The modification of certain parameters – such as slots' and performance's length, size and appearance of the room, objects available – could provide additional comparative data for future research. More significant setting alterations would be considered unrelated to the original concept, although equally incisive in the development of poetic experimentation. Moreover, the refinement of technical aspects and avatars' control dynamics would lead to a broader and more functional range of data in light of what happened.

In the scientific area, the results obtained could be compared with other works by the author or others showing similar aesthetics to confirm, question, or re-evaluate their effectiveness. Scholars might investigate the relationships between the composer's socio-cultural context and the performance conception, linking some aspects – such as the industrial appearance of the setting, the autonomy of the piece concerning pre-set rules, the fusion of human and technological factors, gamers' 'in-the-moment' experience, the artistic-conceptual matrix, and the explicit self-analysis will – to broader trends underlying the realisation of the piece.

APPENDIX

The Appendix provides three sections related to the material collected and realised to fulfil the documentation task in relation to the ethnographic methodology.

Appendix I entails the timelines studied in Chapter 6 and mentioned in Chapter 5 and 7. They report 331 interactions, selected to give a comprehensive overview of the events (according to what observed and noted *in loco* and available recordings analysis) and make the huge amount of data easily accessible. Each day consists of two parts. The first one provides a graphical representation of selected events on the time axis. Vertical marks show when interactions happened, while pictures highlight some snapshots from the video recordings. The second part includes details about these interactions: time, controlled avatar's channel (Ch1 = Max; Ch2 = Carola; Ch3 = Fabian; Ch4 = Yana), category (cf. §6), and a brief description. Boxes in blue evidence interactions related to the pictures, also signalled in the timelines through numbers above vertical marks.

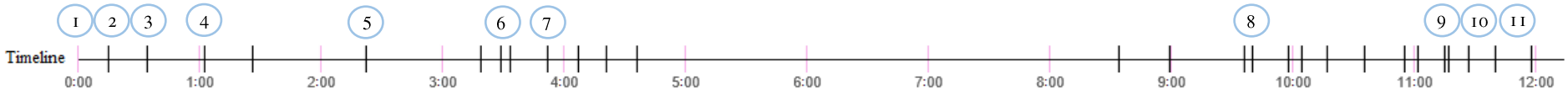
Appendix II documents the author's and avatars' perspectives, useful for understanding the compositional process and the performers' experience during the play. Each text is a transcription of the recorded interviews, which occurred on the date reported in the titles. The author explains the project's conception and purposes, the role of virtuality and immersivity, his personal experience during the performance, and technical aspects. The avatars describe their physical or digitally mediated relationship with people, perception of virtuality and immersivity, emergence of communities, and attitude in performing.

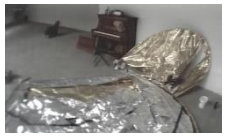
Appendix III reports the questionnaire's open answers. Even if 110 gamers fulfil the form, only between 55 and 88 responses result in these sections (cf. note 28). The five parts show a selection of the responses, skimming the repetitive contents to restrict the still vast amount of data and show the overall picture. An asterisk marks texts translated from German.

I. TIMELINES

DAY 1, MONDAY 27.04

						
1. 0:00; Ch1 Start	**2.** 0:15; Ch2 Naked avatar	**3.** 0:34; Ch1 First light	**4.** 1:02; Ch1-2-3 Living room	**5.** 2:22; Ch1-3 Golden foil setting	**6.** 3:29; Ch1 Kitchen	**7.** 3:52; Ch1 Bathroom

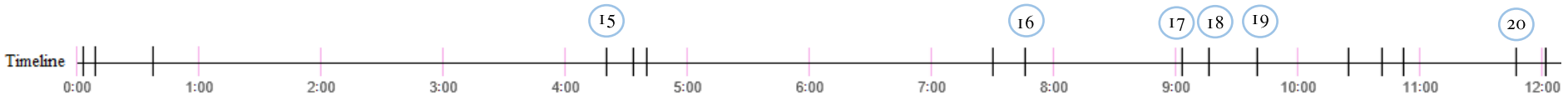


						
8. 9:40; Ch4 Dismantled piano	**9.** 11:15; Ch2-4 Brown tape canvas	**10.** 11:27; Ch2 White fabric canvas	**11.** 11:40; Ch1 'I'm an avatar'	**12.** 12:25; Ch1 Totem sculpture	**13.** 14:00; Ch2 TV-keyboard space	**14.** 14:10; Ch1 Golden foil on TV

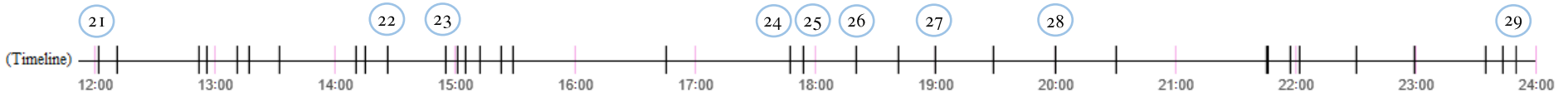
Hour	Channel	Category	Description
0:00	Ch1		Start (1)
0:34	Ch1	Constructing	First light (3)
1:02	Ch1-2-3	Constructing	Living room with table, couch, chair, and light in the middle (4)
1:26	Ch1-3	Partying	Dancing and bow
2:22	Ch1-3	Constructing	Toast and golden foil setting (5)
3:19	Ch1	Caring	Wearing clothes
3:29	Ch1	Constructing	Kitchen with furniture, cutlery, and bottles (6)
3:33	Ch3		Piano in
3:52	Ch1	Constructing	Bathroom (7)
4:07	Ch1	Caring	Jacket to cover another avatar
4:21	Ch1-3	Playing	Jumping interaction
4:36	Ch1	Playing	Waves with golden foil
8:34	Ch2		Keyboard in
8:59	Ch4	Music	Keyboard setting and playing
9:36	Ch3	Music	Piano session with specific requests (Anna Magdalena) and then improvisation
9:40	Ch4	Violence	Piano partially dismantled (8)
9:58	Ch2	Artwork	Installation with golden foil, CD, banana, and strobe light on the piano
10:04	Ch3-4	Music	keyboard and violin, solo violin, violin, and piano
10:17	Ch2-3-4	Playing	Measuring each other and golden foil waving
10:35	Ch4	Violence	Removing another piano cover
10:55	Ch2	Music	Noise: violin and VHS player laying on keyboard keys
11:02	Ch2-4	Violence	Screaming around
11:15	Ch2-4	Constructing	Creation of a canvas on the ground with brown tape (9)
11:17	Ch3	Playing	Yelling while running around with Goku doll and playing melodica
11:27	Ch2	Conceptual	Writing 'LEAVE NO ONE BEHIND' on white-long fabric, then soap bubbles on it (10)
11:40	Ch1	Conceptual	Writing on the mirror 'I'm an avatar' (11)
11:58	Ch2	Music	First keyboard sample music
12:25	Ch1	Artwork	Totem with oriental pants, spray, and gong, then performing a 'ritual' with bubbles (12)
13:00	Ch4		Electric guitar in
13:34	Ch4	Conceptual	Writing 'you are able to act responsibly without authoritarian laws' on melton
14:00	Ch2	Constructing	TV in, creation of a space with TV, keyboard, and amplifier (13)
14:10	Ch1	Constructing	Golden foil moved with a crowbar in front of the TV and dancing (14)
14:15	Ch1	Music	Keyboard pitches taped
14:40	Ch1	Connecting	Asking to write his desired name (Gustav) after trying to find out his real one
14:42	Ch1	Artwork	Colouring shoes with red spray
14:48	Ch1	Music	Removing tape on the keyboard except for one key
14:50	Ch1-4	Connecting	Hugging and touching the other's glasses
15:36	Ch4		Organ in
17:00	Ch2	Playing	Lobster puppet playing
17:12	Ch1	Artwork	Picture made with coloured tape on the wall
17:20	Ch2	Artwork	Sewing machine sculpture
17:25	Ch1	Conceptual	Writing on the black melton 'Miguel was here' below the other writing
17:27	Ch4	Constructing	First wall, then bringing carpet, plants, and chandelier in the living room
17:33	Ch1-2	Music	Organ and violin interaction finishing with a fuck off with the ring finger
17:45	Ch1		Fog machine in
18:00	Ch2	Playing	Boccia play
18:32	Ch3	Music	bass drum in
18:35	Ch2		Mirror ball in
18:54	Ch1	Music	Vinyl player used for Hot Tuna disk
18:57	Ch3	Music	Playing conga on a keyboard sample
19:00	Ch3-4	Partying	Mirror ball used as a ball and dancing
19:15	Ch1		Tent in
19:21	Ch4	Connecting	Asking information about the avatar
19:30	Ch1-4	Connecting	Beer exchange
19:44	Ch1	Caring	Carpet setting and relaxing on it
19:48	Ch1-3	Playing	Playing morra
19:52	Ch2	Music	Whistling a song previously played
20:00	Ch2	Connecting	Asking to hug and kiss another avatar (command rejected)
20:32	Ch1-4	Partying	Wearing funny clothes and dancing
20:50	Ch3	Music	Megaphone and accordion
20:51	Ch1	Violence	Slapping another avatar with a wurst
20:54	Ch1	Partying	Making the avatar dance with music played from gamer's home
21:00	Ch4	Music	Jam session with congas and keyboard, then congas played faster and faster
21:56	Ch2	Artwork	Lobster in a paint bucket, then writing with a finger soaked with paint
23:12	Ch1	Playing	Wheeled table in and skating on it
23:13	Ch1-3-4	Violence	Fight with a mirror ball
23:20	Ch3-4	Connecting	Drinking together and howling while lying on the ground
23:30	Ch3		Table soccer in
23:40	Ch4	Violence	Using a drill on a can
23:51	Ch1	Violence	Sawing on a hospital chair and bass drum to remove the pillow inside, then relax

DAY 2, TUESDAY 28.04

							
15. 4:20; Ch3 Sleeping	**16.** 7:46; Ch3 Morning coffee	**17.** 9:03; Ch2 Kitchen refined	**18.** 9:16; Ch2 Tent space	**19.** 9:40; Ch3 Table frame in	**20.** 11:47; Ch2 Walls	**21.** 12:11; Ch1 Columns taped	**22.** 14:26; Ch1 Blue couch in

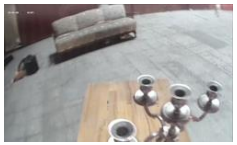


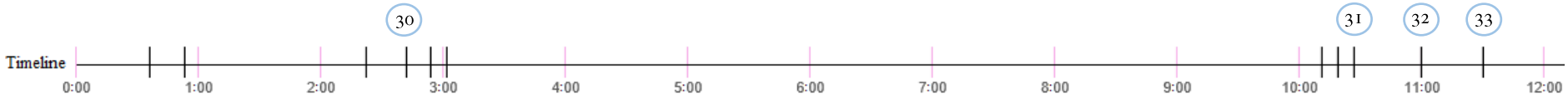
						
23. 14:55; Ch1 Tent moved	**24.** 17:47; Ch1 Sandcastle	**25.** 17:54; Ch3 Smile on a carpet	**26.** 18:20; Ch1 Sculpture	**27.** 19:00; Ch2 Board tools table	**28.** 20:00; Ch4 Party writing	**29.** 23:50; Ch3 Tools table



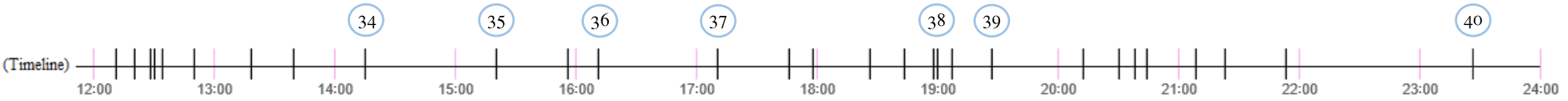
Hour	Channel	Category	Description
0:03	Ch4	Artwork	Sculpture with a chain around amplifier and broken bass drum
0:09	Ch2	Music	Playing cymbals and bongo with a pirate flag occasionally waved
0:37	Ch1	Artwork	Red velvet chair with mirror ball on it
4:20	Ch3	Caring	Flowered couch in, used to sleep (15)
4:33	Ch1	Violence	Inspecting the doors around the hall, asking for breaking them with an axe
4:40	Ch1	Connecting	Asking for touching the gamer's eyes, then to play something for him
7:30	Ch2	Caring	Breakfast
7:46	Ch3	Caring	Morning coffee with a stove on the ground (16)
9:03	Ch2	Constructing	Kitchen refined (17)
9:16	Ch2	Constructing	Tent space in the corner (18)
9:40	Ch3		Table frame in, next to be the tools table (19)
10:25	Ch2-4	Playing	Coffee, then playing together with the mirror ball
10:41	Ch2-4	Music	Organ four-hand
10:52	Ch4		Inflatable pool in
11:47	Ch2	Constructing	Living room with walls (20)
12:02	Ch1	Music	Amplifier on keyboard pitches
12:11	Ch1	Constructing	Tape connecting the columns, then golden foil on the suspended tape (21)
12:52	Ch2	Caring	Pasta cooking and coffee machine setting for the next morning
12:56	Ch2-4	Constructing	Construction with a belt
13:11	Ch1-2	Music	Organ pipes playing
13:17	Ch2	Playing	Avatars' arms and trunk wrapped up
13:32	Ch1-2	Connecting	Toast
14:10	Ch1-4	Playing	Playing chess
14:15	Ch1	Playing	Lighting the flare and wandering around with music
14:26	Ch1		Light blue couch in (22)
14:55	Ch1	Constructing	Tent moved at the beginning of the long white fabric (23)
15:01	Ch1	Caring	Running after balls to warm up
15:05	Ch1	Conceptual	Writing 'APRUEBO' on long white fabric
15:12	Ch1	Artwork	Cutting vinyl with an electric saw and using it to embellish and prepare the piano
15:23	Ch1	Artwork	Painting a bottle in white, then putting it on the table as a decoration
15:29	Ch1	Artwork	Red spray paint on a pirate jacket and a vest, then hung on the wall to create a composition
16:45	Ch2	Music	Playing a fugue from home for the avatar laying on an armchair
17:47	Ch1	Playing	Sandcastle inside the inflatable pool (24)
17:54	Ch3	Artwork	Smile made by a child on a carpet with green paint (25)
18:20	Ch1	Artwork	Sculpture with a raised couch and a mannequin (26)
18:41	Ch1	Music	Playing congas while the gamer improvises singing
19:00	Ch2	Constructing	White wooden board on the next tools table (27)
19:29	Ch2	Music	Piano and violin played with a stick
20:00	Ch4	Constructing	Preparing Carola's party with writing on a canvas and a table with a candle holder (28)
20:30	Ch1-2-3-4	Partying	Carola's birthday party, dancing, presents, toast
21:45	Ch2		Projector in
21:46	Ch4	Music	Singing on a megaphone siren
21:57	Ch4	Constructing	Plastic film around columns, hanging the accordion case on an 'X' made with duct tape on film
22:02	Ch3	Constructing	Continuing to wrap up the plastic film around objects
22:30	Ch1	Artwork	Writing 'MAGIC' on a white fabric hung on a fake wall
22:59	Ch1-3	Partying	Long and articulated dance on classical music
23:35	Ch2	Caring	Coffee poured in a bowl, plant moving, clothing and objects grouped in a corner
23:43	Ch2-3-4	Music	Low drone with a planer on the bass drum and electric guitar
23:50	Ch3	Constructing	Tools table completed with tools on it (29)

DAY 3, WEDNESDAY 29.04

					
30. 2:42; Ch1 Watching from the bed	**31.** 10:27; Ch2 Space setting	**32.** 11:00; Ch2 Bed completed	**33.** 11:30; Ch2 Living room #2	**34.** 14:15; Ch1 Broken violin sculpture	**35.** 15:20; Ch4 Costume sculpture



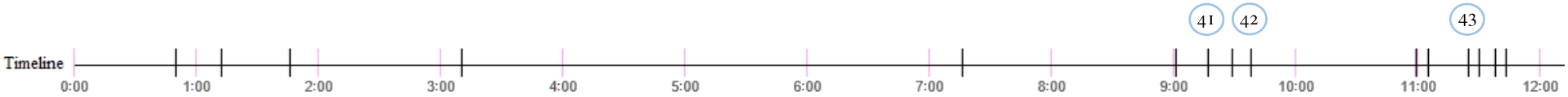
				
36. 16:11; Ch4 Watching TV	**37.** 17:10; Ch1 Tent with a swimsuit	**38.** 19:00; Ch4 Writing desk besides sculpture	**39.** 19:27; Ch4 Embellishing the writing	**40.** 23:26; Ch4 Shopping cart sculpture



Hour	Channel	Category	Description
0:00	Ch2	Connecting	Communication through writings on a sheet
0:36	Ch4		Fairy light in
0:53	Ch3	Conceptual	Writing behind the white fabric 'MAGIC', a question mark and 'leave no one behind'
2:22	Ch3		Bed in (without mattress)
2:42	Ch1	Caring	Watching a projection from the bed (30)
2:54	Ch3	Connecting	Making the avatar touch his face and body
3:02	Ch3	Caring	Sticking on a wall and raising arms and legs as physical exercise
10:11	Ch3	Caring	Initially not knowing the game, then asking for food and beverage
10:19	Ch4	Caring	Breakfast
10:27	Ch2	Constructing	Space construction with flowered couch and table with candle holder (31)
11:00	Ch2	Constructing	Bed completed with mattress, pillow and sheets (32)
11:30	Ch2	Constructing	Space completed with flowered couch, armchair, table with candle holder, and pink pitcher with flowers, carpet, velvet fabric, orange chair and a vinyl; then reading on the couch (33)
12:11	Ch4	Connecting	Guest book on yellow post-it notes
12:20	Ch4	Constructing	Orange thread around all the four columns adding to film and tape
12:28	Ch1-4	Playing	Ping pong playing
12:30	Ch1	Violence	Breaking a tray to weak up an avatar who is sleeping and not helping
12:34	Ch4		Second tent in
12:50	Ch2	Connecting	Communication between avatar and gamer, then the gamer talking about his fears and problems for the pandemic
13:18	Ch1	Constructing	Pumping the inflatable pool and putting water inside
13:39	Ch1	Conceptual	Photo with a Polaroid
14:15	Ch1	Artwork	Sculpture with a mannequin, tape, broken violin, and scores on the ground (34)
15:20	Ch4	Artwork	Hanging a costume on a column and then cutting the belly out to make a face (35)
15:56	Ch1	Connecting	Asking for a distinctive sign to recognise the avatar in a further play, the avatar draws two lines: 'Two Lines' becomes his name
16:11	Ch4	Caring	Watching TV and reading Vice (36)
17:10	Ch1	Caring	Having a seat on a chair inside the inflatable pool, and watching the tent with a swimsuit on the top (37)
17:46	Ch1	Connecting	Asking for olfactory and tactile feelings, then mirroring movements of another avatar
17:58	Ch2	Playing	Playing with a bra as a jumping rope
18:26	Ch1-2	Connecting	Interaction with flowers
18:43	Ch2	Playing	Playing table soccer with a tube and soap bubbles
18:58	Ch1-2	Music	Playing tambourine and recorder
19:00	Ch4		Writing desk in, put beside the column and a sculpture (38)
19:07	Ch2	Connecting	Writing 'please leave a message' on a sheet, then playing three in a row
19:27	Ch4	Artwork	Embellishing the writing 'leave no one behind' with flowers and mannequins (39)
20:12	Ch4	Connecting	Writing 'happy birthday' on a door
20:30	Ch2	Connecting	Gamer introduces herself while the avatar is wandering around on a bike
20:38	Ch3	Playing	Vaulting horse with another avatar
20:44	Ch1-3	Playing	Exchange of terrain sacks with milk
21:08	Ch2-4	Playing	Shortly playing chess and then riding the bike together
21:23	Ch4	Artwork	Mannequin head on the grill
21:53	Ch2	Caring	Shortly cleaning the hall, then asking for windows
23:26	Ch4	Artwork	Sculpture with shopping cart and flashing light (40)

DAY 4, THURSDAY 30.04

						
41. 9:17; Ch4 Playing four in a row	**42.** 9:38; Ch4 Writing on palm	**43.** 11:30; Ch4 Drawing an avatar on a post it	**44.** 12:25; Ch2 Cutting the couch	**45.** 13:18; Ch4 Parade with flowers and cymbals	**46.** 13:32; Ch2 Playing the kitchen	**47.** 14:18; Ch1 Bach and Campari

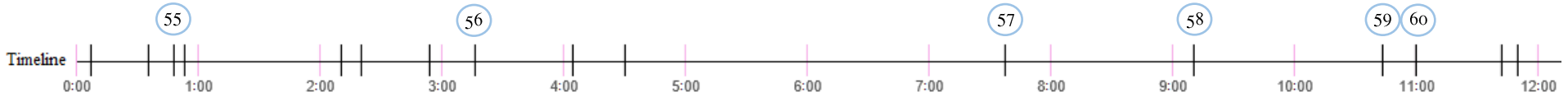


						
48. 14:38; Ch1 Avatar framed	**49.** 16:00; Ch1 Fairy lights on railing	**50.** 17:05; Ch4 Table in a fake-wall cover	**51.** 18:28; Ch2 Continuing the wall	**52.** 18:48; Ch2-3 Waterproof fabric curtain	**53.** 20:21; Ch1-2-3 'Castle' construction	**54.** 22:15; Ch3 Carving gamer's name

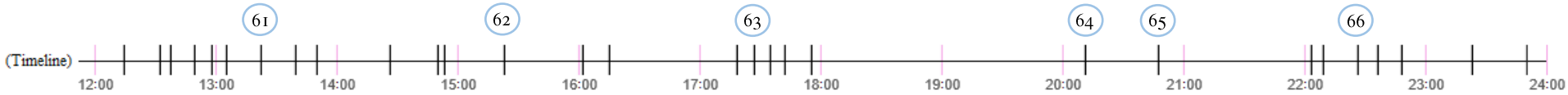
Hour	Channel	Category	Description
0:00	Ch3	Conceptual	Thanks for the authors and staff written and left it in the hatch, where cameras are supposed to be
0:50	Ch2-3	Music	Playing keyboard with cymbals, then cymbals with a vinyl
1:12	Ch2-3	Partying	Dancing together
1:46	Ch3	Constructing	Fairy lights hung between two columns
3:10	Ch3	Constructing	Constructing a seesaw with a rope hung on a beam
7:16	Ch3	Caring	Morning coffee
9:01	Ch4	Caring	Enjoying a cigarette
9:17	Ch4	Playing	Playing four in a row on a door (41)
9:29	Ch4	Caring	Changing shoes for running after stretching
9:38	Ch4	Conceptual	Writing 'transformation now' on palm to let it visible for following players (42)
10:59	Ch4	Connecting	Climbing a table to look at another avatar from above
11:05	Ch2-4	Caring	Singing to another avatar while he is eating, then offering food and feeding her
11:25	Ch2	Playing	Playing football
11:30	Ch4	Artwork	Drawing an avatar on a post-it and hanging it on another avatar's glasses (43)
11:38	Ch4	Playing	Shopping cart run with megaphone siren and jumping in the pool before the time to play finishes
11:43	Ch1	Constructing	Hanging fake reindeer head on the wall with nails and hammer
12:25	Ch2	Violence	Throwing items away, searching for techno music and cutting various objects (44)
13:18	Ch4	Playing	Clothing the avatar, then performing a parade with flowers and played cymbals (45)
13:27	Ch2-4	Music	Bass drum rhythm to accompanying the other avatar's parade
13:32	Ch2	Music	Playing objects in the kitchen with sticks (46)
13:44	Ch1-2	Music	Playing the bass drum, the piano and then knocking it over the ground
14:18	Ch1	Caring	Playing a Bach disk, drinking Campari and smoking a cigar (47)
14:38	Ch1	Conceptual	Raising a frame to represent a picture with the avatar inside (48)
15:21	Ch4	Artwork	Repairing a house pictured with a tape on the wall
15:24	Ch1	Music	Music made with cloud machine music as an installation
15:52	Ch1	Caring	Cleaning up
16:00	Ch1	Constructing	Hanging fairy lights on a railing and adding a spotlight (49)
16:30	Ch1-4	Connecting	Searching for help to find water
16:41	Ch1-4	Connecting	Communication through writings on paper
16:49	Ch2	Artwork	Picture with tape on the ground
17:05	Ch4	Constructing	Space in a fake-wall cove with a glass door, table and armchair (50)
17:23	Ch1	Caring	Child playing with his mother, writing 'stay at home' on a wall
17:53	Ch2	Caring	Cooking potatoes and eggs
17:59	Ch1	Playing	Child playing four in a row with the avatar
18:28	Ch2	Constructing	Continuing the wall construction connecting other parts (51)
18:48	Ch2-3	Constructing	Adding red waterproof fabric to a wall perimeter cove as a curtain; some gamers are in the same gaming room (52)
20:21	Ch1-2-3	Constructing	Construction of vast room in the middle (the 'castle') with boards, furniture and moving the bed, couch, and table in (53)
21:37	Ch1-2	Playing	Shopping cart run in which one avatar pushes the other, then exchanging
22:15	Ch3	Artwork	Carving gamer's name upon furniture with a planer (54)
22:26	Ch4	Partying	Slot played by a group of people, trying to set a party with music and dancing
23:00	Ch2	Constructing	Golden fabric hung on high threads
23:17	Ch3	Connecting	Avatar explaining how to retrieve items

DAY 5, FRIDAY 1.05

					
55. 0:48; Ch2 Microphone on a fan	**56.** 3:16; Ch3 Bricolage	**57.** 7:37; Ch3 Concentric circles painting	**58.** 9:10; Ch4 Niche with microscope	**59.** 10:43; Ch4 Embellishing sheets on the ground	**60.** 11:00; Ch3 Miniature family



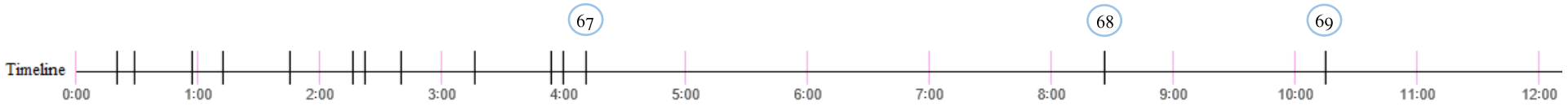
					
61. 13:22; Ch2 Pirate flag and violin assembly	**62.** 15:23; Ch4 Cosy tent setting	**63.** 17:27; Ch4 Bike embellishing	**64.** 20:11; Ch3 Ladder and golden fabric sculpture	**65.** 20:47; Ch1 Garden zone	**66.** 22:26; Ch4 Writing on a bed sheet

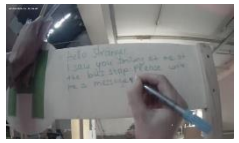


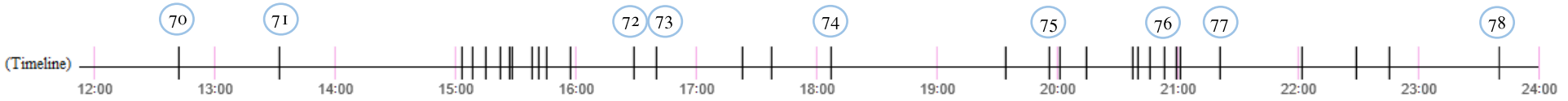
Hour	Channel	Category	Description
0:07	Ch1-2-4	Partying	Dancing and drinking together
0:35	Ch1-4	Connecting	Writing 'I love you' on a sheet and giving it to the other avatar
0:48	Ch2	Music	Building an instrument with a microphone on a fan (55)
0:53	Ch1	Caring	Midnight snack
2:10	Ch3	Partying	Imagining to be in a rave party, yelling, and drinking
2:20	Ch3	Violence	Walking on the knocked-over piano
2:54	Ch3	Violence	Dancing on a broken table, then generating feedback with a microphone inside the bass drum
3:16	Ch3	Artwork	Bricolage by cutting out two circles from a book cover (56)
4:04	Ch3	Violence	Breaking the piano and yelling 'vive la liberté'
4:30	Ch3	Violence	Asking for cutting the cables of a plugged light, gamers kicked out
7:37	Ch3	Artwork	Painting concentric circles on a sheet (57)
9:10	Ch4	Artwork	Sculpture with golden foil, a microscope, mask, and a lighten plant (58)
10:43	Ch4	Artwork	Spilling alcohol on sheets on the ground, then embellishing them with Styrofoam and wooden boards (59)
11:00	Ch3	Artwork	Representing a miniature family inside a birdcage between a world map and a folding chair (60)
11:42	Ch4	Violence	Misplacement, then using a saw to cut a table
11:50	Ch2	Constructing	Stretching a thread between two columns and hanging white and golden clothes on it
12:14	Ch4	Playing	Playing with origami, domino, candles, and a toy tunnel
12:32	Ch4	Caring	Putting candles on the sand while reading *The Book of the Universe*
12:37	Ch1	Violence	Taping two other avatars
12:49	Ch1	Playing	Freeing the avatar taped before, then sticking two wooden blocks on avatar's tibias
12:58	Ch1	Violence	Hitting the wall with two hammers
13:05	Ch2	Caring	Laying on the light blue couch
13:22	Ch2	Artwork	Moving pirate flag on the iron block to make a sculpture with a violin, then letting the avatar sign it (61)
13:39	Ch2	Caring	Laying on the couch while the gamer talks to her
13:50	Ch1	Music	Singing
14:26	Ch4	Connecting	Explaining to the gamer how to play
14:50	Ch1	Playing	Laying a mannequin of a child on a bed
14:53	Ch1	Music	Asking for playing a Bach *Invention* but the piano is broken
15:23	Ch4	Constructing	Tent setting on a corner with plants, golden fabric, red light and a sheet with 'welcome' written on the top (62)
16:02	Ch4	Playing	Table soccer play
16:15			Paint banned from the inventory
17:18	Ch1	Playing	Writing 'I'm shark Jesus' on a sheet and showing it to the others while wearing a shark costume
17:27	Ch4	Artwork	Bike embellished with a plant and an umbrella, then picturing another avatar (63)
17:35	Ch1	Music	Broken piano played with drum's sticks
17:42	Ch4	Connecting/Violence	Wrapping a present with a page of *The Book of the Universe* and destroying it afterwards
17:55	Ch1	Connecting	Gamer asking for avatar's name, what he wants to do and information about the VR set
20:11	Ch3	Artwork	Ladder on a table with golden fabric and puppets on as decoration (64)
20:47	Ch1	Constructing	Garden zone made by a tent with grass, plants, palm tree posters, umbrellas, and folding chairs (65)
22:03	Ch2-4	Violence/Playing	Fighting with pillows
22:09	Ch1-3-4	Playing	Performing like a priest with the other avatars and then writing 'gott erklaert diese arbeit fur gut' on fabric
22:26	Ch4	Conceptual	Writing 'seid fruchtbar und mehret euch' on a sheet covering the bed (66)
22:36	Ch1-4	Violence	Fighting for alcohol
22:48	Ch1	Violence/Conceptual	Putting the Bible on a stove to be burned
23:23	Ch1	Constructing/Conceptual	Searching for the highest point where to put a chair
23:50	Ch1-2-3	Connecting	Exploring the other avatars touching their face

DAY 6, SATURDAY 2.05

				
67. 4:11; Ch3 Towards the highest place	**68.** 8:26; Ch4 Origami on the H signal	**69.** 10:15; Ch3 Cinema seats in	**70.** 12:42; Ch1 Green objects sculpture	**71.** 13:32; Ch1-4 Carpet and red pillows

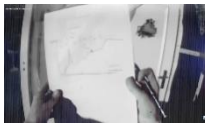


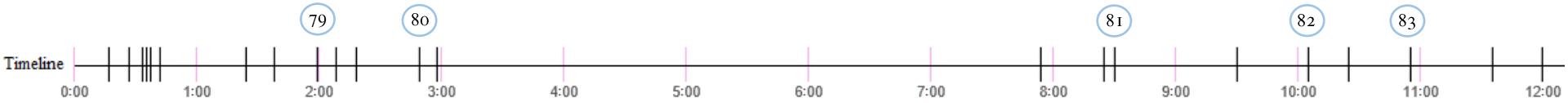
						
72. 16:29; Ch4 Dating	**73.** 16:40; Ch1 Answering on the bed sheet	**74.** 18:07; Ch3 Garden setting	**75.** 19:56; Ch3 Sculpture on the golden foil	**76.** 20:53; Ch1 Clothing the avatar	**77.** 21:21; Ch3 Assembling a handbag	**78.** 23:40; Ch2 Replacing pieces of folding chair



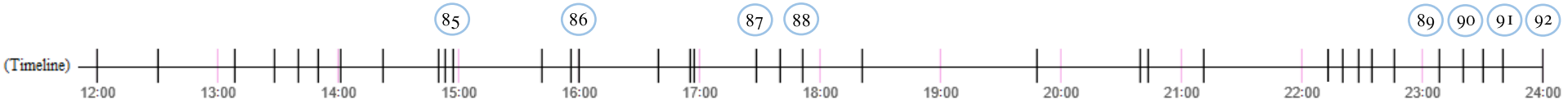
Hour	Channel	Category	Description
0:20	Ch1	Conceptual	Writing ‘kindness’ on the wall
0:29	Ch2	Caring	Midnight snack
0:57	Ch2	Partying	Dancing with Edith Piaf in the background
1:12	Ch2	Music	Playing the violin while following another avatar playing the recorder
1:45	Ch1-3	Playing	Trying to blow up soap bubbles with an opened umbrella
2:16	Ch3	Playing	Putting on the lipstick in front of the mirror and playing with the hula hoop
2:22	Ch3		H signal in
2:40	Ch3	Caring	Avatar writing what he can do, then ordering a book to read as the gamer is used to
3:16	Ch3	Artwork	DIY composition with pieces of a book of German politics
3:54	Ch3	Caring	Warming feet up with a hairdryer
4:00	Ch3	Caring	Reading books and watching images
4:11	Ch3	Constructing/Conceptual	Constructing the highest place (67)
8:26	Ch4	Artwork	Origami unicorn and bird on the H signal (68)
10:15	Ch3	Constructing	Cinema seats in, with the light blue couch in front of the TV (69)
12:42	Ch1	Artwork	Composing a sculpture just with green objects, a sink and a mannequin on an armchair, then pictured (70)
13:32	Ch1-4	Constructing	Constructing a space with black carpet and three red pillows on the ground (71)
15:03	Ch4	Playing	Playing badminton alone and singing *Jingle Bells*
15:08	Ch4	Artwork	Writing ‘BAO VI’ within a heart, then pictured on a cloth on the ground
15:15	Ch4	Caring	Eating with another avatar and watching a video cassette on the blue couch
15:22	Ch4	Playing	Making figures with hands in front of the mirror
15:27	Ch4	Connecting	Asking for the avatar’s favourite place
15:28	Ch4	Playing	Playing basketball with a soccer ball and a cradle as basket
15:38	Ch2	Artwork	Polaroid selfie, accumulating red clothes and putting the photos below them
15:41	Ch4	Connecting	Writing ‘thank you’ to the avatar on a cloth on the ground
15:45	Ch2	Artwork	Composing a line on the ground with photos and red objects, to be continued after the slot
15:57	Ch1	Playing	Playing domino alone rounding the table to change player
16:29	Ch4	Conceptual	Asking for a date on the H signal, reporting her number also (72)
16:40	Ch1	Connecting	Writing ‘trying hard’ besides ‘seid fruchtbar und mehret euch’ on the bed sheet (73)
17:23	Ch1	Artwork	Writing ‘dackel’ in different ways around the hall
17:37	Ch3	Connecting	Asking the avatar if wanting a garden or a bedroom, he decides a garden
18:07	Ch3	Constructing	Garden setting with a cloth on the ground and plants around, then sitting in the centre and drinking a beer (74)
19:34	Ch1-2	Playing	Playing badminton together
19:56	Ch3	Artwork	Sculpture on the golden foil with a mannequin sat on a chair, a spooky mask and bible pages on the ground (75)
20:01	Ch4	Conceptual	Trying to exit the room
20:14	Ch2-4	Playing	Riding an inflatable unicorn and caressing its neck in a sexual way
20:37	Ch4	Artwork	Violin into the cradle
20:40	Ch1	Caring	Fog machine into the tent, then drinking a beer inside it in the mist
20:46	Ch1-3	Partying	Dancing together, performing a ‘zombie dance’
20:53	Ch1	Connecting	Clothing the avatar with a yellow rain jacket, silver fabric and silver cap (76)
20:59	Ch1	Playing	Taking the spooky mask from the sculpture and kissing it ‘as a friend’
21:01	Ch2	Caring	Massage time
21:21	Ch3	Artwork	Assembling a handbag with tape, fabric and climbing rope (77)
22:02	Ch3	Artwork	Continuing the sculpture on the golden foil, ladder, mannequin arms and ribbon, then pointing at it with arrows on the wall
22:29	Ch1	Caring	Massage time
22:45	Ch1	Artwork	Television with a white owl
23:40	Ch2	Artwork	Cutting out squares from a folding chair and replacing them with a tailored soccer ball, taped on the missing parts (78)

DAY 7, SUNDAY 3.05

						
79. 2:08; Ch3 Glue on vinyl	**80.** 2:58; Ch1 'A' with lather	**81.** 8:30; Ch4 Avatar insight graph	**82.** 10:05; Ch2 Sculpture	**83.** 10:55; Ch2 Living room #3	**84.** 14:57; Ch4 Metaphorical Mac	**85.** 15:56; Ch2 Making a puzzle



						
86. 16:00; Ch4 Garden	**87.** 17:28; Ch1 Vinyl and brush on the wall	**88.** 17:51; Ch2 Pillow in tape heart	**89.** 23:08; Ch1-2-3-4- Alex Ending chaos	**90.** 23:13; Ch2 Alex playing the gong	**91.** 23:40; Ch1 Watermelon and maps	**92.** 24:00; Ch1 End



Hour	Channel	Category	Description
0:17	Ch3	Artwork	Assembling a heart picture with domino pieces
0:27	Ch3	Artwork	Taping a sock on a column
0:33	Ch3	Violence	Tying an avatar with a rope, then linking different things around the hall with it
0:35	Ch4	Artwork	Drawing a tree and colouring it
0:37	Ch4	Caring	Doing push-ups, squat, stretching
0:42	Ch4	Caring	Doing the dishes using a water container
1:24	Ch1	Connecting	Drawing two lines when the avatar is asked to write his name
1:38	Ch1	Playing	Interacting with the mirror ball and then with a squared mirror
1:59	Ch3	Connecting	Bringing another avatar towards the 'end of the room', then running after him
2:08	Ch3	Music	Putting circles of glue on a played vinyl, then scratched manually (79)
2:18	Ch1-3	Connecting	Drinking together in the garden tent, one avatar is controlled by more than one person
2:49	Ch1	Music	Playing the snare drum with an empty bottle of beer
2:58	Ch1	Conceptual	Writing the 'A' of 'anarchy' with lather (80)
7:54	Ch4	Caring	Morning coffee
8:25	Ch4	Music	Musical solo improvisation with chains tied on the knees, floor tom, megaphone, and voice
8:30	Ch4	Connecting	Drawing a graph about some avatar insights, then reproducing the action on the peak (81)
9:30	Ch2	Artwork	Clothing a doll beside a unicorn, then covering it with a blanket
10:05	Ch2	Artwork	Helmet with Christmas ball besides lobster puppet, mannequin, and keyboard (82)
10:25	Ch2	Caring	Sunday morning relaxing by cooking and eating on the couch
10:55	Ch2	Constructing	Placing a carpet with black and white squares under the blue couch and an orange chair (83)
11:35	Ch4	Playing	Fight between a puppet mouse, bear, and owl
12:00	Ch2	Violence	Breaking a bench with a crowbar and a hammer
12:30	Ch1	Conceptual	Writing '¡VENCEREMOS!' on a shelf with a planer
13:08	Ch2	Caring	Resting
13:28	Ch2	Caring	Ordering something to eat while resting, then cooking a soup
13:40	Ch1	Caring	Eating can food
13:50	Ch1-2	Connecting	Communicating through words made by letters of a board game
14:01	Ch2-4	Violence	Trying to tape another avatar who is doing something else
14:22	Ch1-4	Caring	Peeling potatoes and eating together around a table
14:50	Ch1	Conceptual	Writing 'I am watching you' with black tape on the ground
14:53	Ch2	Conceptual	Searching for a way to write 'the limit does not exist' even if the paint is over
14:57	Ch4	Conceptual	Attributing symbolic meaning to a Mac computer and a piece composed on a keyboard (84)
15:41	Ch2	Caring	Hearing a story read by the gamer laying on the bed
15:56	Ch2	Playing	Doing a puzzle (85)
16:12	Ch4	Constructing	Garden with green carpet, plants, black stools, fake petals on the ground and a big fake stone (86)
16:39	Ch1	Caring	Throwing fake snow from a ladder while two other avatars are lying underneath
16:55	Ch2	Artwork	Hanging a vinyl on a tape between two walls
16:57	Ch2-4	Music	Playing a rhythm on a pole with hammers
17:28	Ch1	Artwork	Sculpture with a vinyl hung with glue on the wall and brush (87)
17:40	Ch1	Artwork	Writing YOLO with cutlery on the ground
17:51	Ch2	Artwork	Drawing a heart with tape on the wall with a pillow, a puppet and sexy man pictures (88)
18:21	Ch1	Caring/Conceptual	Watching the turned-off TV for ten minutes, then switching it on with a beer
19:48	Ch2-3-4		Not controlled avatar on the couch, intimate moment
19:56	Ch1	Artwork	Installation with half rubbish bin, red light, and paper inside
20:39	Ch2	Violence/Playing	Hitting furniture with a hammer and then various objects around with a sword
20:43	Ch1	Connecting	Pointing at another avatar
21:11	Ch2-4	Violence/Playing	Offering a flower against the destructive actions with the sword
22:13	Ch4	Violence	Wearing handcuffs
22:20	Ch1	Violence	Breaking an electric guitar
22:28	Ch1-2	Violence	Moving the bed with an avatar on it
22:35	Ch2	Music	Vibrating heart pillow on an electric guitar and then with an accordion on it, then throwing the guitar away
22:46	Ch2	Playing	Wearing a tent by breaking its upper part with a crowbar
23:08	Ch1-2-3-4-Alex	Violence/Partying	Chaotic moment with noise music, dancing, gong sound in the background (played by Alex), breaking plates, yelling, and drinking (89)
23:13	Ch2		Alex playing the gong (90)
23:20	Ch2	Connecting	Trying to create a band
23:30	Ch2	Playing/Violence	Trying to break the guitar on the mixer, but the avatar cannot do it, it is too dangerous
23:40	Ch1	Playing	Bebop, inflatable watermelon, Polaroid, crocodile puppet, maps of Germany on table (91)
24:00	Ch1		End (92)

II. INTERVIEWS

II.1 Interview with Alexander Schubert, 14.05.2020

Luca Befera: Could you explain the genesis of *Genesis*?

Alexander Schubert: Alexander Schubert: The project is a follow-up to *Control*, which happened two years ago and similarly applied a first-person view accessed from control rooms. In *Genesis*, I reconsidered that approach further through a different perspective. *Control* had performative aspects and dealt with one person going through different power situations in a staged setting. Instead, *Genesis* excludes every dramaturgy, performative and theatrical parts using empty space to display specific dynamics. Also, it aims to take my role as a composer and artistic head out as much as possible. The process of removing influences and reducing my impact happened step-by-step. Afterwards, the experimental sides got broader, and it was unclear how the project would have developed. This dynamic also happened to a certain degree for the previous pieces, but they were still offering certain regulations and a much more specific or concrete setting than *Genesis*. Focusing on openness or participants without narrative and performative aspects, we aimed at something that was the opposite of works we have done so far in order to get the broadest insight.

LB: Are there any similarities with *Acceptance* or *Unity Switch*? Is it possible to relate this project to the 'error aesthetic' improvement?

AS: More than the 'error aesthetic', I see a continuity from the other works regarding virtuality, distance, closeness of control, and how much is needed to be in a specific space or close to the body to feel something. There are similar levels of virtuality in relation to different settings, interactions, and the room as an artificial entity disconnected from time and space. In *Control*, people get controlled and then control, basically to access different perspectives. On the other side, *Acceptance* was a very physical and bodily experience, extreme for the performer. There was a natural environment, enriched with artificial wooden sculptures and a digital light rendered in the end. *Genesis* is quite the same: challenging events happen in real-life, but there is always something missing. This lack was perceivable from the control room or acting as an avatar in the hall, hearing all the commands, voices and so on. The activity was there, whereas the room itself was very quiet. It had this hollow, virtual, or empty atmosphere to it. It is interesting how people relate to this atmosphere, perceiving something missing or engaging in it. This aspect reflects a contrast between something real and physical and something distant and artificial. It regards the activity within the room and how users connect with the setting from somewhere else and from a laptop. The browsers made it very distant, digital, and virtual, even if people could recognise human beings' presence.

LB: In which ways virtuality influenced the interaction between players and with space?

AS: The disconnection of the players to the space allowed several layers of distancing. For one side, it was almost anonymous, evident for the people instantly playing just logging in

and also for those who bought a ticket by only leaving the email. The dynamics were different from a physical interaction or real-life meeting. The open space provided online communities' facets and lower-control mechanisms displayed and made perceivable. One chance was to create something obvious out of it, as happens in online communities. Still, there were also people trying to help, take care, or constructing. Others had destructive behaviour or, in general, a negative attitude towards the game. Someone else was in the emptiness of not knowing what to do with the offered freedom, as in the idle mode. The whole range of those ways of thinking and interacting was interesting to me.

Also, the experiment showed what people came up with using the room. In that way, we tried to make it possible to build something and establish rules and goals without explicitly giving them as prerequisites. There were just some indications in the FAQ saying that it was forbidden to harm somebody else. It was interesting to see which rules or ideas people come up with or see how people cope with the fact that there are no given rules. For some of them, this lack of information or orientation was too much. I like the idea of creating a space where things are not clear and rules are not known. That was also where the experimental part of *Genesis* could happen. It is something that I have imagined since I was a child, how would the world be if some rules were not applied. I liked to make something similar happen in that context. Then, some people used that freedom, and some did not. It was also interesting to see the expectations that people had towards the interaction and themselves. Some players even had the feeling of being judged.

Going back to virtuality and the possibilities of the space, in the development of the piece there was a constant balancing between two sides linked to the primary references regarding computer games, *Minecraft* and *The Sims*: was it an experiment where people constructed something out of elementary elements? Or a social one with a given setting and people interacting with the avatars? Eventually, we tried to fit both under the hood. Most of the people chose social interaction, and that was totally fine.

LB: Were the setting and the items' grouping related to these goals?

AS: The location, absence of light, and items' selection shaped how the piece would have also been. It was impossible to be out completely.

LB: Were there other inputs coming from the outside? For example, some people from the staff played; Carola's birthday occurred, entailing her real-life social context through social media also; you, Carl, and Heinrich brought a present for her inside the space, not provided in the inventory.

AS: As I said, there were some influences from performers' or authors' background. We were human beings acting in that situation, after all. Events such as Carola's birthday were probably conscious, but I think that the present was not so influential for the project's outcome. It was to make something nice for her, I do not see any specific reason to speak against it.

LB: Did you calculate human interaction coming from other social-media environments?

AS: Not much, the set-up already provided people ideas' exchange or the outside overview through the YouTube channel, the chat, and Facebook and Instagram groups. Thus, there was the idea to make it possible to access things over or beyond just playing. However, the integration of existing networks had not a specific goal.

LB: What about the avatars acting outside of the strict rule of being controlled?

AS: There were several reasons for this. Firstly, they were human beings, so it was almost impossible that they would not have done it. Secondly, we did not have much time to rehearse due to some circumstances, and many parameters remained unclear. Finally, due to the last-minute changes, avatars entered the technology for the first time two or three days before the project started, which is insane.

So, there were various reasons why we had to adjust the project as it went on. But even if we had more time, I do not think we could have solved everything. After a rehearsal, we discussed how the avatars' knowledge should interact, and we realised that it is hard to answer. Adjustments, details and every human-to-human or human-to-avatar interaction were so subtle. But we tried not to allow too high-level instructions. For example, the order 'build a house' would have requested more specific instructions. Still, whether the avatar knew how to pour a glass of water or not, it was debatable if the gamer should have requested to bring the bottle, screw the cap, fill in water, screw the cap again. I personally liked the idea of very detailed descriptions, this is how I entered the project. In *Control*, there were very detailed instructions already. But whether that project was less flexible, *Genesis* needed more space, allowing high-level instructions through which it could be easier to interact. It was something in between Minecraft and The Sims also because of this more open format.

On the other hand, high-level instructions were about making it easier to control avatars, which should have been in the foreground but not involving personal wishes. The avatars' will should not have been part of the reactions. If somebody would have asked for drawing a pig on a sheet of paper, not wanting to do it would not have been a good reason to reject the order. The game's original concept did not provide the performers' wishes. The only actions to avoid would have been those implying hurting somebody or damaging the setting. Another grey area regarded the performer's interpretation of the 'destruction' principle.

We also debated how far the avatar should have been responsible for making a show, performance, or generally delivering an interesting product. Here again, different perspectives met each other, and I strongly believed that even if a slot was boring and people did not know what to do, that was also fine. I did not think that the avatar had to offer something or put on a show, the goal of this project was not entertainment but displaying a space of possibilities. How to use it was in users' hands. Even if the player found it boring, that does not mean that it was a waste of time or slots. It was still an insight and a memory which the player will continue to have, a chance not used or the impossibility to connect through the setting. For me, it says something. Especially within 600 tickets over seven days, it could work for some people or not. I also like this boredom and emptiness that could arise in an idle situation, even if the player is online with an avatar. Nothing happening as in a non-place zoned out of the setting. As a metaphor, it works for me. And I do not think it would have been boring because it usually happens, people might have experienced that. It was

important to make it possible for this sort of things to happen. But, as I said, it was challenging for the performer. There is always a grey area about what needed to be sure that a player can use the settings if she/he wants to, to make it technically possible without giving too explicit inputs about what to do.

LB: Were the avatar feelings considered as part of the performance?

AS: Yes, aspects like where the performers' limit was, what did they want to destroy, what made them sad, what did they want to change in the room, or in which kind of interactions they felt uncomfortable were definitely part of the friction. As I said, there were rules which were not black and white. One of the core components was the friction between an artificial avatar and a real human being.

LB: And the avatars had to choose between these states in the meantime.

AS: Yes, they chose during the performance. Anyway, I think it could be possible to formalise the avatars' performative aspects to develop a kind of rules book.

LB: What were the most important aspects of the performance that you defined over time?

AS: Mainly taking the physical audience and the avatar's speech out of it. Going from the starting idea that I proposed, those changes were made over the last six months through the rehearsals and so on. Taking the speech out made it more abstract right away.

LB: I noticed that you made the avatars participate in the setting preparation, asking them for putting the black foil on the roof to obscure the performance hall. Also, they slept just behind the hall. You also participated in the performance and lived in the place most of the time. This kind of immersivity is frequently present in your pieces. Did you consider it in *Genesis* also?

AS: Yes. For the performers, it was a balance between a full-time hardcore approach – 24-hours and 7-days never going out – and good work conditions. Never going out would have been good on several levels, but we opted for a more reasonable compromise for making sure that avatars stayed healthy. Thus, that sort of immersivity was definitely a goal, and for this production was the maximum we could go for.

About me, it was partly about practicality, I had to be there. Probably, if I had had more time off, I would have gone home more frequently, but I liked that there was something from me also. Even though I had been outside most of the time, I also enjoyed going into the hall to do maintenance, clean up or work as an avatar sometimes. Entering that world was a facet of the piece not entirely perceivable for the majority of the players. It was a particular feeling to construct and live an environment out of time and space and existed on its own always in the same way, where the light did not change, and the music kept repeating to a certain degree. Even if there was a specific evolution, it was very self-content. This aspect of

engaging in something like this, letting it go or surrendering to such a place is definitely something that I find interesting, and I have been dealing with many pieces.

LB: Were you searching for some kind of beauty?

AS: The question about whether the performance was beautiful or not, hollow or poetic is something that drove me in a way. I think that it is hard to say if that place was beautiful, in a way it was very sad also. Aspects such as nobody speaking and people acting like robots are inhuman, probably the opposite of a social setting. On the one hand, it could display something that recalls society or other contexts as well. On the other, virtuality, technology, and many other aspects implied things to be artificial and distant.

Visualising this and making it perceivable reflected the negative part of *Genesis*. On the other hand, it was beautiful that space did exist without the constraints surrounding it. Once entering, I felt like one could have sucked into it and forget to get out again, like a dream, an alternate or an escape space, something like a paradise. I left behind a lot in that projection space, even if not spending so much time inside the hall. I was supervising all the technical stuff, and when going in, I actually forgot everything and just stayed there living in the moment. There is something poetic and beautiful about constructing this space out from zero. Hence, being virtual, it had a very unsocial side, and, at the same time, it was a projection space to leave other things behind.

LB: In my experience, it was beautiful to walk around the room after the performance, as the synthesis of all people's interactions, problems, and thoughts over time. Also, it was there just for that night.

AS: And that is the thing, nobody else saw it. People asked if we planned to exhibit the final result like an artwork. But for me, it never had been like that. Even though I liked the effect of constructing spaces in there, I never had the final goal to create an artwork, it was just a point in time, and I like the fact that the last setting disappeared before anybody else could see it. That is also why we took away the physical audience from the hall, and no spectators could enter the hall and enjoying it. This aspect increased virtuality: no one knew where this happened, and it was gone before there was any chance ever to see its final result.

LB: Can you give me some more information about the technical aspects?

AS: In general, the avatars had a camera and a microphone, both sent wirelessly to the control room. The control room sent those signals over the server and the Internet to the browser of people joining the game. There were up to four slots available at any given moment. Each of the four players, who could be anywhere, perceived the audio-video image of an avatar's first-person perspective. On the other hand, players used their laptop's microphone and sent the spoken commands to the avatar.

LB: Which software, programming language, or technical equipment did you use?

AS: The arm interface was done in Arduino, speaking through the arm interface and transforming into Max's messages. Max sent information from the room through the website, which worked with JavaScript. This is only a broad perspective, implying a lot of hardware and several other stages. The camera sent data to a wireless receiver, which went to a diversity switch passing through a video switch. The latter sent part of the information to local-control screens and part of it to two video-streaming servers – one for the sequence view and one for a test video – which went through mobile LTE routers, which provided a link to the video that users could access. The website that Dominik programmed created links or access to those videos whenever somebody had an available ticket. The audio connection worked on an audio stream client that ran on a commercial server embedded into the website to access the browser's microphone. On our side, we had four computers that would work as the corresponding basis: they received the spoken language of the player and got the microphone inputs from the room and avatars. So, we established four working stations, the 'partner stations', for the avatars. The connections were built through those four stations whenever somebody had an available ticket so that the audio connection and the video link were accessible directly through the video server. Then, some computers did the streaming on YouTube and so on.

II.2 Interview with Carola Schaal, 13.05.2020

Carola Schaal: Can you tell me what you want to know from each performer and what will you study?

Luca Befera: First of all, I'm going to examine if *Genesis* is a performance or an experiment; then, what is the role of virtuality in redefining the and interactions; finally, the relationship between 'inner' and 'outer' performance contexts, regarding authors, avatars, and gamers. These dynamics involve each person's background: the authors' experiences and aesthetic, which determine the setting; the gamers real-life; the avatars' way of behaving and acquaintances. The connection between these communities defined the performance itself, including those which broke the given rules. Your birthday is an interesting example of what I am talking about.

CS: I had never actually thought to discuss with Alex in advance if it could be acceptable to play this real moment. On the other side, he never stopped me from promoting my birthday, even if he usually controls everything. For example, he did not object to the Facebook post, which reported that it was possible to book a slot on that day. I did not mention my birthday, but he knows when I am born, and it was clear that people would have thought about it. Alex, Heinrich, and Carl decided to prepare a surprise package also, putting champagne and glasses in the hatch. This wish was also out of the game. I always had the feeling of existing as a human being, and the birthday celebration was a real-life moment that I brought into the performance week. So, close friends booked a slot on the 28th of April.

LB: Did you act by yourself, or you obeyed the received orders during this event?

CS: I did what the players asked for. My sister prepared the Geburtstags [birthday] Party canvas through Yana. Then, somebody brought it to the kitchen and my gamer, a male user, realised that it was my actual birthday making me answer 'yes' or 'no' to his questions. Then, he wanted me to open a bottle of champagne and drink it more and more. Other players agreed on drinking, it was really in the game. Only the authors' present was out, those items were not in the inventory.

LB: Did you feel like Carola during the play?

CS: Yes, I did. When I think about myself as one of the avatars, I recognise two layers: me as Carola and me in the avatar's role. Especially in the free slots, there were some moments in which I was pure Carola, with all my fears. Of course, I could not always stay in the avatar role because there was time to think, and I was forced to handle loneliness. Sometimes it was tricky, wearing the headset was like observing through a microscope, where it is possible to put objects and see them expanded. It was pretty intense. Also, I felt a bit caged, so that this loneliness was much bigger than I usually feel it. These moments also occurred when I had a player. Sometimes, I felt lonely whether I saw other avatars, and I could observe the room

expanding. Of course, these moments depended on the players also. If there was a tiny bit of connection, then loneliness was gone, and then I could relate to lovely moments of pure intimacy with them.

LB: Did you always obey the given orders?

CS: No, I did not always fulfil the gamers' wishes, like Fabian was trying to. We never discussed strict rules on how the performers should behave, and I allowed myself to press 'no' if the human being behind the avatar, Carola, did not want to do something or was not in the right mood. So, I disagreed with Fabian, saying 'no' was another possibility that the gamer had to face: if my avatar did not want to do something, we could find another way together. It was not a moment of quality if I always pushed my borders to fulfil the gamer's wishes. So, I did not fail, but I just had a different way of dealing with the situation. For example, there was a very boring lady who I forced to change goal because her feelings were very different from mine. Unlike other inspiring players, I was not motivated to interact, and I did not want to do something exclusively to create a nice time for her. This character is in line with my real life: I am demanding with myself, and I expect the same from friends and colleagues. So, I did not deliver this lady a show. I have known Alex for such a long time, and I am aware that he has the same attitude. He likes not to satisfy the audience completely, I appreciate that. In *Acceptance*, for example, it was interesting to leave some people in the audience not completely satisfied, someone even said that the performance was boring. These aspects are also related to the lack of voice usage, limiting actors like Max and Fabian to make a show out of it. Still, this overacting would have been unacceptable for me, it would have brought to a game quality loss.

LB: Did the authors communicated with you during the performance?

CS: Yes, Alex and Heinrich interrupted me a couple of times in between a slot, I found it disturbing, and it took away a lot of energy. In *Acceptance*, Alex had to trust me, there were no connections between us for five and a half days. So, we talked about it in advance, and when we started to shoot, he could not intervene, I loved it. In *Genesis*, I was already aware that he could have mentioned some restrictions during the performance days, and when he did it, I felt limited. It was also a lack of trust, I did not like it.

I also did not like the restrictions of Heinrich, who intervened when I used the megaphone. I know that it was annoying and loud, but I was in the mood to use it, and it was part of the interaction with the gamer. I did not understand why she warned me, I felt like a scolded kid. Those two interventions were also during the performance, in between a slot. It was like being at the concert stage when somebody tells you that there is a wrong note. Maybe people do not get it, but someone wrote something on paper and just put it on my music stand. The performance is running. Of course, Alex and Heinrich also mentioned a lack of time to talk about these aspects before the performance, and we had to take care of the black foil on the roof.

LB: We also managed the items photos together for some days.

CS: Yes, I assisted you in this task, there was a lack of time. Even if it were a long-time performance, I would have preferred to let part of these settings go. For example, the performance hall was a bit too clean to me, it looked like someone arranged and directed it. Maybe there should have been something like a messy corner.

LB: Did you ever felt observed?

CS: As Yana and Fabian stated, we always felt observed because of this 24-hour streaming documentation. This outside overview also influenced the flow, I had the feeling that somebody could intervene.

LB: Did you have the feeling that the performance hall was becoming the avatar's home after a while?

CS: Yes, it started with the green sofa in the middle of the room, and it became stronger with the bed. Then, on my birthday, some close people ordered a few things from the inventory as a present. For example, I always knew where the toy squirrel was. There is a special connection to this puppet, coming from mum and dad. If there were some free slots and I did not feel too tidy up, I just searched for this puppet and did some funny things with it, as using the wig for preparing a lovely hairstyle or taking a carrot and just laid it next to it, so that it could eat. I knew that my parents were watching the live stream, so it was also a kind of communication with them to show that I was taking care of the present.

In general, I always knew where things were. For example, if someone asked for the saw, I just started to walk – if the gamer was inspiring, otherwise, I would let him/her order it again. We spent much more time in the performance room than everywhere else in those seven days. I also find it very interesting that quite many players asked about or mentioned going to my favourite place. When I went there, I was also showing them my aesthetic point of view.

LB: Were you aware of the other avatars' state?

CS: Yes, I always knew when one of my colleagues was in a free slot and private-automatic mode. Yana told me the same, she knew when I was pretending to press the wristband device buttons even if nobody was on the other side. The same with Fabian and Max.

LB: What is your opinion about the relationship between avatars?

CS: In general, we liked each other, for all the four of us it was a very good relationship, even if Max was a bit more separated. Once, a special and intimate interaction occurred between the three of us. We were in a free slot, and I sat beside Fabian, then Yana joined us. I could not go on watching a documentary about Greece and Rome, we had seen it too many times. So, I individually decided to put another one on Norway, which was still in plastic. We were sitting in between the hall watching this documentary while Max was walking around making noise. Then I put my head on Fabian's shoulder. I always had the feeling that

I had a really good connection outside the performance with him, and I just took the chance to get some physical contact. It was purely human, and he also enjoyed it. I am sure that I would not have done it with Yana or Max, something would have avoided this action. Our human beings caused this atmosphere that brought avatar Carola relaxing on avatar Fabian's shoulder.

LB: Did something similar also happen when someone controlled you?

CS: Yes, sometimes. For example, it happened twice when Yana was singing and talking in her fake language in front of me, and I left even if the gamer did not ask me for it. I highly regard Yana, but I could not stand it, I was so nervous and triggered on a very personal level that it was hard to repress that annoyance completely.

Furthermore, seeing the 'Geburtstags Party' sign, a very nice and smart woman asked me about the celebration and my physical state. When she realised that I had drunk too much, she made me prepare a hangover breakfast, asking for what I would prefer. I had coffee and sausages with mustard, ketchup, and mayonnaise. I was thankful because I needed that snack. Then, I turned around, and she saw Fabian on the sofa in a similar condition. She made me prepare the remaining two sausages for him, and Fabian's player told him to eat if he wanted to. So, we sat on the sofa to have breakfast together. At that moment, I had the feeling that both gamers did exactly what we would have personally done.

LB: Did you know some of the players? How did you feel about being controlled by them?

CS: For me, it was a very comfortable and touching situation to have the voice of a close friend right in my ears. It was an occasion to spend an hour in such a unique situation. I also talked to many gamers who knew somebody personally in the game. Some people were just aware of names as Yana Thönnes and Carola Schaal or belonged to the Neue Musik bubble. Others who knew the avatar personally suffered to give orders. For example, a good friend of mine controlled me. At a certain moment, I turned around, so she could see who I was. When the slot was over, she had to shut down the computer immediately and go running. She did it for the two of us and to get rid of the feeling that she controlled somebody. On the other hand, my sister told me that she liked it. She has some employees, so maybe she is used to giving orders. But she struggled when recognising that she was asking a woman to dance, like a logical consequence of the party. When she realised that Yana was doing everything she ordered, she got the taste of really controlling somebody. She recognised it the next morning. Other composers and artists needed to create a space of freedom for thinking and acting, which was controversial, knowing that it would end up in giving orders.

In general, there are preferences in physical interactions, and somebody liked to dominate. Feeling joy in giving commands is not a deplorable thing, even if the abuse is always close. For example, you can nicely dominate people just to create a tense atmosphere. I am sure that those people are aware that they have to balance on a very narrow mountain path, trying not to fall and damage somebody, mentally and physically.

LB: Did you felt a link between gamers' actions over time?

CS: Not really. For example, constructions started when somebody brought already-fixed wall corners into the room. Then, other gamers rarely continued the same building over time. That was also related to the time available. Fifty-five minutes was a too-short time, and gamers would have needed to observe at least one slot before playing to create continuity.

Is there a particularly significant moment for you?

LB: In the last hours, I enjoyed the ecstatic, confused and noise moments. Everything was going towards the end, adding objects, strange actions, and disorder. It was compelling to me, I stood two hours in front of the screens without moving. A friend of mine played with you in that period.

CS: I could not share all his destructive energy, and I just broke the bed. I liked it more when we made the drone sound with a vibrating heart on the guitar. Then he asked for an outstanding costume with a tent shell, so I cut a hole with an iron bar and wore it. He was excited and asked me to go in front of the mirror. I really liked this teamwork and sharing his euphoric moment. Creating that loud drone and walking around with that absurd costume was much stronger than destroying things to me.

LB: Do you want to add other significant thoughts or experiences?

CS: Generally, the most exhausting moments were the ones with three, four, or five free slots in a row. It happened to me on Saturday: there was nobody except for four quick users over the whole day. In general, being bored is a very positive moment for me. But in those moments, I could never relax because of the setting force, I had to be something, and I found it very annoying.

Also, on the 29th, there was a very caring Danish Guy who wanted to talk about his fears of the pandemic situation. He told me that he would not have entered the game without that isolation. Then, I was sitting, and he asked me if I was thirsty or hungry. After around 15-20 minutes, he was about to leave stating, and he wished me all the best. But he was just shy, so I allowed myself to intervene by pressing ‘no’. He repeated his wish to leave, and I asked if he was sure. At that moment, he decided to remain, not actually wanting to go. So, we had kind of a talk, where I answered just ‘yes’ and ‘no’. He did a sort of monologue about the pandemic, Denmark’s situation, his isolation, and sleeping difficulty because of horrible dreams. When I asked for more details, he gave them to me, realising that I was interested. I just laid down and pressed those limited communication possibilities, but it was still a touching and unique situation. I also had the feeling that if I had not reacted, he would just have stepped out. But I did not want him to leave. He also mentioned his name, no one else did it. He asked for my name too, but I could not answer. When somebody tried to know it, I just wrote ‘Avatar’, I did not have a real name in the game.

Finally, on Monday, I did not want to eat in the performance hall, so I brought my breakfast, and I ate in my one-hour break in the afternoon. Then I thought that it was necessary to include eating during the play. On my birthday morning, I told Francis and Vitus that I would have breakfast in the installation with coffee, Cini Minis, muesli, milk, and some fruits. Having this plan in mind and being persistent in making the messages blinking, people

asked many questions about what I wanted. I started with thirst and got coffee, then I continued with hunger and did not stop bothering the gamer until I received the planned meal. I found it interesting to be very clear and see the gamers' reaction to my anger if they did not satisfy me. After this experiment, I stopped bringing my breakfast. Sometimes I even did not eat during the lunch break because I wanted to cook something inside the hall, or I thought somebody would have appreciated cooking together. Of course, in the meanwhile, I did not build up the room also because it takes time to eat or cook something, but I thought that it was also part of the game. I think that Fabian sometimes had the feeling that he needed to push people to create something. For me, it was not my responsibility. Maybe I used (or abused) it in the strongest way of the four avatars, but it was great that we had completely different characters.

II.3 Interview with Yana Thönnes, 14.05.2020

Luca Befera: Could you talk about your artistic path before *Genesis*?

Yana Thönnes: I am a director and a performer. I have my own company, The Agency, founded with three other women, in which I have been working for five years. We are doing immersive shows where the audience walks around and always has particular parts. For example, spectators participate as a customer of a fictional corporation. As a director, I want people to have very tailored experiences to adapt or access them easily in that world. However, how people participate is very different from how *Genesis* worked. When Heinrich explained it to me, I was very interested because of this discrepancy. Then, I wondered about what gamers would have done. My pieces' audience entails people from theatre, performance, and dance, going to a show, sitting down, and waiting for something to be delivered. Even if they participate, they do not have to be inventive. Instead, *Genesis* entailed a creative audience. For example, those coming from the Elbphilharmonie music context showed very original interactions.

LB: Are you used to immersive performances of this length?

YT: No, we did some durational shows, which lasted six or seven hours at the latest. Also, I enacted one-to-one performances similar in the relationship with a single person but different in having the performer as a guide. In *Genesis*, the person changed each hour, and it was challenging to recognise what the gamer wanted, where he/she wanted to go, and how I could cooperate with them. It was much about understanding people. Also, I could let it go to the situation and surrender to what was happening there. It clicked something in my head.

LB: I noticed that you tended to guide people with the gesture. Do you think it depended on your expertise?

YT: It was a mixture of my background and the attempt to bring a rhythm. For example, the 'ta-da' gesture showed gamers that we had finished something.[105] They usually reacted by thinking about what done and what to do next. It was quite helpful for me to communicate with them somehow when we fulfilled something, giving a chance to progress from those facts. They were not really in a computer game after all, and this gesture highlighted a new achievement, like collecting coins. I felt it was good to give them this moment of satisfaction.

LB: Someone also reacted by drinking a beer or smoking a cigarette when perceiving that action was over. Did you conceive these relationships as virtual or human?

YT: Somehow, very ambivalent. Performing, I always tried to be in the two worlds. On the one hand, it was a physical and haptic space that I could touch and influenced my body. For example, it transmitted cold. At the same time, I imagined the players' screen view, which

[105] The performer refers to the gesture implying stretched arms, hands and fingers, usually towards an object.

was much more virtual. I always had this split awareness, which changed regarding the player and the perception of myself. I was aiming for a VR experience, but it was something that I had to construct in my mental attitude while playing. Of course, I might have interacted with space just as an industrial hall where we built up things. Instead, it was a wonderland to me, where I endlessly looked around to those fascinating things.

LB: Was it something improving over time, or it was always the same feeling?

YT: I think it depended on the hour of the day, but I also got used to it. I can remember every time I went into the hatch and made the door go down again, thinking "ok, now it is here".

LB: As a gate into another world.

YT: Yes, exactly. It was helpful to have this transitioning process: waiting until the light was dark, going in, putting something here and there, asking myself if I was ready, and then the gate took one second to go up and one second to go down. It got easier to access after a while. Sometimes, when I felt exhausted, it was harder to take this virtuality into account, and it became weird. But, as long as a person connected and I heard someone, I was there somehow.

LB: Did you feel intimacy with the gamers?

YT: Yes, so much. Of course, it depended on what people were looking for. For some of them, it was what they were into, for example, when asking to touch avatars' face. It was easy for me to understand when a person wanted to go in that direction. There was one intimate interaction that I still cannot understand why happened. I think he was an Italian guy with whom I did some random things with the tape. He was not ordering anything but just asking for it. He also took endless time to do unexpected things, which is something that I also really like. We arranged a golden fabric, and he asked me to write his initials on the door, GB, I think. Then, I found a rose, and he wanted me to put it on the door as well. He was always very gentle, and I felt a connection that had nothing to do with these actions. Finally, he asked me to put my initials as an avatar close to his, so I got a confirmation of his intents. And I still cannot say why this relationship came up, I think it was just a matter of voice and talking to each other.

LB: Were you performing or joining the experience as in real life?

YT: In my approach as a performance artist, I believe that whatever you experience in that space, as a performer or as an audience member, it is never an 'as if' experience. It is something that can potentially live into your real-life, leave a trace on you, create knowledge, and it can touch you somehow. Performances are an interesting environment to unfold these possibilities that we usually do not consider in real life, it would be very confusing to be as opened all the time.

During this week, we had a very special moment on Sunday. We were all the four avatars in the hall, and three of us, Carola, Fabian, and me, did not have a player – we became really

sensitive to understand when someone had a player. Only Max, who were running around and destroying things, was controlled. The three of us were sitting on a sofa in one of the living room settings, watching a VHS tape on Norway, an embarrassing and hilarious travel documentary from the 90s. Then I came to the point that it was just a job. I lived in that setting with strange flatmates, waiting for someone to login to do something with them. This feeling probably depended on the persistent routine. Also, doing it all day long made it part of our lives. It became difficult for me to say if it was a performance or something else, sometimes these two aspects merged. For example, in everyday-life actions, I found myself thinking about my avatar perspective and view. It was a trace inside and outside our life, frequently with a strong emotional response and, at the same time, a regular job. After a while, it became ordinary to me.

LB: Did you play with yourself as a gamer?

YT: No, I was aware only when playing with someone, gamers, or colleagues.

LB: Did you feel like being watched because of the camera overview?

YT: No, it was immersive theatre to me. The camera overview regarded the performance's artistic product, which usually relates to the audience's experience in my performer's and director's practice. Thus, I associated *Genesis*'s live stream with a film from a certain point. It was hard to justify why I was doing it and what it meant during the performance, it is still an open question. If I had known that it was rather a documentation, maybe it would have been different. I could sense that Alex had another approach to the audience's experience. He told us that even not played slots would have been in the documentation as the project's outcome. So, I started to relate the documentation to the artistic product.

LB: Did you perceive the will of an online community?

YT: Not really, people would have needed to interact more with each other. It was hard to develop a social group in a one-hour slot and with many new inputs to manage. Instead, they focused only on their slot. Of course, this could be a community behaviour as well, but I did not feel that gamers referenced each other. Some people even asked me if the objects inside the hall had been brought there by other people. Some gamers came again and again, but it did not make a community.

LB: How did relationships between avatars evolve? Did you have a sense of a growing-up avatars' home within the hall?

YT: Yes, totally. Since the beginning, I had the feeling that we were working well together, and I always felt very safe with everyone. I had a couple of difficult moments just when Max was destroying things. In the overall experience, we found a way of being there together, and we assisted each other. For example, once I made a coffee out of the setting, and I shared another one with Fabian. Or Carola handed over the blanket while she was on the sofa. These

little gestures enhanced our mutual presence and increased cohesion. A very significant moment was the one on the couch I mentioned before. It was curious to share these experiences without talk also.

LB: Did you feel connection or interference from the environment outside the performance hall?

YT: It was getting more and more weird to me to go outside. We were wearing sunglasses in a space that was usually dark. Actually, each morning it got worse, I was getting up feeling like a mole. I loved when Vitus and Francis were dealing with the inventory in a very relaxed way. Also, sometimes Carl was alone in his office, and I always perceived calm from him. With Lisa and Jette, it was different. They had their own dynamics and a stronger emotional connection with the project, it was possible to sense it. Sometimes I went out, and they were sleeping, or other people I had never seen before were wandering around the building. So, I enjoyed most a concentrated or easy-going atmosphere, whereas a giggly or emotional backstage confused me. It was difficult to deal with these situations after fifty-five minutes inside the performance hall, maybe after a tense experience. We had around two-minutes breaks between the slots – tasks such as time for going out, removing glasses, and charge batteries reduced the total duration of five minutes. This short period could give you something positive or be overwhelming. Two people asking a question was already too much. So, I tried not to communicate, I could not process that.

LB: In these two minutes, you were still inside the hall mentally.

YT: Yes, exactly.

LB: Did you feel that going outside for a longer period broke the flow of your performance?

YT: No, for me, it was important only to eat something warm. During the lunch break, I was not really going out of the performance, it was like working and going to the canteen. It could not break the flow because I was not doing something different, and even if the setting was different, there were still people engaged with the project.

LB: Do you want to tell me something special that happened during the performance?

YT: Yes, two special sessions occurred on Sunday. The gamer wanted me to reach my holiest place in the first one, where we did an exciting training. Firstly, he asked for reaching the object that gave me the greatest emotional response. I was looking for a particular keyboard, but I could not find it. So, wandering around, I found a Mac, and he told me to look at it meditatively. The object stood on a shelf, I asked if to lie down on the floor, and he answered no. He then wanted me to place the object where I was and vice versa, thinking about the object's perspective from my previous position. After a while, he asked me to go to the keyboard and take the red paint. We did not have colour anymore, but I saw a lipstick passing by a makeup case. He was so ambitious, and he wanted to push it somehow. He asked me to

play something meaningful to me and associate a composer's name with each white key. After stating that we usually remember much more male composers, he wanted the red colour on each white key to enlighten female composers too. This play went on and on and until he came to the point of me being the next female composer. That was my music, and I had to feel how personal it was, perceive each sound, and do as I liked because it was worthy for everyone to listen to. Moreover, he wanted me to go to the other avatars, look at the person behind the person, say to stop whatever they were doing, and request their attention to my music, which was more important. When I found the piece's end, he called it *Opus 1*, which I wrote on the keyboard beside my name – which was 'D'. Finally, he asked for placing me in front of the mirror and lip-sync my name after Wagner and Stockhausen to establish my relevance among these great composers. I was thirsty, so we went to the kitchen to drink some milk. After that, we returned to the keyboard to watch from the audience position. I put a drop of milk on the keys to remember each sound, how good it was, and what it meant to me. I did this action while drinking the milk to have a remembrance of this experience in my daily life. That person was awesome. He played an entire session like this without stopping, it was like David Lynch having a training session. He could not know that he had a female avatar, and I asked myself if he prepared the play. Also, he was the first one on Sunday, wanting me to wear a dress, it was unclear if I was a male or a female with my previous clothes.

LB: Do you still remember that moment when drinking milk?

YT: I do! I also took the keyboard with me. The other significant play I would like to tell you was very different and a bit creepy. There was a person who did not communicate really but used very few words. He was a man, and I also heard a woman in the background. Firstly, he ordered some gnocchi and pasta sauce. He was not talking to me at all for the first minute, I was just standing there. After a while, he asked me to cook the gnocchi, so I thought he ordered them and went to the hatch. He was quite impatient with the boiling process, which I think he forgot after a while. Then he wanted me to take the handcuffs and, again, I went to the hatch by myself. I found real handcuffs there, which were quite strong. I put them on both my wrists and remained like this for around seven minutes. Afterwards, he did not do anything except for letting me stand in the centre while raising my arms to make them visible to the screen view. After some minutes, I heard heavy breathing. He did not hurt me, but his behaviour was creepy, somehow. This person created an atmosphere just talking to me a few times and not describing anything in detail; he really communicated through not communicating. It was brutal, but I was not anxious, it was just a frame of the situation.

II.4 Interview with Max Pross, 15.05.2020

Luca Befera: Could you talk about your artistic path before *Genesis*?

Max Pross: I had been a performer in the SIGNA group for five years, where we did immersive shows lasting even one week full-time or nine days. Some were very heavy, but still different from *Genesis* because having a story, and resulting very clear. It was a long time ago. After that, I did not perform much anymore, but I worked as a director and assistant director. Heinrich remembered my plays with SIGNA, so she called me for this project. *Genesis* was an interesting occasion to do a hardcore performance again.

LB: Did you ever tried virtual reality means?

MP: No, it was the first time. It was strange because the audio connection was always working, and it was not possible to run away from gamers. It was difficult to understand how to get users into the game and make a player out of them. It was a learning process and one of the core tasks to me.

LB: Did you perceive the gamer as an audience member or as a director?

MP: Both at the same time. Many other pieces provide this interactivity but not to this high degree of freedom. Therefore, the spectator is also a creator. Nevertheless, he still looked at an artwork in which insert many inputs. In this acceptation, the gamer was a spectator. I personally considered mostly this last perspective because I had to do something for him/her, and I felt responsible for making the performance work. If the gamer became aware of the rules and mastered the game, he was a director more. But this was rarely the case.

LB: Was virtuality a means to enhance intimacy or distance between avatar and gamer?

MP: For me, it was very intimate. As I said, the avatar could not run away from the show, and there was a one-to-one relationship, whereas there is an audience normally. The distance was never there to me. As a performer, I was closer than usual.

LB: Which was the difference between performing and having a human relationship?

MP: Of course, there was a difference. I was alone in this hall, and I could get clever as a performer and improve live interactions. But as an avatar, I was a victim of the spectator, more than performance in presence. I did not have any means to direct or construct the performance because it was virtual, and I was played. I only had psychological communication to use. Sometimes, I provoked anger, made gamers look at things, and gave them tips by turning to a certain point.

LB: I noticed that you were acting consistently when not controlled also. Why?

MP: For the performance idea, it was necessary to give the impression that something was still going on. I did not stop working even when not having a player. Since we had the free slots' problem, keeping the performance alive by acting in a kind of self-mode was important to me. In general, I pretended to be the player. So, I did it to keep up the performance, fill the spaces, and somehow fulfil my task. Of course, it was making decisions, but nobody stopped me, so I tried to develop my own behaviour.

LB: Did you ever have the impression to play with yourself, also when controlled by someone else?

MP: No, I did not play with myself. I put myself into extreme situations, but I always let people play with me. I did not look to my joy during the performance. Otherwise, I somehow analysed the player's control mechanism and what people do when they have this power.

LB: What is your opinion about gamers controlling people?

MP: It was fascinating, I got to know them quite well. If gamers wanted to talk, I let them talk. They told me a lot about themselves. Then, there were the lost gamers, maybe the most uninteresting, like people unable to manage the virtual aspect. They could get angry, still telling a lot about themselves. On the other hand, some gamers knew how to play, as a woman who took care of me like a little dog. The most interesting were the many artists, they created great atmospheres. Then, there was this couple, a little bit sadistic, who made me eat row potatoes. It was a human study, also for the avatar.

LB: Did you feel an improvement in your way of performing?

MP: It is very hard to say. Of course, I tried to. For example, I attempted to make gamers check the rules, it was boring to play with someone who did not understand them. Then, I developed sensitivity about what the player meant. There could be very defined commands or someone generally asking for a hammer. In this case, I went to the hammer and took it. I did not want to be more stupid than I was, being both an avatar and a human being during the performance. If I stopped to be as stupid, I would have to create a concrete role, and many questions would come out. Following this evolution, we ended up performing differently. We had to develop these capacities during the show to get a feeling for it because people telling us exactly what to do were deficient.

LB: Did you feel that the performance hall became the avatars' home?

MP: Yes, I got this feeling, especially during the night. I got used to the hours of the clock. The night began at 5:30 p.m. when Fabian came. Then, it started the rush over until around 1:00 a.m., when Carola and Yana went to bed. From then on, there was a distinctive morning feeling, it was the most special moment for me.

LB: In which ways?

MP: We had unique players, sometimes quieter. Of course, everyone was sleeping, everything was calm, and there were many other influences. But I do not know why it was such a special atmosphere. It was also more concentrated, artistic, and the players knew what to do. When the players knew what to do, it was beneficial for the game, something was really happening, and there was a profound development. Something of *Genesis* was there.

LB: Did you perceive an online community growing up over time?

MP: Partially, in a small group of people playing a lot. They were not necessarily the most inspiring players. For me, an interesting player had to experiment on what he/she could do in the room and how to interact with the other players. Sometimes, people wrote to each other, that made a lot of fun.

LB: What about the relationships between avatars?

MP: For being there an entire week, it was necessary a strong trust. Within the show, we took care of each other, we were very reliable. We liked each other, and it was essential to have a good situation inside the performance space for me. There, we could build up confidence out of the general friendliness through an underneath communication. Of course, we had different artistic views, but we managed to leave them outside the performance. We were very different. I was the one considered much distant because I did not want to take breaks: when I am in the show, I am in the show. It is very irritating if, somehow, I stop being there, it takes me out of it. It is not a joke for me.

LB: Which kind of interaction did you have with the authors and the people outside the performance hall?

MP: It was helpful to talk with them to have feedback, considering that the rehearsals had been very short. It was crucial to build trust lasting one week. And the days before the performance were important too, to get used to the room.

LB: Were you searching for beauty within the performance?

MP: Beauty is a complicated concept. I did not look for beauty but for pictures that inspired the players' thoughts and emotions. So, I tried to arrange things where they could be funny or interesting. I did it imagining where a hypothetic player would go. Of course, I got to know the players, and I learned how to arrange objects. For example, many of them did artistic works, so I took the players' functionality, adapted it, and did it myself. I also finished incomplete slots. Moreover, you probably realised that I cleaned up a lot at night. I wanted to push the hall out of a rubbish situation, which was one of the most relevant problems to me – even if artistic. People were not considering the following players, and leaving a mess was not their concern at all. They did not think that there were only fifty-five minutes to finish something.

LB: Would you like to tell me other particular experiences?

MP: On Thursday and Friday nights, we had players with a very concrete image of space, about how the room could sound and look. In these moments, everything made sense because the room became an instrument that we could develop, build and play – in a musical or installation way. These gamers had a clear direction and became professional, for example, as artists or musicians. Knowing how space could sound, they extend the experience to a broader extent than just music. It was related to how they talked, and I moved through their commands, everything was clear and made sense.
LB: I would like to talk about my play with you also. I was the one trying to construct a treasure hunting, and at a certain moment, I used a half-cut paper rubbish bin. Maybe I was wrong with the pronunciation of the words, and you did not understand me, especially when I tried to make you write 'gambling' on a sheet of paper to report the clue.

MP: In that play, I had audio problems, and I could not understand you correctly.

LB: When you threw the marker away because of these interferences, I perceived that we established a connection. At that moment, I realised that you did not want to write anything, or we could not communicate in that way. So, I tried to do something else. How did you perceive that interaction?

MP: Yes, I threw the marker away because I did not understand what you wanted me to write. I had the impression that I was losing you if I had not put something into it. Instead of trying and trying again, I tried to surprise you, get you into the play again, and provoke a further action.

LB: It worked. When you did it, I considered doing something else that could be better for both of us. The following nonsense actions became sensible and beautiful to me.

MP: Yes, nonsense is something that happened a lot! But it was not just nonsense, but a surface behind which lays not intended sense.

II.5 Interview with Fabian Oehl, 19.05.2020

Luca Befera: What is your artistic background?

Fabian Oehl: I decided to be a theatre actor after performing experiences at school. So, I studied acting in Leipzig from 2009 to 2013. I knew I could work in movies and television with that education. After four years, I had my first theatre employment in Heidelberg from 2014 to 2016. In that period, I realised my need to discover more. I was disappointed by State funding usage for the German theatre system and not artistically satisfied. So, I quit and decided to be a freelancer. Since then, my main work continued to be in theatre. I met Heinrich in Heidelberg, who proposed me to join a project in Sweden with her. That was the beginning of my performing-art experience, and I started to think about other possibilities as an artist and an actor. So, I applied my education less – techniques such as essential bodywork, standard movements, and language awareness – and I began to think differently. I did three performances with Heinrich before *Genesis*. I was working for the theatre and a few TV shows then, so this project arrived in a period of artistic thirst, also worsened by the pandemic. I was trying to find a balance between satisfying work to push myself and more common performances to earn more money. So, *Genesis* was something I was waiting for. Having the feeling of doing a meaningful thing is generally very important to me but very rare. At the same time, I cannot do such intense plays every month.

LB: Did you have other experiences in immersive or video game-based performances?

FO: No, not video game-based performances and neither long-term ones with this peak of intensity.

LB: Do you know the video games world?

FO: Yes, I play video games, and I have been doing it for more than 20 years. I regard it as an art form that became an economic industry similar to films. I also read video-game reviews, I am very informed about it.

LB: Was it relevant for your when performing?

FO: Totally, I was constantly comparing the piece concept with computer game genres.

LB: What was your relationship with virtuality? Did you perceive human interaction or digital mediation?

FO: Choosing between these two parameters, I perceived human interaction more. I did not think to be in a computer game while performing but just considering what people could do in the game. Still, as both actor and avatar, I was mixing virtual ideas and being a human. I do not know if I behaved differently from others because of my computer games' knowledge. Initially, I tried to be an avatar as a following-order character, perhaps because I know what

an avatar does. I always thought that when nobody controls an avatar, it gets into the 'idle mode', standing or moving in a rule set without doing anything, sitting on the bench and smoking, for example. When the player comes back, the avatar throws the cigarette away and waits for commands. But these virtual aspects became more and more human. As a performer, my own needs came through, getting more relevant, developing during the week, and even getting over control.

Sometimes, I also thought about how computer games direct the player through narration. For example, they often provide environmental storytelling, letting gamers discover the plot through details of a landscape. This dynamic also occurred in *Genesis*. Gamers could see a broken glass, two racks and a ball and immediately build a story from those elements. They could think about who was there, that someone lost the game, or maybe someone got angry. People asked us a lot for going through the room to scan the possibilities. Through how I used my camera and looked at things, I could influence the players' attention. Most of the time, they were not telling me where to look. As we advanced, I looked at things around: when other avatars passed by, I pointed at them; when there was a loud sound, I looked in that direction. So, I offered dramaturgy to help people getting an idea, as computer games hints. Anyway, I always felt like a human being and not wholly a digital entity. Significantly, I was making decisions every 10 seconds in 55-minutes slots, computer avatars are not doing it with this frequency.

LB: Did you perceived intimacy with players?

FO: I had a very strong connection at times. I could often feel that it was present on both sides because gamers thanked me or offered a beer. There was also a perceivable connection through voice, some sounded more kind, and I did not want them to leave. There was a special relationship if someone was gentle, I felt that we were playing together, and human aspects arose. Instead, some other players sounded not really interested in interaction. There was no connection if someone neglected communication, as in real life. In those moments, I felt more like a digital avatar, not forming a bond as well but still following the rules. These cases were part of the game, but I found them very boring. I do not know if the outside's perception changed, this was my perspective.

LB: When I played my slot, I also realised that establishing a connection made the game more interesting. Since you were playing during the night, did you perceive a particular atmosphere?

FO: Yes, a specific atmosphere came up from Thursday. On the first night, there were hardly any people from 2.30 a.m. The next night nothing was going on, but I still had a lot of energy. I have a vague remembrance, I think I was chilling or hanging around, mostly without sleeping. On Wednesday, I got more tired, and I started sleeping when no one was there. Because of the limited amount of people playing during the night, I had the opportunity to rest, and everything was very relaxed. On Thursday, we had worked four days already, with a few hours of sleep – in my case, also because I did it during the day. So, I started to feel

tiredness in my body. Authors and staff assisting the performance were also not there for at least a couple of hours.

At 2.30 a.m., my nerves were down already, and one guy was experimenting with the room possibilities. For example, he took the microphone and wanted to have feedback in front of the speakers. The microphone was already loud for us, and I had already had 30 minutes of loud music while Max was throwing things against the wall. This combination turned the whole perception, and something was opening up. I danced on the table until it broke down. I was a little shocked, but nothing bad happened, just glasses shattered on the floor. The adrenaline, which was already up because of the music and this guy getting more aggressive, became even higher. He was worried about me but not very empathetic, not unfriendly but still on the controlling side. He was trying something in that room, not in a destructive way. Still, the air was tense and stressful. Thinking about it afterwards, it was also an exciting, dark-romantic and crazy atmosphere, and I am proud that I experienced it. But at that moment, it was too much, I am not the person who likes to party, go to clubs, or have a wild night. I was tired and a little bit drunk – after a while, I understood how to let people give me beers, it worked sometimes.

After one hour, another guy joined the game as a quick user. Firstly, he made me sing and play loud music. It was enough for me already, and he asked if I was tired, I replied yes. So, he let me lie down for ten minutes without doing anything, respecting my recover. While relaxing, I heard what I had sung before in the background: he was playing the recording of what I did. I thought he was listening to what he had registered, or he was intentionally and creepily let me hear it. It was weird, but he could do it, he could record using these technical possibilities, even mixing it. On top of these slots, another violent gamer wanted to throw something against the wall and cut the plugged light cables. He was not getting that I was a human being, or maybe not paying attention to it. That was too much, he was aggressive and had masculine energy also – as I will call it from now on because it was always males playing in this way. There was no sensitivity anymore, it was all very dark, and I finally kicked out this person. I felt so disconnected, nobody was watching, and these two guys enacted destructive actions even when understanding that we were human beings.

The next day, when I recovered, I realised that I faced with my personal fears of being controlled and doing something that goes against my moral compass. I realised that I do not like to damage the hall where I slept and lived but create something in it. Then, I realised that, in our society, there are people who aim to create and people who want to destroy because they do not have a relation with what is in front of them. I was so sad to comprehend this concept. This feeling of disconnection became weird, and I had to deal with it. Later on, when I was thinking about it, I felt like being raped – a little bit, because I knew that I could always leave. I also felt dirty to go as far as possible. These aspects have a lot to do with me, that destructive energy is something that I perceive as negative.

Coming back to the computer game's topic, I know that there are many destructive people there, especially when you play together online. Some are not interested in achieving something together but just to disturb and give you a bad experience. Not intentionally, I associated this image with those gamers. I was afraid that certain people would have got into this behaviour again, joining the following nights with the same approach. After all, almost nobody watched during the night, and many quick users could join the game. Fortunately,

nothing likely happened. On the contrary, there was a session with Alex's friends from the Neue Musik environment – as he told us. They played in the same room, exchanging roles, telling us stories, and creating a play with a pope to chase. Their game was totally the opposite, it was very creative even if they did not build anything, they were friendly. One of them asked me if I had free will and, when I answered 'no', he started to order things. But he was just playing with control.

On Saturday, a guy asked me to take the hammer to destroy something. I got frustrated with my fears once again, but it was fine in the end. And then, on the last day, I was prepared for everything, destroying was not a problem anymore except for dangerous actions. There were still bad energies, but I was also dealing with my borders, which were stressing me because I wanted to perform as far as possible. Thus, I also confronted with my dark side, it was a mixture. Max told me that he perceived this atmosphere, but I think in another way. He was a different character and had another way to deal with it, generally more open. I thought a lot about these dark energies, and sometimes I also felt a little bit like a coward. But the most important thing was to see this lack in society and to make it visible. Thinking about this experience now, I would be more open and much less stressed. I know that those people exist. These energies were a disconnection from what was happening.

LB: Did you perceive an online community behaviour emerging from the interactions over time?

FO: Rarely. For example, on Friday night, I had the feeling of cooperation between players. I made an installation in a corner with a guy, using light, a gold foil, and a floating violin. Some slots later, I played with a woman, and I had the impression that this guy was with her, I heard his voice in the background. Also, this woman was continuing his work. It was the only time when I recognised a construction intentionally continued some slots later. From my perspective, people were not able to continue what they were building. Then, I had a gamer who controlled me during Carola's birthday and in the last slot. In both his games, he wanted to challenge me on who could hold the breath longer. He asked for looking in the mirror to recognise who I was. It was a good ending, he was a caring player. Another time, when the authors' friends joined the game, they told me that they had watched the live stream and wanted to build a living room because it lacked, even if we had a bed. These players were considering the game's history. I had the impression that people did not recognise spaces but just wondered around when not aware of the streaming. So, this continuity was infrequent, and I was missing it.

LB: Did you perceive a developing relationship between avatars and the hall becoming the avatars' place?

FO: Not much. There was a kind of community between Max and me, maybe during the night. But even in that case, I felt disconnected because I did not know what he was thinking. Also, I was not aware of the other avatars' feelings, I just knew they were there. Sometimes we met for smoking a cigarette, shared something to eat, and cleaned up together. That was it. In the last days, I think we all enjoyed a particular moment when sitting on the sofa and

watching a documentary. We did not have many played slots then, it was a slowly ending. So, we enjoyed the idle mode together, with the background impression that we were leaving that place soon. At that moment, the first not-commanded contact happened when Carola laid down on my shoulder. When some player ordered us to hug someone, it never felt like a real hug but distant. It was not a negative fact but part of the game. In general, it was good for me when I was alone in the room, and somebody came, but the interactions between avatars were the same during the whole game, they never really changed. Of course, it helped to know that there were other players in the room when I had to do something weird. But I did not have that home feeling during the performance. Even if sometimes it was perceivable, it was still a working place. As an avatar, I was inside the process slot after slot, hearing my feelings and thoughts and just going on. I felt it like home only after the performance, when I was walking through the room without my glasses. Then it became more emotional. After all, I slept many times (once for two entire hours) and had many experiences there.

LB: Did you enjoy the game?

FO: All in all, I would say yes, it was very special. In particular, I loved when people built something, know how to use the inventory or had a goal. I think it would have been a better experience if people would have had this behaviour all the time. I enjoyed the music sessions or every time that someone was trying something that leads to something else. It was also lovely to go through the room with people who could have strange ideas. Nevertheless, about half of the time, users did not know how to play. These slots were challenging and affected my endurance. Anyway, I never questioned to wear the glasses and go into the room, this thought was senseless to me. Those moments when everything worked well were enough to justify everything else. Of course, it could take time, and I had to pass through hard, static, or boring slots. Many aspects might improve to make the game more enjoyable. For example, more hints might allow gamers to interact more consciously. But I also understand that one of the purposes was not giving advice and letting people be overwhelmed. The technical problems also caused frustration in both gamers and avatars because we could not interact properly or fulfil an action. In general, making the game more constructive would be better for me.

LB: Which kind of relationship did you have with people immediately outside the hall?

FO: I communicated a lot with them when leaving the slot. I was always smoking a cigarette and talking to Jette, Lisa, Vitus, Francis, Heinrich, Alex, and you. Every time I came out, I had a small talk, commenting on what happened, sitting for a little while, or having a coffee. They told me that Max was never going there, just exiting for five minutes and going back again. It was crucial to get out of the game for a few seconds for me, I needed these breaks for stepping out completely for a moment. I really enjoyed this connection, especially when nobody was joining the game and I was leaving the hall 10 minutes earlier. It was an essential part of liking the whole experience. I had no interest in being continually in the performance, it was beneficial to change the batteries. I was not afraid of the performance load but just

loved being a full human for a few minutes, exiting the ‘game mode’, and offering myself again to someone else.

LB: Do you want to add something?

FO: One last thing. I saw a fifteen-minutes video about women living in German society, continuously asked for going out, scared of wandering around in the night, and so on. I am not a woman, and I cannot say how they feel. Anyway, no women controlled me during the aforementioned dark moments, and I understood their situation better through those games. The performance newly shaped my perception of things around me, and I have a new emotional experience that I can use. I am still thinking about why I got triggered by those situations. What happened is still resonating in me.

III. QUESTIONNAIRE EXCERPTS

III.1 Relationship between Avatar and Gamer

Question

Do you want to add some more information about the relationship between you and your avatar? For example, how did you experience your position of power?

Answers

(selection from 64 responses)

- I only realised after the game that there was a human behind the avatar. I felt bad for giving him nonsensical commands. During the game, when I thought the avatar was purely virtual, I loved the way he interpreted orders and gave them his own face, the way HOW activities were implemented. Or also that 'my' avatar didn't like fish and didn't smoke.*

- I was very concerned about the avatar's condition, and it took me a while to realise that the avatar wanted me to be in control.

- I had the feeling that my avatar had very clear plans for what he/she wanted to do and was only waiting until I guessed the intention. Plus: the view I had was so pixelated and manipulated that I could only guess what I see (no chance to really interact with the room/items lying around). There were no other avatars...

- I didn't feel like needing power or having power. Maybe because I'm used to interacting with my team as a collaborative boss 😊

- I thought they should just be me, so I didn't think there is a relationship. And talking to myself was a bit weird.

- Like a left-wing 40-year-old bourgeois, not very well, I was not prepared for that. When I realised what it was, I could relax and build things: the possibility of smashing things had crossed my mind. I felt a bit as in the '60 Harvard experiment simulating a jail, with students impersonating prisoners and guards.

- I felt very conflicted between wanting to be entertained and imagining how the avatar feels.

- There was a moment where I wanted to use red painting to paint something. So I ordered the red painting, but my avatar refused to use it. I tried painting different objects, and they refused to all of them. I could even see a painted wall, and they still refused to do it. Also, the interface to use the inventory was a bit confusing, and when you tried to search for categories of objects, it didn't work.

- I was a bit shy sometimes, especially when he showed thirst. Because all the liquids I've found so far in the space where inside alcohol bottles, so as I didn't want to harm him by getting him drunk, I couldn't fulfil this necessity to drink. So only on this part, I felt awkward.

- I was very hesitant to give direct commands. Instead, I asked: "can you do this, could you maybe do that" – which made playing the game more difficult. But it was still very important to me, to keep these polite phrases. In the end, I felt that I hadn't thanked my Avatar enough. I hope that my Avatar had equally as much fun playing the game as I had.

- I didn't decide who the executive was... I and my orders or the avatar put them into action.

- It felt strange to 'navigate' a seemingly human being. I felt the urge to make him/her feel comfortable: i.e. as s/he showed to be hungry on the control panel, I was contracting on finding food.

- The 'position of power' was strange. It was necessary to 'give orders' – that is in a way morbid – but at the same time, I did not want the avatar to feel like a slave. So that borderline is strange if you try to be a good person.

- Ecstatic at first (discovering the potentiality of this virtual artistic device), then uncomfortable of being hidden as a player and engage (at a small scale, but still) in a relation that felt like going in a single way only. I tried to balance that position of power which was mine by trying to 'build' something, inside out and outside in: with 'my'/'our' human avatar by playing a game myself (a bit too late, unfortunately), while letting her know and thus, an invisible and micro-sensitive feeling (which I believe video games are commonly creating, by being kinds of instant meditation devices). I could have played 'my' character for experimenting a bit more in this empathetic way.

- I was in control of the proceedings, but my avatar corresponded to my ideas and questions. Without their creative personality and cooperation, it would have been much less constructive. It was a healthy flat hierarchy where two people work together on one project with clear roles to each of them. Effect: we got sh*t done! :)

- It is more difficult to control 'someone' verbally than with a controller or with my own body (control over body, over every move). Avatar could not act as I want. Regarding the position of power, I know the avatar is a human and has his own will. So, there is not a feeling to be more 'powerful'. There are rules and some things he can do, some not.

- Unlike in a similar command scenario where I directed other human avatars, my avatar here was quite helpful. She would suggest things to me when a task required a tool and try to answer my questions. As I played only on the last day the game was running, I asked her to remember scenarios she had experienced earlier, and then reproduce those.

Through her writing/drawing, we also tried to communicate about her experience, length of time spent there, and other personal aspects. She didn't admit to having personality/character/identity, but still recounted earlier moments. The tasks I asked her to do required some amount of knowledge, such as, 'improvise experimentally'. Since she could execute these commands without resistance or requiring more details, it was certainly a constructive collaboration.

- He was setting clear boundaries (e.g. it was not allowed to nail something. into the walls), plus he knew the hall much better than me which was important because I found the view was poor. I was rather interested in finding out what he wanted to do (it was: rolling a cigarette, lol) and how he was interpreting my instructions.

- The avatar had been another person the entire time. I didn't feel like I 'was' the avatar like in games usually.

- I felt a desire to actively work against the inherent position of power and interact in a cooperative situation. I understand that more interesting situations might have raised from a more direct control, but I couldn't get over the (slight) feeling of violating another human even though I know that the avatars retained the ability to refuse. Nonetheless I still found the experience interesting and valuable despite (mentally and personally) insisting on treating it as more of a collaboration than a control situation.

- I understood that I could take over a sort of crazy total control, but I was happy to create some sort of partnership. And since it was he (or she) who could 'do' things, I could not go into details through our communication it was clear that I formulated my needs and questions as precise as I could, but it was his/her duty to solve problems creatively. We had a good time though. Thank you for creating this possibility!

- I felt more like a team being able to construct things at a location only one person is present. Felt more comfortable when I found out my avatar can communicate with me. Maybe the position of power is less important when both sides agree on the roles and means of collaboration (and have the option to disagree). Overall, I really liked the setting as there was no 'goal' but things to create.

- It was strange to give orders. At the same time, I felt like creating something. I kept trying to find out whether the 'avatar' still had enough strength and desire, whether he had other wishes or wanted to implement my idea. I found it great that my 'avatar' was willing to share his own ideas and became a co-player. The game fluctuated between giving instructions and creating something together.*

- The position of power changes over time. When the interaction starts, it is difficult to know exactly what we both want (avatar and I), and how to interact. As soon as time passes, everything becomes easier because it is possible to ask for the avatar's necessities and ask for stuff.

- I would have liked to hear some spoken words from my Avatar from time to time. In that way, I would have felt more connected.

- Encouraged my Avatar to communicate with other Avatars and owners to assert the overriding importance of the music she was making as a new female composer – Richard Wagner style.

- I felt the need to check about avatars needs and did not want her to do things she does not want. Also, there might be a gender thing. I had the idea that I (m) had a female avatar. I might have been less concerned if I had a male avatar. Also, I wondered about 'thank you' responses from her, where they about thanking me because I commended them, or because of the task I was giving, or because I said 'thank you' myself…

- Thanks to *Genesis*, I understood: there is my idea, and there is the realisation of my idea. I was the Idea, and my avatar was the realisation of my idea. Thanks to *Genesis,* I understood how big the gap between your idea and its realisation could be. I liked the process of feeling this distance.

- The relationship with my avatar was friendly and constructive, it listened to me and always answered fast and did what I asked for, although I wasn't feeling comfortable sometimes to make the commands. I think I needed more human than an avatar to feel myself more human as well...

- I felt close to my avatar and enjoyed every (positive) feedback on its success in doing something or understanding the situation. Still, I felt distant because the avatar does not talk back, but only writes feedback. Strange.

III.2 Impressions During and After the Game

Question

How did it make you feel during and after the game?

Answers

(selection from 88 responses)

- The first time, very weak due to communication difficulties, but much better when I played the same avatar the second time.

- At first, I was a little bit nervous. In the end, and after the game, I had lots of ideas.

- During the game, I was fascinated and curious and really 'in'. Then I observed, researched in the background, and repeatedly tried to get hold of an interrupted slot to correct things, change things, and get more into the flow. My first booked session was jerky; after that, it worked better.*

- In the beginning, I felt a little bit lost, but this got better over time.

- Exhausted, I had to quit 10 m before the end.

- Excited during the game. After the game, I thought about what I could have done differently.

- It was very exciting in the beginning. Then I got used to the situation, and it was fun to interact and create from a distance. Improvisation was needed to build the artistic meaning of the installation without things I had planned to have, which were out. Afterwards, I was happy with the result and the fun I had. I completed an installation that Maximedes started to build up, without the constructive help of the human avatar we would not get it done. We needed his skills and knowledge especially about the violin's fixation between a chair and a stand, a computerised avatar could not have been able to do it.

- Very uncomfortable at the beginning. I started to enjoy it once building and interacting with other avatars towards the middle of my slot.

- The first time was really early on, the space was almost empty and dark. I felt lost that time. The second time was on the last day, and I had fun exploring.

- I had a lot of fun during the game. After the game, I had a lot of questions about borders and controlling. It is a bit strange to know that you say to the avatar to do something and the avatar just does it. At the same time, you exactly know that it is Human.

- In the beginning, it was strange, but with a goal, I completely forgot the time.

- Excited, overwhelmed at first, stressed because of the time limit (so much to do!). Then I got really into the fun of playing a game, having fun became the most important thing.

- Isolated but together.

- Challenging and stressful but satisfying (after reflecting about it).

- During: happy, stressed. After: melancholic, feeling loss.

- During: lots of fun and because of the time limit very focused. After: happy, because the avatar and I could construct something new and fill some empty, unused space with something I considered cool. I was happy to see that our installation survived mostly until the very end.

- I felt sorry for the 'performers' who were locked in that space many hours a day for many days with little sleep.

- During the game: at first exciting but after a while, I lost a bit of interest. Limited options. Small room. The connection was interrupted for a short time. The view was not clear (visualisation could be better). After the game: I cancelled my second ticket.

- Not completely involved. But wanting to stay longer to explore.

- During the game, I found playing surprisingly stressing – always having to give instructions, pretending I had a goal initially. As I was acclimatising, time was passing by, and I had a lot of fun, I also told many persons about it afterwards.

- Okay, excited at first, bored after a time and in the end a little lost.

- Stressed, uncomfortable, guilty... but I liked it.

- It took me a few minutes to understand where I was and what I was doing during the game. After this, I was happy because I felt that it was a great time spent with the project.

- At first, I felt very inhibited and didn't know what to do. The more the hour went by, the more comfortable and close to the avatar I felt. I think I am enjoying more the 'memory' of playing than actually playing.

- At first, it was very difficult to control an avatar because the avatar waited for my instructions, that was stressful. I was very happy when the avatar thanked me for what I made him/her do.

- I got comfortable quite quickly. I wanted to continue afterwards. I didn't expect this, but I actually felt close to my avatar, as we had a bond and I needed to take care of her. Very interesting, since I didn't know her at all.

- I was very excited beforehand because I realised that I was about to meet a person with whom I was supposed to 'play'. During the game, I quickly felt connected to the 'avatar'. I also received feedback from my avatar through hand signals, which was very nice. In the meantime, I was sometimes worried that the 'avatar' was KO, even though he gave me feedback that he could continue. Hearing his breathing, hearing how fast he was drinking made me feel a bit more compassionate than I had realised before. After the game, I was a bit sad that I had only booked 1 hour and couldn't try more. I found my 'avatar' very sympathetic and friendly. It's a strange feeling to be so connected so quickly and yet be so disconnected. It was an exciting experience, and I found it interesting to meet a person in such an unusual way.*

- Feelings changed over time. In the beginning, I felt uncomfortable and kind of confuse. Then, when I understood the mechanism, I felt excited. During the whole game, I was wondering about doing something extraordinary (I couldn't).

- It was fun to be able to build something, having all those resources. I was sad that I did not have more time to play.

- The Camera settings made it feel quite distant and rather not connected.

- I was glad I sought to find some closure to the experience for both of us within the slot and to allow it to spill forward into space. I later watched the play and could hear my avatar's ongoing composition.

- I felt awkward. It wasn't a comfortable experience. I don't know if I pitied the avatar more or reflected more on my stupid actions. You realise that, when you rule over a human 'avatar' during an hour, even prepared before, you experience emptiness when the game starts.

- It was a bit boring most of the time. The avatar seemed to engage with the activities a lot, which was cool, but the activities were not interesting to watch. The communication with the avatar was really cool. We would decide what to do next together based on what the avatar wanted and what I suggested, but once we decided on what to do next, my role in the play seemed irrelevant.

III.3 Reflections and Regrets

Question

Do you reflect or regret something you did (or did not do)?

Answers

(selection from 84 responses)

- No.

- I controlled the avatar from above. If I had known during the game that there was a human behind it, the encounter would have been more at eye level, in team mode. Moreover, such a 'game' raises the question of boundaries. On a small scale: may I hug another avatar without being asked? This idea can be taken further and intensified. Watching other players just towards the end of the week, I was annoyed at the destruction. For example, the mirror made for nice moments and communication, then another player orders a golf club and smashes the mirror. The first half was creative, and the last few days were destructive. A pity, really...

- 'Feeding' oneself (the avatar) is time-consuming 😀

- I thought the items were in the room, it took time to understand that they were provided.

- Regret to sit there for an hour, waiting, on a Sunday morning instead of sleeping longer or take the dog for a walk :(

- That I was not observing what happened in the room before my slot.

- It was hard to finalise plans within the given timeslot.

- I regret hugging other avatars (-> Corona).

- Yes, I wish I had messed more with the other players to test the context's limits.

- Talk with other avatars (it's difficult though, maybe it's not possible).

- I would have liked to put even a bigger message in the space to address important questions of our time.

- I was not well prepared for the play and choosing objects.

- I regret petit-bourgeois empathy that blocks me while beginning.

- Not really, I didn't have a goal in mind.

- The stuff I got broke down.

- I was thinking about *Rhythm 0* by Abramovic.

- Most of the things I've asked was supposed to be harmless, fun or nonsense. So, I don't regret that part. Just because most of my indications were improvised and that English is not my mother tongue, maybe some part of the indications may be misunderstood.

- Yes, I reflected on the game and was very interested in what other players did after me. That's why I played more slots. I regret that I couldn't finish the spaghetti cooking :)

- I regret not sharing my feelings enough with the performer, especially not thanking enough, or complimenting them for their very thoughtful and collaborative performance.

- I could have done bigger and challenging things.

- I regret not exploring the space more or engaging in artistic activities, but there wasn't much time due to some technical difficulties early on.

- One hour goes very fast!

- Being caught by a feeling of incarnation and friendship that was artificial/on which I projected myself. I wish I could have kept objective.

- I still want to tape somebody to a wall. Like that banana art meme? Yeah. In all seriousness, I actually regret not taking another slot earlier, because I would not have thought it would be so much fun.

- I should have met with friends there to collaborate and achieve greater actions.

- The only thing I wasn't particularly excited about was attempting to create a construction. Not only would it require more time dedication, materials, and expertise, it was pretty unstable, pointless, and messy. The directions to my avatar were simple: "put this thing here, drag this there". I did this quite early, then abandoned it for more interesting experiments. Having another avatar work and communicate with my avatar, having my avatar perform, having my avatar remember, and having my avatar communicate to me were valuable and interesting.

- No, I regret more that I didn't understand so much what this was about and had no real goal. But it was also too wide/open for me to just set one for myself, especially since collaboration and communication with the others didn't seem possible for me.

– No. Well, there was a point when we had a small dancing with another avatar. I was thinking of giving a kiss, but I was not sure about it. I am still not.

– I should have done more things. More disruptive things. I regret that.

– Most of my actions with the avatar were without any meaning, just senseless play.

– I was very sorry that I used drinking water for the plants and then had to see that the avatar was very thirsty.

– I kind of regret that I didn't explore more of the space.

– I really wanted to write a message on the wall, but there was no spray paint left.

– At some passages, I was a bit mean to the. avatar.

– Before the game, I decided to treat the 'avatar' like an avatar, give clear instructions, and not be so emphatic for quickly reaching my goal. But I couldn't keep that up for long. Humanity interfered… In retrospect, I even asked myself whether I shouldn't have given more breaks… whether the beer was really OK or whether I should have asked again whether the drink should have been water… quite tricky…*

– No, but I find this a fascinating question. I did ask my avatar to engage with other avatars. At first, I thought there was a language challenge and then realised that she was possibly mute. I asked if it was difficult for her to talk to the others. She said "yes", and I changed tactics. She said "thank you" when I made an accommodation like this.

– I should have pampered the avatar with more alcohol!

– Yes, directing an avatar!!!! How may it feel in this situation?

– I regret that I couldn't make more mature decisions during one-hour play. It felt like I was thrown into an avatar and unprepared mentally to work out a reasonable game solution. Or maybe there is a moment when we lose our reason and are strapped to rational thinking?

– I regret that I did not see any artistic perspective in this project, it was rather superficial.

– I drew a smile on a carpet.

III.4 Messages for the Avatar

Question

Do you have a message for your avatar?

Answers

(selection from 85 responses)

- Thank you!
- I was fascinated by how I got to know Fabian without talking directly and how hands can show emotions just like faces.
- You were so kind!!
- If I had known that you were not only virtual, I would have thanked you more. So now: thank you for the encounter and the experience I had with you!*
- It was fun.
- Sorry.
- You communicated very efficiently, even without words. I would be curious to understand your hidden agenda (it seemed that you were not very happy being part of this game).
- Thanks so much for collaboration and intelligence and empathy for the artistic goal. And for the knowledge where to find what in the scene (violin, bible).
- My last question was: “Can you kill him?”. I’m pretty sure her answer was “yes”, and then it cut. I just hope she didn’t. (And give her all my best wishes for what’s coming!)
- I hope you are not too exhausted.
- It is time for a revolution.
- I hope it was a nice experience for you. Please let me red paint the table.
- I hope your hears are fine after the feedback and keyboard performances (sounded like the volume was a bit high). And I hope you had fun, besides my nonsense indications ^^’ By the way, was it alcohol in those bottles?

- Thanks ← for → the ↓ game ↑!

- Thank you so much for the experience! I hope you had as much fun as I had.

- I might have been very demanding the last night, trying to clean out the central room… I think he kicked me after that, being really tired. But I am happy that we also put some very simple actions into play.

- Thanks for making this experience possible! I would be quite interested in the reflections of the avatars.

- Thank you, we made something great!

- Hi! You don't know me, and I don't know you; I felt and spoke, you touched and moved. The least I can do is to thank you.

- Hi Carola :)

- Thanks for being submissive enough to give a slice of avatar realness.

- Hey, my friend! It was so cool to build something with you. We worked so well together I wanted to continue. Maybe next time. And perhaps with reversed roles. Or in a completely different setting.

- Many thanks for your performance and energy! Even if your singing and percussion playing was heard live just by yourself, I think it was a wonderful and surreal performance!

- Thanks for playing with me, I would like to know how it was to be played by me in comparison with others.

- Your dedication and commitment are admirable. Thanks! (Also, to the composer and production team!)

- You did a great job, but I did not understand the mission.

- I am very sorry that I used drinking water for the plants and then had to see that you were very thirsty! :(Everything else, I directly told the avatars in-game.

- I wonder how the experience during the whole week was for her. Probably exhausting, confronting or maybe horrible. I would actually like to know more about her own perception. A big thank you anyway!

- Dear person who built the little camping area in the corner. Thank you for playing along and trying to implement my idea in the shortest possible time. I hope you are well after this project! It was nice to watch you, and I think you are very brave, patient, and strong and smart.*

- It was an amazing experience to interact with you while I was looking through YouTube your activity and movements. Sorry for the mattress.
- I hope you enjoyed your composition. I did, and I hope possibly you feel the power to compose as you go through life, if you wish. Your creativity is always important and worth asserting.

- Thank you so much for doing all this for me!

- Hey! I would love to know you better. And your hands are beautiful!

- Dear avatar that made a genesis altar with speaker, plant, artificial head, two drums and an armchair – thank you for executing my actions and listening to me. I am sorry I commanded you so stupidly.

- Thanks for letting me in your brain for a while! I hope you finished the puzzle!

- Cute guy!

- Thanks, mate, lots of fun, tried to take care of your needs as good as possible!

- You did a great job, and it was a nice hour to connect with you, some level of intimacy. I appreciate it much.

- Thank you for this great experience. But why didn't you paint the door? What a pity!*

III.5 Additional Considerations

Question

Add something about your experience.

Answers

(selection from 55 responses)

- Should be repeated. An overview in real-time (mine was delayed) on a second monitor would have been useful.

- Had the feeling of being part of a huge special Event.

- I would be happy to see a detailed evaluation of this experiment published. And it would also be great to be able to look at some scenes again afterwards.*

- Not my thing.

- It was awesome. I told many people about it.

- It was a very frustrating experience, I missed some cooperation (with the avatar, other players, etc.). And I didn't have the feeling that I was empowered to 'create' something. I would be curious to hear about others experiences though…

- Next time it would be great to have better technical visualisation and better light. Better transmission. That was a problem sometimes. Mist of my time maybe. And maybe some more cameras for the spectators to switch between the scenes. More visitors in the chat might be nice. You made great photos! Unbelievable how they found all the ordered things in such a short time! Do it again! Would be fine for me if some people would be less destructive... Thanks to everybody involved in this project!

- Didn't really feel like controlling a video game avatar. I was always aware that I instructed a human being. Maybe I would have acted differently if controlling a robot or not knowing it was a person.

- Did everybody wash his hand before doing that? Watch out the Corona. Love on the team who set that up!

- It is a very rich experience, playing with listener/viewer as Schubert does: is a very powerful experience. Some of its ethical and political implications are to be deepened. To resume in a few words: I have some doubts or/and critiques regarding the way Genesis face the media we use and the dispositive on which our activities are super-structurally

framed, and the fact we still having a white/European point of view, even being left-winged (which empathy could also be a symptom, a feeling which finally helps to reinforce exploitation and inhibits revolutionary action). It is a long subject to deep in, hope I will cross Alex soon and discuss it over a beer.

- Thinking about the performers' perspective occupies my mind. I would really like to know more about the experience of the people behind the avatars. I wonder how it must have been to have given up so much of your free will. How were people treating them? What have they learned about some of the gamers? Etc.

- It helped to discover your own mind/borders/limits/archetypes. It was cool & nice to have this experience. Thanks to the whole team ☆

- There was some collaboration with others, but not nearly as much as I would have thought, and I still wonder why.

- I actually used the avatar to place a work within the work. Don't hesitate to get back to me on that. After my first session, I started thinking about who is the 'DOer' in all of this… Is it me giving orders or the avatar realising those orders? Is he acting them out or reacting or enacting? Etc.

- I was surprised at one point of hearing my voice as feedback. And just before me, I was hearing the voice of somebody else. That was kind of disturbing.

- I wonder about a science-fiction tale in which I can speculate about the potentialities of virtual love (as a general way, at its very state of emotion) and empathy, from a human player to a human avatar. How can you 'control'/'play' with love, and can it be communicable?

- [IN-GAME] On the one hand, I felt the visuals' technical imperfections (for lack of a better word) was artistically interesting because it made me feel like I controlled somebody on the moon. On the other hand, I knew that I didn't, which made it somewhat frustrating to make out what the avatar was actually looking at. Especially when working with bright lights, it was almost impossible to tell what was going on. I hope that this gets a future replay because the experience in itself was dope. But if so, I would very much wish for a more solid resolution of the stream. [SPECTATING] Another thing that I found to be very cool as a concept was the possibility to spectate not only an overview of the whole space ('map') but also the avatars POVs. What I would have wished for was an option to switch between all the available cameras manually. The auto-switch (or was it controlled by a director?) threw me off the 'action' way too many times. Other than these points, I really enjoyed the experience much more than anticipated and I hope to get a chance to dive into it again.

- Tiny family!

- Due to the optical filter, identifying objects in the world had been hard. Would've liked to interact with the existing environment more. Also, the items in the inventory were a bit overwhelming; choosing my five items took quite some time. But all in all, it was amazingly realised!

- It made me think a lot about human interaction and human rights (and the anatomy of will). Taking control so directly (even though it wasn't with power abuse intentions) still was uncomfortable for me. Yet, in a way, my life is also indirectly (to a smaller or higher degree) a result of taking 'control' of others. And the same of others taking control of me.

- I was really excited initially and thought the whole set up was very innovative and interesting, really well made in a way. But I was also craving for a little narrative/purpose/background information, some rules at least or goal, this way I would have had something to do or aim for or even be able to break the rules or anything. But the narrative/overall setting was so vague, or maybe just the very general tasks to build a utopian space with very known and daily accessories was not so interesting to me when left alone. If communication with the others would have been allowed or made a more central aspect of the game/work, maybe that would have been different. Like that, I was quite lost in it and became bored quite quickly.

- Very strange time perception.

- Wild but useless.

- For me, one hour was quite a long time. I didn't really make a plan of thing that I wanted to do before, so I kind of improvised (which was fun!). But on some points, I run out of ideas for things that I could do.

- I also imagined how it would have been for me to be an avatar. What an experience this must be!

- I would have loved to be in that building for two/three hours and watch the avatars being controlled live from the sit.

- It was good. I enjoyed a lot. However, the bars going up/down accordingly to the avatar feelings didn't work!!

- The camera could have been better. But thank you in any case!

- I thought it was amazing to make this technically possible, but I think the experience would be even better when the quality of the personal view I saw was in HD. There was

always a kind of delay where you had to work with. It was the same if I wanted to use my vision from the game and the external total view on the YouTube stream. But I really loved it!

- It would be great if you could publish the technical documentation so that people can replicate the experience more easily. Thank you for such a unique experience!

- I steered my avatar via my smartphone. Maybe not a ‘smart’ idea. Next, better using a tablet or notebook… and more time!

- Technology and multimedia have been widely used as cognitive tools in Arts to enrich and connect our perception and understanding of intellectual. In *Genesis*, I, as an audience member, found no satisfaction but entertainment in it.

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