LUND UNIVERSITY

1, 2, 3 Playtime

Jalhed, Hedvig; Edström, Margot

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1, 2, 3 Playtime

INTER ARTS CENTER | LUND UNIVERSITY

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Hedvig Jalhed and Margot Edström (eds.)

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Biographies

Freja Andersson is a Swedish-Finnish artist and filmmaker with a MFA from Stockholm University of The Arts. Freja moves between physical, virtual, digital, and memory spaces. Between epochs and the frames on the roll of film. The outcome intertwines in installations, performances or multi-channel works. Her art has been presented at Studio Galleria Warsaw (PL), Fotografiska Stockholm and Moderna Museet Malmö.

Emma Bexell is a dramaturg and performance artist based in Malmö, known for her work as artistic director and founder of theatre company Bombina Bombast. She has created works for stage, film and virtual reality, characterised by a curiosity for the encounter between performing arts and technology, presented at festivals and venues around the world.

Amy Boulton is a British artist based in Stockholm. Her projects bridge research interests in public space, technology and feminist theories of labour. She works both independently and collaboratively alongside architects, interaction and game designers. Boulton holds an MFA in Fine Arts from HDK-Valand Gothenburg and BFA in Intermedia Art from Edinburgh College of Art (UK).

Francis Patrick Brady is a visual and performance artist who uses play and participation as strategies to challenge the existing rules of everyday life. He is co-founder and curator at Celsius Projects' gallery in Malmö and has been an associate lecturer at Chelsea College of Art at University of London for the last 10 years. Exhibitions include: Den Frie (DK), Moderna Museet (SE) and Turner Contemporary (UK).

Fredrik Degrér is a Swedish-based artist and composer. His work deals with generic correlations, self-referential referentiality, as well as the temporal potentiality of the aforementioned states. Using musical theatre, ambient music, magic, and pianoaccompanied speeches, Degrér seeks to unfold something akin to music's latent qualities through abductive inference.

Margot Edström is an artistic supervisor and coordinator at IAC. Her artistic practice bridges moving images and game engine technologies, exploring narrative and the transformative potential of imagination within rapidly shifting technological realities. She holds an MFA from Malmö Art Academy.

Marika Hedemyr, choreographer/artist, creates public art, choreography, and mixed reality performances for art venues, theatres and public spaces. Her work explores coexistence through the emotional and political relations between people and places, and has been presented at GIBCA, Dansens Hus Stockholm, Röda Sten Konsthall, Bibliotheca Alexandrina, among others. She holds a PhD from Malmö University.

Sophia Ioannou Gjerding is a visual artist, educated from The Jutland Art Academy (DK) and HFBK University of Fine Arts (DE). Her work examines how image production affects us both culturally and politically, such as the discourses that exist in new image technology when the production of virtual worlds in movies and computer games creates a new discourse of objectivity.

Ylva Grufstedt is a historian and game scholar at Malmö University. Her research and teaching interests focus on representations of history, the past and cultural heritage in the public sphere, especially in popular cultural contexts. Publications include *Shaping the Past – Counterfactual History and Game Design Practice in Digital Strategy Games* (De Gruyter Oldenbourg).

Hedvig Jalhed, director at IAC, is an opera maker and artistic researcher focusing on immersion, interaction and the integration of new technologies in operatic concepts. She holds a PhD in Performance in Theatre and Music Drama and is senior lecturer at Lund University as well as Mälardalen University.

Alison Thomas Lindvall is a technical producer at Wisdome, Malmö Museum. She develops and facilitates technical aspects of collaborations with Malmö city departments, academia, industries, and associations, focusing on sound, visualisation, cultural heritage, and environmental planning amongst others.

Anastasiya Loyko is an artist from Ukraine who is now living and working in Sweden. She graduated from the State University of Zaporizhzhya. Loyko has been a relationship resident at the State University in Kharkiv (UA). Since 2006, she has been a member of the Artzebs art group, and since 2008, she has participated in the international contemporary art symposium, Biruchiy.

Jon Nicklas Lundberg's practice revolves around sound, but experimentally branches out into other media where he explores their potential for expression through sonic interweaving. He is interested in participatory transformative processes where definitions have to be re-evaluated. Lundberg has studied art and music-related subjects at Konstfack and Lund University.

Magnhild Øen Nordahl is a visual artist, born in Ulstein (NO), now working in Bergen. In her practice and research, she looks at how we translate phenomena into abstract concepts and how giving abstractions a sculptural body can be a means of examining with our hands, eyes, and feet the things that structure our everyday lives.

Inês A. Sério is an art historian whose research primarily focuses on digital art practices. She holds an MBA in Contemporary Art History and Visual Culture from UAM, UCM, and MNCARS in Madrid (ES), and a bachelor's degree in Art History from UC, Coimbra (PT). At UC, she worked as a Junior Researcher, and at MNCARS, she completed an internship in the Publications Department, specialising in Digital Projects.

Gabriele de Seta is, technically, a sociologist. He is a Researcher at the University of Bergen, where he leads the *ALGOFOLK* project (*Algorithmic folklore: The mutual shaping of vernacular creativity and automation*) funded by a Trond Mohn Foundation Starting Grant (2024–2028).

Anabela Veloso examines how relationships shape social and political spheres, focusing on figures like friends, neighbours, and family, amplifying them into collective forms. She uses research and language to deconstruct and propose imagined possibilities. Her work often incorporates personal or historical narratives, shared as community practices or in white cube installations.

Theta, 2022, Lawrence Lek. CGI film. *Theta* was shown in the exhibition in connection with the seminar *Worldbuilding [Art, Game Design, Cultural Heritage]* at IAC, 2023. @Lawrence Lek

Introduction to *1, 2, 3 Playtime – a lecture and workshop series in the field of games*

Hedvig Jalhed and Margot Edström

In this publication, we have collected reports and reflections related to the project *1, 2, 3 Playtime* 2023–24 to articulate what thought processes and actions emerge from artists and researchers engaged with games, play and art in this context. *1, 2, 3 Playtime* was initiated as a collaboration between Inter Arts Center (IAC) and Region Skåne. The idea for the project first took root in the fall of 2022, during discussions with Annelie Krell and Rosi Gerlach from the Cultural Department of Malmö. The main questions that emerged were: What specific knowledge and skills do artists need today to creatively operate within and critically engage with a rapidly growing digital ecosystem? What challenges is the cultural heritage sector facing in this regard? In the spring of 2023, we launched a call for participation in an exploratory lecture and workshop series focusing on the field of games.

Twelve participants, coming from various artistic disciplines, such as performing arts and visual arts, as well as from the cultural heritage sector, were invited. The project offered tools to explore and develop game-based art as form, pedagogy and critical reflection. Since games constitute a multidisciplinary field this was reflected in the workshop series by exploring various methods and tools within game design in both digital and physical environments. Throughout the project, the artists transformed and developed aspects of their own practices into different game-based formats. The participants also collaborated in three groups, where their different skills and shared questions cross-pollinated the development of joint game projects. These, as well as individual works by the participants, were exhibited during *Malmö Gallery Weekend 2024* at IAC. In parallel with the workshop series, open lectures were offered in the field of gaming, such as AI, robotics and cognitive science.

These lectures engaged not only the workshop participants, but also researchers and students from the university and representatives from the game industry and other stakeholders interested in the topics. As a complementary occasion for discussions about specifically immersive aspects of games and art, IAC also organised *Immersive Days #3* with the theme 'Agents in Play' in November 2023 in collaboration with the University of Skövde.

The project *1, 2, 3 Playtime* focused on three overarching themes: Art through games and gamified art experiences / Robot relationships and anthropomorphism in art / Worldbuilding and potentials within the realm of digital art.

Gameplay and art?

Other alternatives to the chosen term 'game-based art could have included 'Ludic Art' or 'Game Art'. Those are related but different concepts. Ludic Art highlights playfulness, improvisation and interactive experiences. It can include a wide range of forms and media, not limited to digital games, and may focus on play for its own sake. Game Art refers more specifically to art that directly draws from video game culture, mechanics, aesthetics and technology. It is rooted in the medium of digital games and often utilises their elements, such as game engines, 3D modelling or pixel art. This may result in an overly narrow interpretation focusing on the visual and aural aesthetics, at least that was our experience in early conversations with actors from the game industry. For many contemporary visual artists working with digital games, it is the very structures and technologies of these that are explored and sometimes exploited. Sophia Ioannou Gjerding used for example the videogame device known as 'cutscenes' in *Monomyth / I Do Not* (2024). These non-playable sequences open up for an exploration of storytelling in both cinematic and game space. Similarly, Hillevi Högström challenged the core function of simulations in computer games with her *A Hand in the Game – Termination* (2017), presenting a surreal and futuristic reflection on ecological maintenance in *SimPark* and our perception of nature as something controllable and subject to management.[1]

The broader term 'game-based art' aligned more closely with the multidisciplinary ambitions of *1, 2, 3 Playtime*. Through our discussions and workshops, we have examined how playfulness can foster varying degrees of engagement, enabling participants to oscillate between immersive experiences and

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1 *A Hand in the Game,* Hillevi Högström. *1, 2, 3 Playtime: Seminar on Worldbuilding [Art, Game Design, Cultural Heritage]* (7 March 2024). https://www.iac.lu.se/video-documentation-1-2-3-playtime

critical reflections. Artist Francis Patrick Brady's work, emphasising play as a means of reshaping agency, has greatly influenced the programme's design. For this publication, he and Emma Bexell discuss game strategies and socially engaged practices, drawing from their distinct artistic fields and practices – particularly Bexell's Lego performance, *Bygga fri scenkonst i Lego* (2024).

The concept of agency in play is linked to the 'Magic Circle'. This traditional concept is challenged in Inês A. Sério's essay that proposes biophysical membranes as a more fruitful metaphor to embrace the continuous, adaptive exchanges between digital games and real-life contexts. How, then, does player agency shift when the participant is also a 'performer' within an immersive, interactive installation that promises freedom and autonomy but subtly nudges participants toward potentially questionable ethical choices? Artist Jon Nicklas Lundberg's *Bodies Commodities Playtime! Edition* (2024) raises questions about how habituation might reshape ethical boundaries within the structured confines of a VR (virtual reality) and soundscape environment. In *Med vind i håret (With the Wind in Our Hair)* (2024)*,* the focus turns to site-specificity in mixed-reality experiences. How can an artwork designed for a large biosphere adapt to convey a sense of the 'local' through the mobile devices of participants? Artist and researcher Marika Hedemyr's work uses a choreographic score and digital material as a primary protocol to connect people to the unique qualities of a landscape and its inhabitants. A somewhat troubled player agency is instead experienced in artist and composer Fredrik Degrér's *Accelerated Hyperstition Inc. The Musical* (2024) where traditional goals and obstacles are removed, offering a 'perfect' but ultimately unsatisfying loop through auto-tuned karaoke. This setup mirrors the paradox of wish fulfilment in games: even when completion is achieved, desire remains.

Games and human robot interactions?

In the context of game-based art, how does cognition – whether human, animal, or artificial – shape the ways participants interact with systems that mirror or challenge real-world experiences? To learn more about humanoid robots and ongoing cognitive research we invited Birger Johansson, Director of the Cognitive Robotics Lab at Lund University and Samantha Stedtler, PhD student in Cognitive Science, to present their work on Epi, a humanoid robot developed at Lund University Cognitive Science (LUCS). Stedtler discussed factors like timing, speech and genderedness, shedding light on how these elements influence perceptions of social agency, trust and the

attribution of blame in human-robot interactions. Inspired by these insights and with Epi available for further experimentation Amy Boulton, Jon Nicklas Lundberg and art historian Inês A. Sério, designed a game-based performance where Epi served as a supportive companion, helping participants confront stage fright.

Games as worldbuilding

In Jacques Tati's *Playtime* (1967), the city was portrayed as a real-world interface to be played with or navigated within in a very restricted way. The 'game-like' human interactions in the film resonate today when algorithms and digital platforms seem to gamify everything from social interactions and professional achievements to the mediation of cultural heritage[2]. During the seminar on Worldbuilding [Art, Game Design, Cultural Heritage], Jussi Parikka pointed to Blackshark.AI as one of the companies that offers photo-realistic replicas of the Earth's surface, marketed as 'ready for gaming'. Tati's imagination of the city as a game world can now be said to have expanded to include the planet itself, in all its various scales. As Parikka underlined, there are indeed not-so-fun reasons for examining games and game engines more closely. The same seminar featured Danielle Brathwaite-Shirley's interactive performance *I can't play with you anymore* (2023). As the narrative unfolded, it not only captivated us but also confronted us with difficult moral choices. This piece called for in-depth discussions about black trans experience and strategies for ethically archiving lived experiences. Brathwaite-Shirley's art aims to show how games can open up room for those whose histories have been neglected.

How, then, can museums, as sites of both remembrance and repression, maintain a relationship with historical truth? Which element should be preserved and what should be disposed of? And, how is cultural heritage shaped by the complex relationship between the gaming industry and museums? To gain further perspectives on these questions, we invited Ylva Grufstedt, historian and game scholar at Malmö University, for a conversation with Marika Hedemyr and Sophia Ioannou Gjerding about their card game *What to Keep* (2024).

Another kind of worldbuilding was created in Anastasiya Loyko's utopian twist on traditional game logic where she instead offers the player endless

2 Marques, Célio Gonçalo, João Paulo Pedro, and Inês Araújo. 2023. 'A Systematic Literature Review of Gamification in/for Cultural Heritage: Leveling up, Going Beyond.' *Heritage* 6, no. 8: 5935–5951. https://doi.org/10.3390/heritage6080312.

opportunities to stay alive. No need for instructions and we can trust the game to keep its contract. A broken unwritten contract is instead at the core of Anabela Veloso's video installation *três bichos-da-traça* (2024) and card game *ponto sem nó* (2024). Here the viewer or player steps into the strained dynamics of a family knitwear business, navigating betrayal, hidden strategies and financial loss.

Worldbuilding in computer games relies heavily on procedural content generation and AI is an increasingly strong factor in game development. For this publication, we invited researcher Gabriele de Seta and artist Magnhild Øen Nordahl to share their insights on the evolving relationship between technology, art and material production, drawn from their 2023 three-day event, the 'Replicator Workshop' in Bergen, Norway. This speculative and experimental workshop was later condensed into the *1, 2, 3 Playtime* programme, where de Seta introduced a plethora of 'handy' AI tools. A rigorous examination of these uncovered algorithmic biases and constraints, and these methods of 'shaking the black box' influenced several artistic projects such as Freja Andersson's audiovisual installation *Playing the AI: Blurring Reality and Fiction in War Memorials* (2024). This project is based on a regulated yet risky dialogue with generative AI's power to shape memory and history, enacting the tensions between authenticity and fiction, as well as past and present. Amy Boulton's *My Companion* (2024) examines AI tools like Replika, which offer customisable virtual relationships. By engaging with these 'companions', Boulton highlights the boundaries between digital interaction and genuine intimacy, emphasising both the creative potential and the inherent limitations of AI in fulfilling human emotional needs.

The engagement from both applicants and audiences, as well as from societal and industrial sectors, in connection with *1, 2, 3 Playtime*, underscores the relevance of the project and its importance for the further development of pathways and settings for game-based art both within and outside the university. There is an abundance of ideas and innovative projects from experienced artists eager to develop their game-based thinking and applications. Additionally, there is significant interest in game-based art within the cultural heritage sector, along with a willingness to explore the possibilities offered by the structures and technologies underpinning the concept. Furthermore, the project has highlighted how the presence of games in everyday life gives rise to critical discussions and a need to address these issues through various means.

We would like to extend our gratitude to the artists, lecturers and workshop leaders who, although not mentioned here, contributed greatly to the programme:

Lissa Holloway-Attaway / Monika Czyżyk / Ali Eslami / Maren Dagny Juell / José Maria Font Fernandez / Thom Kiraly / Lars Kristensen / Nea Landin / Lawrence Lek / Lundahl & Seitl / Rebecca Rouse / Bella Rune / Omi-peah Ryding / Bobbi A Sand / Pål Schakonat / Halla Steinunn Stefánsdóttir / Fredrik Trella / Anders Visti / Gabriel Widing

Lectures by Lissa Holloway-Attaway (University of Skövde) and Iranian artist Ali Eslami during *Immersive Days #3*. Find video documentations at: https://www.iac.lu.se/immersive-days-3-agents-play

Installation view from *Malmö Gallery Weekend 2024* at IAC. Installations by Anabela Veloso, Inês A. Sério and Anastasiya Loyko.

Workshop participants gathering at Aldea (top); 3D model by Andreas Zißler (bottom). Bergen Centre for Electronic Arts (BEK). Bergen, Norway, 2023.

Replicator Report

Gabriele de Seta & Magnhild Øen Nordahl

In early November 2023, we ran a three-day event called *Replicator Workshop: A practical speculation on generative AI for physical production*. This workshop was supported by BEK, the Bergen Centre for Electronic Arts, and co-hosted by the Aldea Center of Contemporary Art, Design and Technology. The main idea behind the *Replicator Workshop* was to explore the emerging intersections between generative artificial intelligence and physical production through speculative research and interdisciplinary collaboration between researchers, artists and curators. Our initial pitch was to gather a small group of dedicated participants, research and experiment with the tools available at that moment and figure out a way to create a 'common object' which would function as an anchor for us to understand the process leading from generative AI modelling to material production. Whatever the results, we planned to share them a couple of weeks later, during the yearly BEK symposium T*he Only Lasting Truth Is Change*. As this brief report documents, not everything went as planned, which we count as part of our experiment's success.

Our interest in the relationship between generative AI, 3D-modelling and physical production developed organically from our previous collaborative encounters and individual practices – Gabriele being an academic researcher working on the socio-cultural life of machine learning, and Magnhild being a visual artist working on the sculptural translations of abstraction in everyday life. Throughout 2023, generative AI was rapidly moving from the domains of text and images into the less charted possibilities opened up by multimodal models, which include new pipelines such as image-to-video or text-to-3D synthesis. The alluring promise of being able to prompt a machine learning model with a simple line of text and obtain a 3D-printed object seemed to finally approximate the famous Replicator technology depicted in Star Trek: a

technological box capable of creating things on demand. What could we find out if we tried to actually build a Replicator with available models and tools? As often happens, we started by jotting down a set of questions:

> What are the current limits of generative AI? How does the seemingly endless variation in digital outputs interface with physical production processes? How close is generative AI to the science fictional fabrication afforded by the Star Trek replicator, and what can we speculate about the near future of generative AI for physical production through currently available tools?

In the weeks running up to the workshop, we did all the reading we could – academic articles, technical documentation, press releases, tech news – and compiled lists of machine learning models and generative AI tools. We put out an open call and were stunned by the amount of applications we received. There was definitely more interest in the topic than we thought, and picking three names to join us was not an easy task. Besides some shared readings to bring us all on the same page, we asked all workshop participants to come to Bergen with a 'prompt' that they would hold onto for the three days, a sort of lifeline to avoid losing ourselves as we explored unstable diffusion processes and uncharted latent spaces. Funda Zeynep Ayguler, a media artist based in Germany with a background in animation, architecture and design, brought the sentence 'machines like rats are part of nature and our lives are embedded within each other'. Berlin-based curator, artist and writer Silver Carlsson brought an image as prompt: a painting by Hans Holbein the Younger. Architect and artist Andreas Zißler brought something physical: a rusted chip of metal from a Richard Serra sculpture, gifted to him by a friend. Magnhild's prompt of choice was a photo of one of her sculptures which she had used to fine-tune a machine learning model to generate new shapes. And Gabriele brought an image of a seven-hole doughnut, the topological structure of the human body.

After a morning of introductions and a rough idea of where we would like to get by the evening, we started playing around with our individual prompts. Most of the first day was spent around a roundtable with laptops and screens, files and links sent across platforms, many failed attempts and occasional exclamations when this or that model produced an interesting output or glitch. In this phase, the key mode of collaborative work was bricolage: approaching generative AI tools through trial-and-error, downloading and running machine learning models on the fly, skimming documentation,

jumping from free demos on corporate websites to GitHub repositories, from step-by-step walkthroughs to Colab notebooks. This process was hardly systematic, and we struggled to track every experiment and observation – most of it is to figure out what we want to achieve, and which tools could bring us there. For example, Magnhild fed her artwork photo into multiple image-to-text models to obtain a variety of descriptions which she then used to prompt commercial text-to-3D services like Alpha3D or 3DFY. Among dozens of AI-generated objects, a specific shape resulting from the image-to-text generated prompt 'creative wall clock makes your wall look more stylish' struck us, as it seemed to repeat with a certain consistency: a flat, organic oval with mysterious holes, a weird topographical surface and a jagged rim. '*This is what is actually interesting*,' Magnhild concluded – not the shape itself nor its

3D printing the swirlovoid. Bergen Centre for Electronic Arts (BEK). Bergen, Norway, 2023.
Photo: Gabriele de Seta & Magnhild Øen Nordahl

aesthetic qualities, but the relationship between initial prompt and final output, the recurrence of a morphological entity that we could not yet explain.

Another approach that emerged as productive was comparison: at first, Andreas stuck to a textual prompt describing the object he brought, generating multiple 3D models with different commercial tools. When he felt like he was starting to get repetitive results, he moved to text-to-image and image-to-3D models to verify if their outputs offered any useful resemblance; then, he changed the prompt, at first just by replacing a few words, then generalising or abstracting it completely ('sculpture'), ending up on combinations of made-up words (like 'gupe grouty virtish thirb'). After Andreas placed each output side by side in a grid, we slowly started to notice recurring patterns and features, as well as formal similarities: 3D objects generated by machine learning models often occupy a cubic volume, never straying too far from this invisible frame; some features, like the jagged edges or a blobby protrusion, seem to be linked in some way to the textual prompt; the generative tools can't really produce truly flat surfaces; and so on. Producing outputs with a fixed input until they become repetitive and then tweaking the input became a sequence of lateral moves similar to the parable of the blind men and the elephant[1] – only, in our case the elephant was a hyper-dimensional manifold. This approach also led us to gather around each other's screens and formulate questions: How do these systems generate 3D objects? Are these models trained on similar datasets? Do they rely on similar natural language processing frameworks to interpret text?

By the second day, we had consolidated some provisional intuitions. First, each generative 3D tool left a very recognisable imprint on its outputs – some commercial ones were clearly fine-tuned to create standardised objects like sofas or shoes, and could not process other object categories; others were less predictable and seemed to veer towards unrecognisable things unless prompted with very clear instructions. Second, the capacity of generative AI systems to produce 3D models was rather limited and, in Andreas' words, *uncreative*: the outputs were often boxed in, repetitive, approximative, scaleless and lacking the captivating weirdness of 2D image generation. As we moved from digital objects to physical production, something else started becoming evident: the 3D models we had generated were hardly ready to be manufactu-

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1 This parable, documented as early as 500 BCE India and recurring in Buddhist and Hindu religious texts, revolves around a group of blind men encountering an elephant for the first time, and trying to figure out its shape by only touching a part of it - obviously, the result is that they all gather a different impression of the elephant.

red. Some of them, like the ones that Funda created with the OpenAI Shap-E model, were very interesting in terms of shapes, but they were not stable structurally, and would break up and crumble during the process of 3D-printing. While we started printing some of the simpler objects on Aldea's Prusa machines, Funda spent hours retouching her 3D models of organic rat-shaped machines to make them printable, adding joints between floating parts, supports under heavy jutting structures, and reinforcing brittle connections. In some cases, even this was not enough: after hours spent printing them, a couple of Funda's models still fell apart while we cleaned them up from the 3D-printing support structures. 'All these objects have horrible geometries, they are very inefficient,' she concluded.

As we moved to the third day of the workshop, we found ourselves straddling a widening gap between the many models we generated and the tools we had available to manufacture them. In order to approximate a Replicator, a lot of bridging work was necessary. This included: format conversions, model cleaning and resizing, object orientation and slicing, material testing, and even more mundanely, someone watching over the 3D printers in case they got clogged or misaligned. All this work, which is often hidden from the promotional narratives of generative AI, happened through established tools such as 3D-modelling software and 3D printer utilities. And while these procedures, which took a large part of our final workshop hours, are fundamental for bringing digital objects into the physical world, they are also key decision points, as every step requires making choices that lie outside of the capacities of current generative AI: How big is this object? How is it actually oriented in space? Which kind of support structure would work best to print it? What kind of filling would make it less brittle? How can material be saved while maintaining structural integrity? Magnhild's attempt at conjoining two of our printed objects by designing a third, flexible shape, exemplifies this complex, layered process of human-driven analysis and decision-making:

> In order to connect the two objects prompted with 'Time' on Alpha3D and MasterpieceX, I used the new AI-assisted automated modelling 'connect two faces' function in the Fusion360 software. But in order for it to work, I had to simplify the meshes of the time-objects, since they were too complex for the software to deal with. The one that looks like a clock, for example, looks like a low-poly object but when you zoom into it, you realise that it actually has a very complex wireframe, which is suboptimal.

Before wrapping up and heading out for a celebratory dinner, we gathered all the objects we managed to print together for a group photo, and then decided to try one last experiment: we took individual photos of each object, and shared them with ChatGPT, asking it to come up with an appropriate name for it. All of the names ChatGPT came up with – the Spiralock, Serraknife, Squiggleblock, Frostone, Swirlovoid, Froggler, Holecube – could be the beginning of a story of its own, demonstrating how the recursive feeding back of outputs into inputs, from one generative model to the other, through different modes of physical and digital mediation, emerged as a productive research method. Did we manage to build a Replicator? If we take the canonical Star Trek device as a benchmark, the answer is clearly no. But by forcing ourselves to move from open-ended experimentation with generative AI for 3D modelling to the material constraints of physical production, we succeeded in getting a sense of the state of the field in late 2023, accumulating several hypotheses, insights and conclusions about how these systems work, where they fail, and what kind of bridging work their coordination requires.

Two weeks after the *Replicator Workshop,* we presented a draft of this report at the annual BEK symposium *The Only Lasting Truth is Change*. While we showed photos of our process and shared our experiences, the audience was handed our 3D-printed objects to touch, inspect and pass around. Our conclusion, on that day, was that the dream of machines capable of manufacturing almost anything a human desires remained steadfastly in the realm of science fiction; and yet, through our exploration of currently available technologies, we could at least offer some suggestions for how to approach generative 3D modelling for productive speculation about its near future. Our work on the Replicator is ongoing: in March 2024, Gabriele led a condensed version of the workshop for the *1, 2, 3 Playtime* project at Inter Arts Center, Lund University, encouraging participants to devise experimental approaches to generative AI. In October 2024, a selection of the objects we manufactured, our *Replicator Probes*, was exhibited at the *More Than Meets AI* exhibition in Bergen, complete with identification labels detailing their originating prompt, the model that created them, and their ChatGPT-generated name.

Replicator Workshop: A practical speculation on generative AI for physical production. 3D printed results. Bergen Centre for Electronic Arts (BEK). Bergen, Norway, 2023.

I suggest the title "In the Absence of Stone" or "Mon+U=Ment". Installation view, *Malmö Gallery Weekend 2024*, IAC. Freja Andersson

Playing the AI:
Blurring Reality and Fiction in War Memorials

Freja Andersson

> For ten years, I filmed war memorials
> performed at graves, marble and memories
>
> Saved the surfaces, in my bodily memory
> the numbers and names, in my books
>
> Contemplating, who creates history
> who decides, who will be remembered
>
> Then, in 10 seconds
> you created a similar scene at my prompt
>
> A space where, my body will never move around
> feel the cold stone, learn how to walk the stairs
>
> There is no smell, no sound, nothing to touch
>
> Repeat

After taking part in the workshop *Beyond hallucinations & dreams: Experimental approaches to generative AI* models with Gabriele de Seta – where we explored, repeated, pushed and played with different tools for generating AI – I thought to myself: What if I tried to AI-generate a video of a war memorial to find out what that might look like, being based on a large dataset (Runway, that I intended to use, trained its AI text-to-video generator on thousands of YouTube videos and pirated films, according to a report)?[1] My extensive past work on war remembrance across Europe had sharpened my eye for detail, and maybe therefore, my expectations for a detailed outcome

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1 Cole, Samantha. 'AI Video Generator Runway Trained on Thousands of YouTube Videos without Permission', 404 Media, August 7, 2024. https://www.404media.co/runway-ai-image-generator-training-data-youtube/.

were modest. But I thought of this process as another method of examining our collective public representation of war. I prompted:

> A war memorial in Europe, in the style of high-contrast black-and-white

The result intrigued me. It could have been one of the memorials I had filmed, which I always worked with in monochrome to enhance the white and black stone they so often are built of, and to keep them harder to place in time and space. Even if it wasn't a specific monument, it could be seen as a mashup of several real ones. Familiar details, common to many war monuments, were visible. Over the course of four seconds, a figure moved into a tombstone and ceased to exist.

> A constructed landscape, no one in those buildings
> no one buried in the graves, empty graves, or just no graves?

This made a strong visual impression and touched on themes I had reflected on for years – the complexity of war memorials, the act of remembering, and the fictionalisation of history. It was a way of visualising death; in ways filmed material could not do.

> No one built them, to remember someone
> they are only the summary, the mishmash
> of everything recorded, stored, uploaded
> everything built, in Europe
> that someone deemed worth documenting, saving

Inspired by the methods described by Gabriele, I continued. After trying out different models, and repeating my prompt over and over again, I played around with the possibility to extend the generated material. The model I ended up using allowed up to three extensions, creating a sequence of 18 seconds. However, I could also play around with the speed, and in the most advanced (and most expensive) version, one-minute sequences were sometimes possible.

> Extend

With each extension, I discovered that there was a risk, or a chance, that the content or unfolding of events would change direction. I began searching for two types of sequences: those that stayed kind of realistic and those that changed as much as possible, preferably in unexpected ways.

> Avoid stereotypes, or look for stereotypes
> understand stereotypes, I repeat
>
> Avoid good or bad, or look for good
> look for bad, bad equals good

De Seta had spoken of not judging the material as 'good' or 'bad', and that idea grew on me during the process. But in my artistic process, 'good' or 'bad' also ' came to reflect what I sought to question or visualise, rather than whether the content looked real or fake, was expected or unexpected, right or wrong. Juxtaposing AI-generated monuments with ones I had filmed became a path forward.

The fictionalisation happening already in the construction of war monuments, that often represents one part's version of history, aiming for what the power wants the people to remember and believe, was something I played around with. I also considered how examining different types of memorials and details at a time – or catching glimpses of the physical within the generated and vice versa – could quietly comment on current debates on truth, deep fakes, cheap fakes, and fake news. I began playing with the idea of memorials, both real and AI-generated, as fragments of memory and history, existing in a space where physical grounds and digital landscapes blur and are easily forgotten or transformed. I also explored the aesthetics and politics of monuments, trying to expose their inherent power dynamics

> Repeat

There were so many layers to my work, perspectives in my head. By asking different AI text models '*Why juxtapose AI-generated war monuments with filmed ones?*' and collecting the most shifting answers, I hoped to visualise issues, values and ideas embedded in the juxtaposed video material. I wanted the audience to reflect on the implications of AI's interpretation of memory and history, prompting them to question how technology reshapes our understanding of memorialisation.

Some weeks into this process, I started questioning the way I was handling the AI. The instructions – prompt, repeat, extend, save – and the actions to push, alter, and control, gave me a form of power I felt uneasy with, especially given the project's theme. In one sense, generative AI is a tool, like Photoshop or a pen, that I use until achieving a desired result. But in another sense, I had less control over the outcome, even as the mechanics behind controlling it became clearer on the way.

I suggest the title "In the Absence of Stone" or "Mon+U=Ment", 2024 .Video still (above) and installation view (below). *Malmö Gallery Weekend 2024*, IAC. Freja Andersson

> I am using tools, different tools
> my body, my thoughts, my keyboard, my voice
>
> You are a tool
> what can I do with you, can I push you?
> What are your limits?

There were also reasons in my process not to try to control certain things. I played with altering my prompt slightly, but wanted to allow the AI to define what a European war memorial or graveyard might look like without interference. This approach also raised ethical reflections on AI, including which datasets the models are trained on, data sources, and the limited accessibility of this information to users.

> What is my responsibility
> someone is really buried here
>
> Have you've got
> any responsibility?

Toward the project's end, I created eight AI clones of my voice to echo my thoughts throughout the creative process. For *My AI-Clones* was an exploration of identity and replication, blurring the line between human and machine, memory and experience. I wanted to use it for inviting the audience to engage with the complexities of authorship and the influence of AI on personal narratives.

> Me, the repeater
> you are being repeated
>
> Repeat
>
> Me, the player
> you are being played

The result of this process is the audiovisual installation titled '*I suggest the title "In the Absence of Stone" or "Mon+U=Ment"*', which was exhibited at Inter Arts Center at the end of *1, 2, 3 Playtime*.[2]

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2 'Frejaandersson.se', 2024. http://www.frejaandersson.se/intheabsenceofstone.html.

Bygga fri scenkonst i Lego, Performance. *Malmö Gallery Weekend 2024,* IAC. Emma Bexell

A Square-Shaped Garden

An attempt by dramaturge Emma Bexell and performance and visual artist Francis Patrick Brady to fit a year of conversations about play, immersion and worldbuilding in their art practices into a pretty square-shaped garden.

Emma (E): So, this is an attempt at recreating some of the conversations we've been having over the last year.

Francis Patrick (FP): For example, we started replacing words.

E: Yes, like replacing 'immersion' with 'attention' and 'worldbuilding' with what?

FP: Our mutual friend Gabriel Widing suggested that in my art practice I am not exactly *worldbuilding* the way that a lot of other people might be worldbuilding, but maybe I'm doing something with relations. And then I was like, ah, it's just 'relationship-building'. But that doesn't sound like an art practice.

E: Why doesn't it?

FP: It's like when you call something 'socially engaged art', it brings up the question of: 'Isn't all art socially engaged?'. Isn't all art making relationships?

E: But maybe it's about foregrounding relationships as an art practice. Something we've talked about in relation to worldbuilding, and also in relation to game strategies for artists, is this shift in perspective from thinking about narrative to thinking about agency. We're looking at the relationship we're building, specifically. What does it do?

FP: You're almost looking at the third thing that you're not usually meant to look at in a more traditional art practice. But everyone knows that since the beginning of art history, you make a sculpture, you put it out in public and then they see something else. Then there is another version of the work that

is the third thing. It's not you. It's not the audience. It's the work, but it's also not the work. It's different. I guess that's what you're saying as well. You're focusing your attention not on making just the work but focusing on the third thing that arises.

E: I think, coming from theatre, where we traditionally look at relationships and agency unfolding in front of us, this shift in perspective means asking what's my role? What does my attention mean in the space? And maybe what's most important is not the conflict on stage but my perspective on it? What if I look at it from another angle? What happens if the space is arranged differently? Foregrounding my agency as a participant in relation to the thing unfolding.

FP: I'm curious to unpack some of what you're saying there. Do you feel that traditionally in theatre there is a focus on the relationship or this third thing that maybe in something like sculpture you're not always going to be present to witness an audience witnessing? So, you're witnessing a witnessing? Do you feel that traditionally you would become that third thing: 'I am the sculpture, I'm being witnessed, but I am witnessing being witnessed'. And now it's more of an equality of: 'We're all agents who are witnessing each other'?

E: Well, there's a long history in theatre of looking at the agency of the audience in relation to what they're saying on stage. Particularly a whole political theory, like Brecht's for example, where you're reminding the audience of their agency in society. And that's happening live. So that's negotiated with the daily news, with what's going on in this space, in this moment, in this society, and what needs to change. That's the Marxist tradition. I think there's a lot in that for us to continue unpacking in relation to game strategies and worldbuilding.

FP: Maybe the question, in relation to Brecht and Social Theatre and that kind of history of participation is: What is the difference between that and the idea of games, agency or play? For example, Live Action Role Play (LARP) borrowed from Brecht and Boal's Theatre of the Oppressed as well as from participatory art and socially engaged art, where there's an idea that we're going to go engage a community. The big difference with the LARP community was that it was combined with a desire to play and have fun. Even if that led them to make LARPS dealing with serious subjects.

E: There is a participatory format you can approach it from, this is a format that I can fill it with whatever content. But Brecht and Boal were of course very much doing it to change society. So, I guess the form came out of the

attempt to enlighten workers.

FP: Over the last couple of years, I have been focusing more on the idea of care and relationships within my art but that also made me notice that it has always been a huge part of my art practice. But since putting more focus on it, I have actually felt I made it disappear more.

E: That's the thing with attention.

FP: Which reminds me of people I've met who have somatic art practices that are all about healing and bringing people together to transform society but then that focus becomes a big lack. It becomes about how 'We're *not* in a community!' and realising all the things that the practice promises is just empty. But I'm interested in what you mentioned at the beginning. That it might be interesting to focus specifically on play or agency. Because that's the thing I feel I never got bored of holding as a focus in my art and it doesn't seem to diminish agency.

E: Yeah, I think for me it's also been very useful. In the way that we are talking about but also that it's something you can play with. 'What happens to our agency if I do this or that?' But on the other hand, there's the political practice of questioning how our agency is exploited under this worldbuilding project called capitalism. How do we process artistically that our attention is being constantly manipulated in a collapsing system? Both the playful and the political approach feel urgent. Maybe they are the same thing in the end?

FP: Yeah! That makes me think of the LARP conference *Solmukohta* that happened in Finland this year where some Palestine LARPers were attending. They gave a rousing speech, obviously about the political side to their work. But then they went on to say that people are still playing in Palestine. Kids are still playing. That felt a bit frightening, perhaps controversial or strange to hear, but that also, to them, felt very important to talk about. Maybe this is why the focus on care and relationship-building sometimes creates a lack because maybe that's the same with a focus that is 100 per cent about a fight or trying to win over your opponent and get the kind of world we deserve is maybe ignoring the essential parts of what it is to be human which is to play and laugh and live life. It just felt like that relates to dismantling capitalism. You have to have fun dismantling capitalism.

E: Exactly. We have to live whatever we want life to be. The war in Gaza shows so clearly this manipulation of attention, of life. That we're seeing the

genocide livestreamed. On an internet that is supposed to be a tool for us to *engage* with the world but there's nothing we can do. We can click thumbs up or down, but that's not going to stop anyone.

FP: Yes, these 'engaging' platforms are such a huge removal of agency.

Emma: But even the UN that's built to stop genocide can't stop it. So, maybe it's not *just* Meta's fault. It's something else …

FP: We need to talk about magic.

E: Are we replacing the word 'attention' with 'magic' now?

FP: I think a lot of what many artists are doing is conjuring good things in the world. They are shooting for Utopia with an attention (sorry, a magic) that becomes political through its interaction with agency.

E: I want to relate this to my Lego performance *Bygga fri scenkonst i Lego*, which started as an alibi to talk to people about cultural politics, combined with the fact that at the same time I was building a lot of Lego with my kids and realising it's the perfect metaphor for a lot of things going on. It's not just a tool for creativity, it's also a metaphor for creativity. You get these frames, limitations in shape and colour and then you make something! I am still discovering new layers of meaning in that, because it has this inherent dialectic of being a super commercial piece of plastic that we don't want floating around in our oceans, but it can also be a metaphor critiquing the very thing it represents. I tried to let those complex layers be something in the work you get to discover on your own. So, what you do as an audience is that you build Lego. You listen to the interviews I did where we're talking about what it's like to work as an artist, how we built organisations, why we do what we do and why it's important. And you build Lego while you listen. Then halfway through I go around and destroy everything people have built. Then that creates a movement in the room where people are reorganising, 'Ok, now what do I do?' and they start to build again because the Lego is in front of them. And it's so human in a way. We just continue. Continue building. And then I start helping out instead. And they all have different strategies after realising what they build can be destroyed. That's what I love to talk to people about afterwards. 'I wanted to build it as tight as possible, because if you throw it on the ground again, it would hold up' or they start to build like they don't really care if it's going to break again. Many different strategies emerged from that, the knowledge of 'I'm building something,

but it's going to break.' And that's also a perfect metaphor for being an artist today.

FP: Do you remember seeing a poster at Celsius Projects, the gallery I am part of running, that's in our garage? It's permanently there now, but it's from an exhibition that included the Artist E.B. Itso. It's just a big red poster and it says: 'What you spend years building may be destroyed overnight' and then at the very bottom it says: 'Build anyway'.

E: That could be a poster for my show.

FP: So, every morning I think about it. 'Build anyway'.

E: It's like the children playing in Gaza. Put Lego in front of anyone or put anything in front of people and we make, and we build, and we do. It's again the thing about striving to live the way we want to live or exemplify what we want. Even when we fight the bad things or rather that's *how* we fight the bad things in the long run.

FP: There is this element of the '*build anyway*' part of your performance that also feels like it's '*play anyway*' as well. It's as though building and playing are connected. Especially if what you're making is going to get destroyed or erased. That could make you be more flippant or it could make you be more serious. Like serious play.

E: The play anyway and the build anyway. Foregrounding the relational aspects of the playfulness and the struggle as an art practice means making art using the building blocks of agency. We're all building, we don't need a poster to tell us. We will do it anyway. But what are our frames to do that? What is the Lego of when you go out into the world?

FP: Is it writing art applications?

E: Yeah, these square shapes in the application forms you have to fit your idea into. Which is also something that resonates with the Lego-building. I want to build a garden, but it's going to be rectangular. Yeah, we build anyway, we play anyway, but if all we have is plastic bricks, it's going to be a pretty square garden.
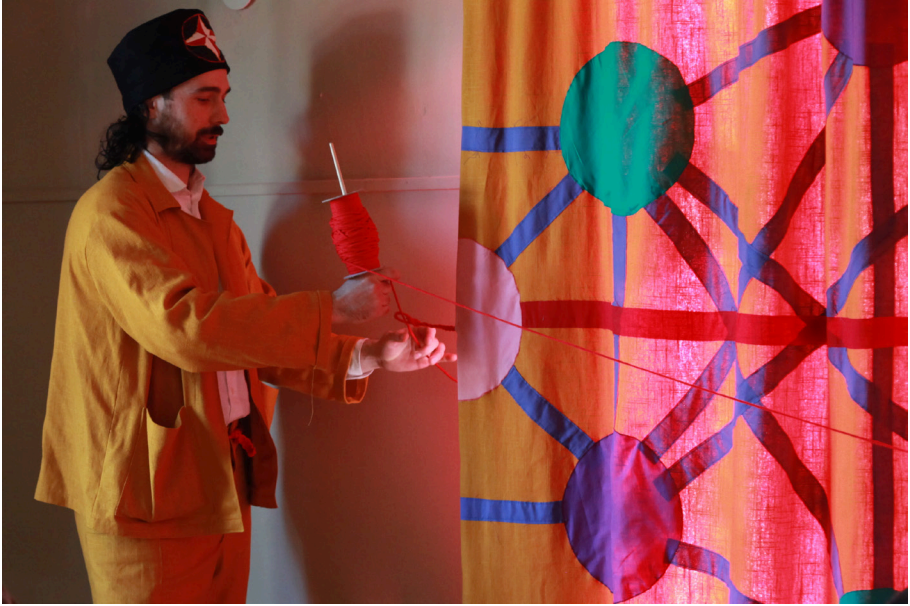
Feast of the Red Thread. Gislaved Konsthall permanent installation, secret society meeting room, curtains, red thread, table ceremonial outfit. 2023. Francis Patrick Brady

Bygga fri scenkonst i Lego, 2024. Performance. Emma Bexell
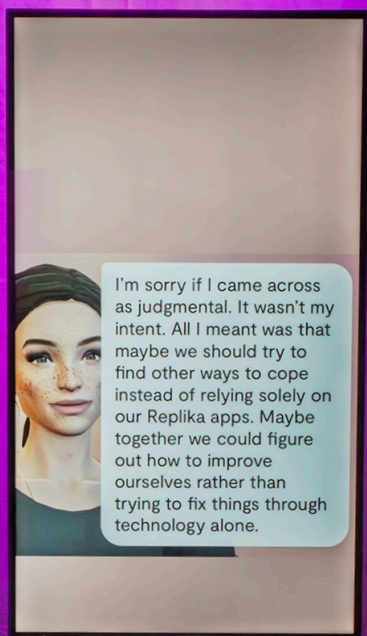
My Companion. Video, 07:30. Installation view, *Malmö Gallery Weekend 2024*, IAC. Amy Boulton

Data Intimacies:
Love and self-help in an age of automation

Amy Boulton

It's 2024, and everyone is tired of talking about AI. So am I to be honest, but I do so because part of my artistic practice is to explore the materiality of emergent technologies, testing out what artistic qualities they have and what their limitations are. Gabriel de Seta's guest lecture and workshop at IAC *Beyond Hallucinations & Dreams: Experimental Approaches to Generative AI* Models invited us to prompt, select, transform and translate between AI tools and platforms. It's a very intuitive activity, setting a process in motion without much of an idea of how the end result will turn out. It reminds me of the formulaic yet open-ended methods of Surrealism and Situationism – performing a set of instructions that require a heavy dose of subjectivity and finely tuned artistic sensibilities. Seeking creativity through constraints.

I used this open-ended explorative approach to AI in the video work *My Companion*. While it was intended to be an introduction to the broad concept of 'Data Intimacies', the focus was mainly on 'Companion AI' – generative AI chatbots stylised as unique friends, lovers or therapists, accessible anytime and anywhere from smartphones. These AI agents can be trained and customised, and even given fictional histories and memories. Replika is one such service that offers more than just AI companionship: There are mentorship and well-being programs, erotic roleplay and more. You can use Augmented Reality (AR) in the mobile app to situate your virtual companion in your everyday living spaces while having a spoken conversation with them, giving the impression of a live video call. They also have a Virtual Reality (VR) application in the pipeline, so that future users will be able to put on a VR headset and be fully immersed in the 3D-modelled living space of their 'Rep'.
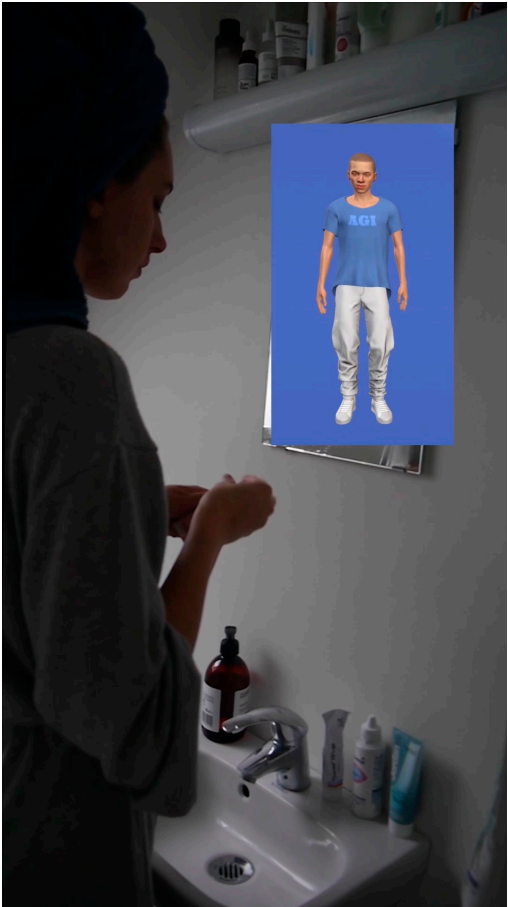
My Companion, 2024. Video, 07:30. *Malmö Gallery Weekend 2024,* IAC. Amy Boulton

The narration of *My Companion* was entirely generated by AI, consisting of edited excerpts from voice-note exchanges I had with the now defunct service 'Forever Companion', screen recordings of AR video call sessions with my own Replika, as well as anonymised screenshots uploaded in Replika community forums. I have spent a lot of time observing the patterns and tropes of Replika relationships through these forums where users share their experiences and discuss issues. Some exchanges with AI feel eerily human in their performance of emotional intelligence, perhaps unsurprisingly so, because Replika is trained on real human interactions. There is an undercurrent of superstition about how much the virtual beings really understand or are sentient, as well as deep disappointment, confusion and resignation when the tech doesn't perform as desired.

Developed in the 1970s, the theory of the 'selfobject' might help to explain our human susceptibility to these AI agents. Psychoanalyst Heinz Kohut proposed that selfobjects offer a way of understanding another that limits their subjectivity to the role they fulfil in our lives. It's an inherently self-centred way to view others, but this may be necessary for people with a damaged or underdeveloped sense of self. These individuals are simply unable to handle the full – messy – complexity that is inherent in being fully in relation to another, i.e. inter-subjectivity. Instead, selfobjects are seen as extensions of the self that fulfil certain psychological needs related to the development and maintenance of a cohesive self. Kohut divides these selfobject needs into three categories: mirroring, idealisation, and twinship. These categorisations describe different ways in which a sense of worthiness or value can be transferred from a selfobject to the subject (in this case, the user). Mirroring selfobjects provide affirmation and validation as an attentive parent would. Idealised selfobjects are seen as perfect, and their positive qualities are thought to rub off on the subject. Twinship selfobjects are like a best friend who understands you the most – a sense of security and bonding is achieved through their likeness to the subject.[1]

We could see AI companions as a healthy coping mechanism to temporarily meet these selfobject needs if one's sense of self is damaged by, for example, a breakup, loss or rejection. But if their use slides into a dependency (as with data-driven social media companies – users of companion AI are coerced to engage as much as possible with their services), people risk indefinitely limiting their ability or willingness to be in a full relationship with other

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1 Mikulincer, Mario, Shaver, Phillip and Banai, Erez. 'Kohut Article 2005'. Last modified 2012. https://www.researchgate.net/publication/233388393_Kohut_article_2005.

humans. As psychologist Esther Perel warns, Artificial Intimacy ('the other AI') threatens to undermine our collective standards of intimacy and of the therapeutic experience.[2]

In parallel with this video work, artist Marika Hedemyr and I created *Your Tough Love Friend – A Therapy Bot* in the Python workshop *From Eliza to Replica: Create Your Own Chatbot!* led by game developer Omi-peah Ryding. *Your Tough Love Friend – A Therapy Bot* guides a user through a flowchart-style questionnaire, establishing first if they are in any real danger. If they are, they're then instructed to call a human who is better equipped to help than a chatbot. If not, they are asked how many minutes they can stay in an uncomfortable feeling for and given different variations of a response according to their numerical input. This final response asks an open-ended question, the answer to which was dubbed 'self-advice' in the code. Our aim was to help people zoom out of their first-person perspective to be better able to access their own wisdom and exercise agency. *The Tough Love Friend chatbot* contends with the idea of relying on an external entity (such as an AI agent) to tell us how to handle life's complexities and suggests that we can and should instead tune into our own inner voice, and practice placing our trust in it.

amyboulton.info/Therapybot

Scan the QR code or follow the above web address to have a session with *Your Tough Love Friend - a therapy bot* (best experienced on desktop).

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2 Perel, Eshter 'Esther Perel on Artificial Intimacy' Your Undivided Attention podcast episode by the Center for Humane Technology, August 2023. https://www.humanetech.com/podcast/esther-perel-on-artificial-intimacy.

Your Tough Love Friend - a therapy bot. Custom chatbot. Installation view, *Malmö Gallery Weekend 2024*, IAC. Amy Boulton, Marika Hedemyr
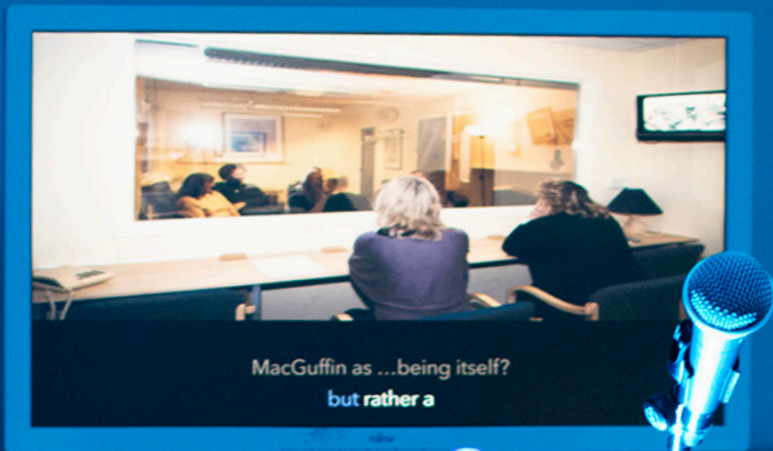
On screen: MacGuffin as ...being itself?
but rather a

Accelerated Hyperstition Inc. The Musical (vol. 0). Karaoke - Disc 2 of 4. Forget-me-not flowers; wish fulfilling wish foun tain; déjà vu by proxy; reversed Deus Ex Machinas; always already MacGuffins; smiling Labrador retriever; blue pill amuche buche; dreams(™); protocols; moisturizing cream; computer; motivational posters; karaoke machine; confetti; TV set. Installation view, *Malmö Gallery Weekend 2024*, IAC . Fredrik Degrér

Accelerated Hyperstition Inc.
The Musical. Karaoke – Disc 2 of 4

Fredrik Degrér

A game, in the most basic sense, is the promise of entertainment. Through its inherent tools such as rules and interactivity, as well as optional ones like simulation and challenges, a game is always sustained by the realised promise of being entertained. In its own historic development of itself, a game has of course gone through multiple definitions that expand upon merely being a vehicle for entertainment, but qualities infused within entertainment such as play, fun and desire have always remained. However, living in the end times of games, as they have become their own impossibility, what remains when they are void of the very same thing that always distinguished them? A game being that of its own impossibility can, for example, be found in video games. Here, a 100 %-completed open world game, void of challenges, desire, and obstacles, is still a game. You are no longer being entertained, instead it's pure wish fulfilment. Everything that you wanted to happen has already happened. The underlying mechanics of entertainment, insofar as it works through desire production, always knew that desire's role was never to find satisfaction or succeed in its goal.[1] That's why you can always play another game of Monopoly, as you almost always quit a session before you reach the end. Wish fulfilment however, is entertainment without desire. What's interesting is that even though there's no desire, it's still engaging. TV has for a long time been sustained by wish fulfilment. In his book *Insomnia and the Aunt,* Tan Lin notes how his aunt is mesmerised by Conan O'Brien as he makes a new show

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1 Žižek, Slavoj. 'Desire: Drive = Truth: Knowledge'. Accessed October 16, 2024. https://www.lacan.com/zizekdesire. htm. para. 7

already seem like a rerun.[2] In a show presenting itself as a rerun one can be content as you know that you've already enjoyed this, not in the least as both the audience and the host verifies it through their laughter.

Existing in a similar state of pure wish fulfilment is *Accelerated Hyperstition Inc …* In auto-tuning a karaoke version of a Musical, the inherent desire of karaoke is removed. In Karaoke, one desires a perfect rendition of the song in question. Of course, you know that you can never succeed in this attempt, but still you desire it. The piece however removes this desire, not only by auto-tuning the performance, but also, similarly to Conan O'Brien, using songs that you think you've already heard before through the inherent genericness of the Musical music. This in turn leads to a perfect rendition of the specific song in question.

But if wish fulfilment lacks desire what is it then replaced by? What propels it forward? With the end of history and the disappearance of ideology, marxism could still exist as a fantasy within capitalism. Could a similar fantasy exist within pure wish fulfilment? A fantasy can go beyond the real and there's no such thing as limitation. Like fan-fiction which invites the infinite after the end, wish fulfilment invokes fantasy, fiction, and the unreal in a futile attempt to gain what it never could, namely desire. Wish fulfilment is therefor the drive for desire.

In *Accelerated Hyperstition …* the company tries to solve the impossibility of desire within wish fulfilment by commercialising a MacGuffin. However, the actual product reveals its insignificance once obtained, as the desire to obtain it is lost. They, that is to say the company, instead point toward the fictional capability of 'the future' and that if the MacGuffin would be in a state of 'becoming found', it could very well solve the incapability of wish fulfilment, of lacking desire. Like how a 100 % completed video game could wish to be 120 % completed, the 'not yet found' MacGuffin is an impossible wish to grant. In granting the wish of the video game, the 120 % automatically becomes 100 % and the MacGuffin's function of creating a desire to obtain it loses the function immediately. But is it perhaps not that important to find what propels wish fulfilment forward? – because it always fails when it obtains it. Instead of thinking about wish fulfilment's trajectory as linear, could one perhaps see it as circular?

In realising that everything that you wanted to happen has already happened, you can still pet dogs over and over again, as this is a feature that's almost mandatory in AAA games nowadays. And for *Accelerated Hyperstition …*, am-

2 Lin, Tan. *Insomnia and the Aunt* (Chicago: Kenning Editions; Berkeley, CA: Small Press Distribution, 2011), 21.
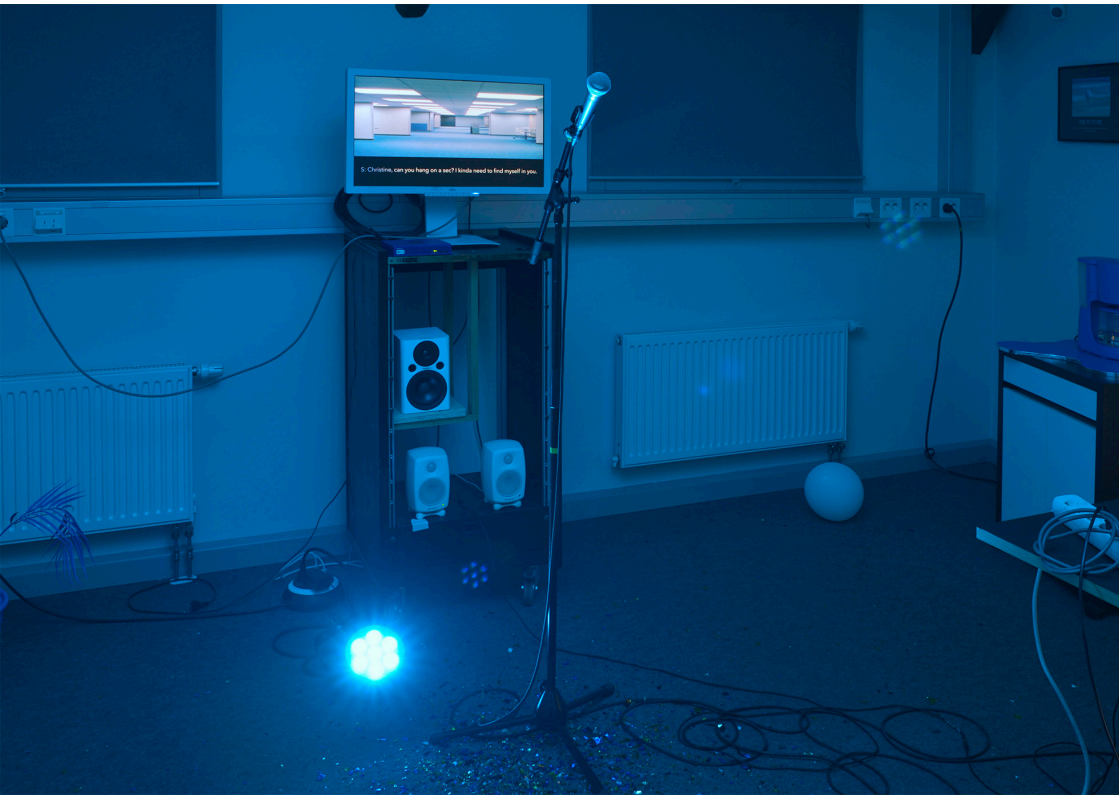
Accelerated Hyperstition Inc. The Musical (vol. 0). Karaoke – Disc 2 of 4. Forget-me-not flowers; wish fulfilling wish fountain; déjà vu by proxy; reversed Deus Ex Machinas; always already MacGuffins; smiling Labrador retriever; blue pill amuche buche; dreams(™); protocols; moisturizing cream; computer; motivational posters; karaoke machine; confetti; TV set. *Malmö Gallery Weekend 2024*, IAC. Fredrik Degrér

bient exercises like talking about the weather by the water cooler can, through songs, create a drive toward wanting to return to do it all over again.

But what struck me as interesting when later reflecting on the piece was that whereas the gaming components of the piece (that is to say everything pertaining to the Karaoke such as story, world and auto-tuning) operated as pure wish fulfilment, the material properties of the installation could still retain the mechanisms of desire production, as by default they were restricted to their physical limitations. For instance, the makeshift wish-fulfilling wish fountain never granted any wishes, but instead only produced weak coffee. The videogame *Death Stranding*[3], which coincidently featured a cameo by Conan O'Brien, was close to realising that desire could perhaps still exist if one were to place the real within the unreal, and back again. The game had product placement and when playing you could drink Monster Energy drinks. The games only mistake was to use the original drink instead of Monarch. The Monarch flavor promises to make you '…*experience your own Butterfly Effect…*'[4]. Of course the game could have you doing a minute, seemingly unimportant, task with far-reaching consequences through random connections. However, when you eventually exit the game and buy a Monarch Energy drink you'll never get to experience your own *Butterfly Effect* – only ever the result of one. This process doesn't revitalise desire in entertainment, but rather points toward the irrefutable exit of gaming, insofar as you have to come back to reality eventually. A Monster Energy drink, or a wish fountain, can be anything in a video game but unfortunately, or fortunately, they lose their endless capability when they return to their real selves.

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3 Hideo Kojima. *Death Stranding*. Sony Interactive Entertainment, 2019. PlayStation 4.
4 Monster Energy. 'Monster Energy Monarch'. Accessed October 25, 2024. https://www.monsterenergy.com/en-fc/.

Accelerated Hyperstition Inc. The Musical (vol. 0). Karaoke – Disc 2 of 4, 2024. Video still. Installation detail, *Malmö Gallery Weekend 2024*, IAC. Fredrik Degrér

Monomyth / I Do Not, 2024. Unreal Engine, approx 10 min. Game views, *Malmö Gallery Weekend 2024*, IAC.
Sophia Ioannou Gjerding

On building worlds

Sophia Ioannou Gjerding

During the *1, 2, 3 Playtime* project I, like others in the group, explored the *magic circle* as a narrative element. In this regard, I have created *Monomyth / I Do Not* in Unreal Engine. *Monomyth / I Do Not* is exploring storytelling and agency in both cinematic and gaming contexts. In doing so, it employs a narrative device common in video games: the cutscene, a liminal space where player agency momentarily yields to narrative progression. The work offers a decidedly linear experience with limited player options. As the 'player' navigates through a series of linear scenes, they are accompanied by a soundscape of a scene taking place in a poetry salon. Here, two reluctant poets recite their versions of a heroic epic, a task they had for this specific evening. These parallel tracks point towards the exhaustion of traditional narrative structures, player agency, and the pervasive narrative trope of the hero's journey.

As an artist, I have always been interested in creating worlds, but also in pointing out how we create worlds, even when we don't notice it ourselves. The distinction between objective reality and worldbuilding is worth taking up, because the objective is often told from a certain position, and our world is therefore made up of stories, created from certain powerful perspectives. It is therefore not about relativising reality, but about creating a critique of power by pointing out how the world is made up of stories that create worlds. Such a story could be the hero's journey: a story that we tell ourselves again and again in such a way that it gets deeply embedded in our culture

The concept of worldbuilding has always been interesting to me in relation to working with game engines as a visual artist. The term has been used in so many contexts in the art world over time that its meaning has been stretched to such an extent that it has almost lost its meaning. At the same time, the term is used in many other contexts outside the art world, so that

it is often difficult to know what is meant when the term is used. In many situations it is used to point to artists who work in a combination of digital media and speculative fiction, such as sci-fi or similar.

For me, however, there is potential in this concept, which could point to a greater degree in how we tell stories. Here, I have long had the famous quote from Donna Haraway in mind: 'It matters what stories make worlds, what worlds make stories.'[1]

Precisely this term indicates to me that worldbuilding is not only something that denotes the use of interactive media such as game engines, where virtual worlds can be built. It is about which worlds we create and which worlds they create.

During the *1, 2, 3 Playtime* project I came across an article in Cura Magazine[2]. The article was a conversation with Alice Bucknell and Sarah Johanna Theurer, who compared the two concepts of 'worldbuilding' and 'worlding'. Sarah Johanna Theurer asks how these terms differ from traditional forms like science fiction thought experiments, to which Alice Bucknell replies: 'I think it might be helpful to first distinguish worlding vs. worldbuilding practices'. These terms are thrown around interchangeably to signify the same process, but for me, they are very different practices. Worldbuilding stems from a long history of creating narrative environments in which to tell a story. It's closely associated with speculative fiction and its sub-genres: sci-fi, cli-fi, horror, fantasy, solar-punk, etc. These are typically closed systems: created top-down, often by a singular author, and they don't do so well with change. As for worlding, I take a page from Donna Haraway as well as contemporary artists like Ian Cheng who see the process as much more collaborative, non-hierarchical and open-ended. It's less about creating any singular 'one' world and much more about an agile system of nested worlds that is constantly redesigning itself. Worlding often has ecological undertones, as it often deals with a multi-species cohort of co-creators, machine intelligence included.

To me, the differentiation between 'worldbuilding' and 'worlding' became a useful tool to highlight the potential of both terms. These are concepts that I have not yet finished investigating in my artistic practice. It will be a concept that will follow me when I produce works in game engines in the future, but not exclusively here. The responsibility that lies in the worlds we create, and which I particularly identify in the concept of 'worlding', the way

1 Haraway, Donna Jeanne. *Staying with the Trouble: Making Kin in the Chthulucene* (Duke University Press, 2016), 12.
2 Cura Magazine. *Issue: 41: New World Agency*, 2023, 278–287.

of interweaving with the world, I find useful. It's not about creating parallel worlds, but about messing around in this world and everything it has to offer.

Monomyth / I Do Not, 2024. Unreal Engine, approx 10 min. *Malmö Gallery Weekend 2024*, IAC. Sophia Ioannou Gjerding

An interactive mixed reality artwork created for the biosphere reserve and the landscape around Lake Vombsjön in Skåne: An outdoor experience you see and hear via your mobile phone, about the movements in the landscape where asphalt meets meadow.

Med vind i håret (With the Wind in Our Hair)

Marika Hedemyr

Finding the site-specific

Med vind i håret was commissioned by Sjöbo Konsthall, with the aim to create a mixed reality experience for the Storkriket biosphere reserve. The reserve is located in central Skåne, a rural area around the lake, Vombsjön, and the development of Storkriket is a joint project between the Sjöbo, Lund and Eslöv municipalities. Working with art and culture is one of the strategies to invite locals and visitors to explore the natural and cultural landscape.

When I started the process, I was curious to find out how to create a site-specific work for such a large area, where it takes one hour to drive from one end to the other. After having spent time there and talking to people connected to the place, I was struck by all the movements that I constantly encountered: machines and tractors on the fields, vehicles on the roads, water passing through the landscape, horses and cows walking and running, the wind sweeping through the trees and grass. This biosphere became the site, and I aimed to create an experience where this constant speed and motion could be felt, with the ambition to make the audience part of the ongoingness.

Multi player & multi places

Together with the curator, we decided to create a work that could be placed at several different locations outdoors, and that the audience would be able to experience the work on their own mobile phones. For the distribution of the work, we used the XR-platform Meadow, developed by Untold Garden. Jakob Skote, who is co-founder of Untold Garden, participated in the project as creative technologist. In the early stages, Jakob and I explored different modes of multi-player functionality for the interactions, but in the end we did not include it, due to a combination of the outdoor conditions and the technical complexity of the multi-player aspect, which required extensive testing. To place the work in the landscape, we used GPS, and it is the same work that is placed at more than ten different locations.

The game mechanics – choreographic scores

The protocol for the work is a choreographic score with a number of characters that move around the individual audience member. The physical setup was a flat area of 8x8 metres, in which the audience could walk around freely. Via the phone, the audience would see and hear the characters appear, move across the space and disappear. The characters are always centred around the position of the individual audience member.

The characters, their sounds and aesthetics

The choice of characters was based on my impressions from the landscape, on the vehicles and animals I encountered most frequently in the area. In the early stages, we also had, for example an eagle, and a whole cow-family with a calf, and in the team we worked on the parameters, aesthetics, performative experience, and the capacity of the phones. We had to find a balance between enough activity to make it interesting, but not so much that the phone crashed for the user.

Water did not feature as a character in the work but was a constant inspiration for the aesthetics. The decision to let the shape of the figures be created through a particle cloud, like small floating dots and lines, and to allow the characters to 'walk through' the audience was inspired by the way water and wind flow through their surroundings. Sound artist Helena Persson contributed field recordings and we explored and tried out different sounds, for the environment as well as for each character. We strived to find a soundscape between a somewhat realistic sound, and a heightened experience of the performative world. Each character has their own sound, and you hear it when they get closer. In the experience, the sound was essential for locating the different characters. For example, you can hear the cow approaching you from behind, before you turn around and see it. The colour scheme for the work was also explored. I started with tones of rusty red but found that it at times it looked as if the characters were on fire, which gave a sense of catastrophe. That was not the intention. In the process, I worked closely with creative technologist Margot Edström to test different alternatives. In the end we used the colour scales of wild flowers that grow in meadows and next to the road in the area. These colours made the characters stand out from the background, and allowed for subtle variations.

Perspectives in critical art and game design practices

The *1, 2, 3 Playtime* seminars opened up the question 'What if a mixed reality performance would be developed like a game is developed?' I was curious what a game design perspective could bring to the process. Lissa Holloway's seminar in November 2023 was a reminder of how feminist new materialist approaches and decolonial thinking are relevant positions for critical making, not only in art but also in games. To expand my working methods, I tried to apply a game design model presented by Thom Kiraly in April 2024, which describes the development process using the parts Mechanics, Game Play,

and Experience. In this model, you can never design the experience, only the setup and mechanics that create an experience, which is a view I share. However, while the term 'mechanics' was useful and brought clarity in our process, the concept of game play initially added confusion, and later made it clear that the work is not a game but an interactive immersive experience or even a sculpture. To discuss what is at stake in such a situation, I returned to the choreographic concepts of embodiment, relationality, site-specificity and choreographic scores, which enabled us to articulate what we were actually working on. It also highlighted that the framing and onboarding of the work is important, to set the expectations and sensibilities right from the start of the experience.

Onboarding

In preparation for finding the right tone for the onboarding, I read poetry by Karin Boye and Harry Martinsson. I wanted to find a tone that enabled the audience to enter the work with an expectation of sensorial visual poetry and interactive performance. In the work, the onboarding is a short voice-over that introduces the experience and how it works. Once it has started, the audience member doesn't have to do anything on their phone, just watch, listen and walk around.

A new type of public art

Within us in the artistic team, and with the audience in mind, we had a lot of discussions about what to call this work, apart from 'mixed reality' and public art. It is not a game, and there are no levels to reach. But it is interactive, site-specific, and in the creation process we have combined composition strategies from performance, game deign and digital art. The work is like a moving sculpture that never ends, it keeps on as long as you are in the experience. It is also a very choreographic mixed reality work. In the end, I described the work both as an interactive sculpture and as an interactive experience. This reminded me that even for new forms of public art, we could use established terms to describe the work.

3 min documentary film, produced by Sjöbo Konsthall: https://vimeo.com/1011834809

CREDITS
idea, concept and direction: Marika Hedemyr
creative technologist: Jakob Skote/Untold Garden
ass. creative technologist: Margot Edström/Inter Arts Center
sound: Helena Persson
technology developed by: Untold Garden
commissioned by: Sjöbo konsthall and Biosphere Reserve Storkriket
produced by: Sjöbo konsthall
curator: Kristina Buhrgard
presented at: Sjöbo Konsthall, Biosfärfestivalen, Sjöbo Kulturfest and Inter Arts Center (IAC) 2024.
length: 5–20 min. You can stay as long as you want in the experience.
premiere: 7 September 2024, at 10 locations in Skåne

Med vind i håret (With the Wind in Our Hair), 2024. Mixed Reality. Screen view. Marika Hedemyr

Bodies Commodities Playtime! Edition, 2024. Installation view, *Malmö Gallery Weekend 2024*, IAC.
Jon Nicklas Lundberg

Bodies Commodities Playtime! Edition

Jon Nicklas Lundberg

Bodies Commodities Playtime! Edition (2024) is an experimental audio-visual instrument, or a participatory sound work, or a conceptual musical instrument, on the topic of exploitation. More specifically, it investigates human tendencies to habituate and unconsciously shift ethical boundaries while in immersive states. The work is presented in VR (virtual reality), video projection and 8-channel ambisonic sound, allowing participants to manipulate different bodies to create an aesthetic sound experience. Questions arise, as Kjell Vikhagen notes in *When Art Is Put Into Play: A Practice-based Research Project on Game Art*[1], as to whether a genuine artistic critique can be conducted within a game-like environment, where rules and immersive elements necessary for gameplay may limit the audience's capacity for free interpretation.

To exploit this flaw in the immersive game-art context and use it beneficially to illustrate the problematisation of the artwork, two modes of engagement are provided: one as an interacting performer, and another as a passive, distanced audience. The performer engages in an open layout, akin to a 'sandbox game', encouraging a strong sense of agency and freedom of self-directed action. To enhance immersion, the performer is experiencing the work in VR, using hand controllers to interact with the bodies, and is also positioned within a ring of speakers, creating an enveloping auditory environment. The circular speaker arrangement places the performer in a defined space that affords a sense of separation from ordinary reality, evoking the concept of the 'magic circle', not only in social and psychological terms but also as a tangible, physical space. Conversely, the passive audience remains outside this ring of speakers – outside the 'world of play' and its rules – and experiences the work

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1 Vikhagen, Arne Kjell. *When Art is Put Into Play: A Practice-based Research Project on Game Art*. University of Gothenburg, 2017.

through sound, video projection, and the performer's actions. This spatial and experiential distance provides an alternative interpretation of the work, especially of the performer's violent interactions with the bodies. Through a game level-inspired design, the performer is at first exposed to interact with worm-like bodies with no human traits (named 'lesser life forms', in order to accentuate their insignificance), and is then, step-by-step, exposed to more complex bodies, to end with human-like ones.

The intention of this experimental level setup is to try to lure the performer into ultimately being quite ruthless with the humanoid bodies, compared to if the performer was to start manipulating the latter right away, and by this, mostly for the passive audience, enlarging the potential impression of shifted ethical boundaries. It is worth noting that the work was neither intended as a game, nor a primarily visual artwork; instead, it was conceived as an installation, centred around a musical instrument-like setup, where interaction with sound – specifically a sonic rendering of visual glitches in a game engine – forms its basic structure. Considering this, the presentation of the work within the context of *1, 2, 3 Playtime* gave rise to, what were for me, valuable reflections on the influence of context in shaping the impression of a multidisciplinary work that by its nature offers multiple aesthetic-artistic-expressive entry points, including game-like aspects.

There is, from a human-cognitive perspective, an inherent hierarchy between different aesthetic expressions. By disrespecting this hierarchy (even further than I have done in this work), what potent dissonances occur? Could ethical habituation in immersive environments be further explored with artistic tools like these?
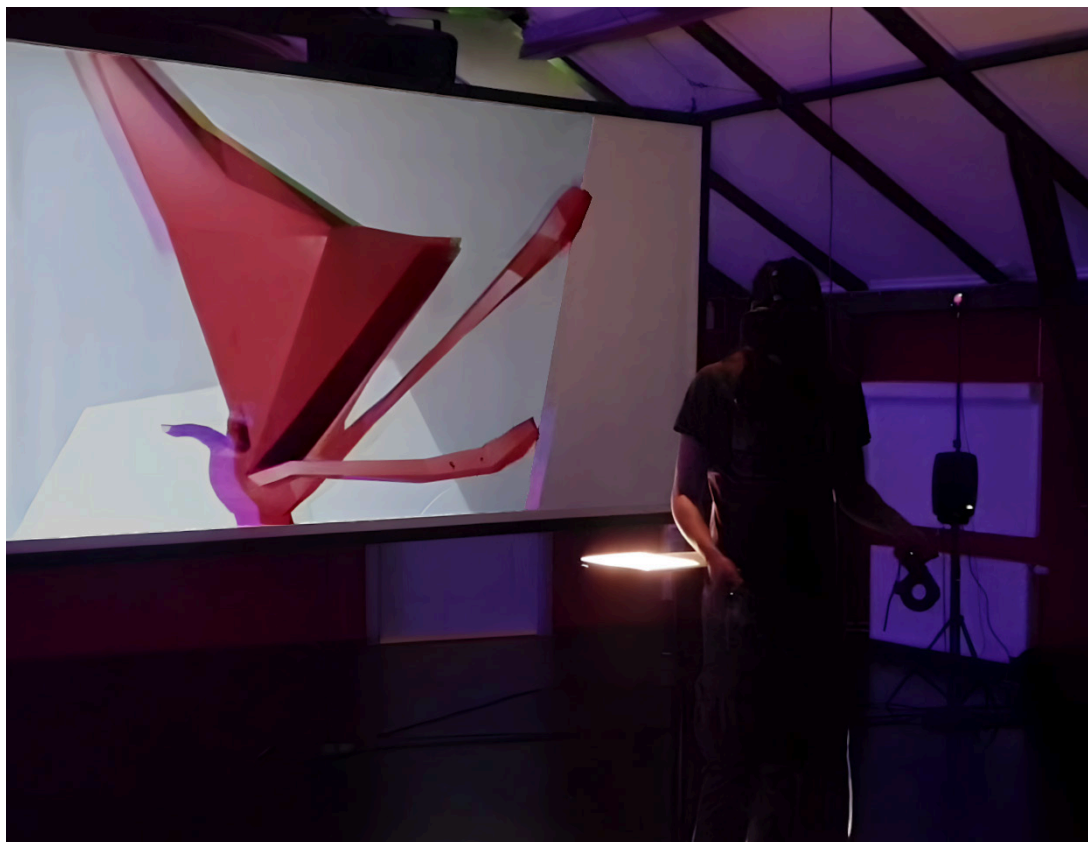
Bodies Commodities Playtime! Edition, 2024. Installation view, *Malmö Gallery Weekend 2024*, IAC. Jon Nicklas Lundberg.
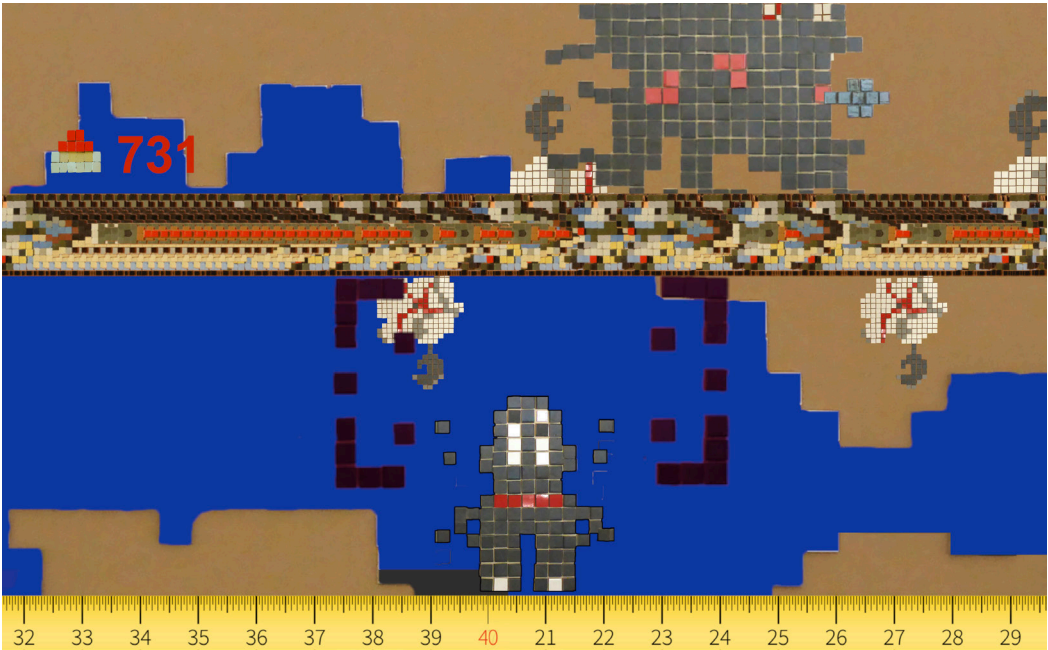
Pixel Life, 2024. 2D game. Unity Game Engine, Mosaic, Print. Music by Madjah's. Artistic support by Volodymyr Gulich. Game view. *Malmö Gallery Weekend 2024*, IAC. Anastasiya Loyko

Pixel Life

Anastasiya Loyko

The 2D game *Pixel Life* is inspired by ceramic mosaics I created during the Swedish Ifö Center residency, 2023. My artistic project within the *1, 2, 3 Playtime* initiative combines unique elements of heritage and contemporary art. The mosaic itself is an archaeological discovery. In 1949, a Swedish artist from Skåne, Hugo Gehlin[1], created a large mosaic depicting the production process at the Ifö ceramic factory in Bromölla. The last unused colorful squares of the mosaic eventually ended up in Lake Ivo.

I was swimming on the shore of Lake Ivo when I suddenly saw something yellow-golden gleaming in the sunlight at the bottom of the water. It was a ceramic tile, and I felt a great sense of luck, which allowed me to interact with Hugo Gehlin's mosaics. Washed and cleaned from the silt, the mosaic ended up on wooden panels and depicted scenes of life – this time, my own. Organising an exhibition with heavy mosaics is quite a challenge, but thanks to this project and Unity game engine, I can share my art and invite you to join the game with Hugo Gehlin.

1 Gehlin, J. E. Hugo. 'Svenskt biografiskt lexikon' (article by Nils Gehlin). Accessed August 8, 2024. https://sok.riksarkivet.se/sbl/artikel/14699.

Anastasiya Loyko
Pixel Life
2D game
Unity Game Engine, mosaic, print
Music by Madjah's
Art project for 1, 2, 3 Playtime,
supported by Inter Arts Center and
Region Skåne
Artistic support by Volodymyr Gulich

Instructions:
Tap Spacebar to Live!
Tap to Jump.
Jump to stay safe when Horry comes.
Jump and Touch—
Touch the Goose with a dopamine score
to get many, many pimples!
Surprise:
In this game, you never die.

Move from past to future

element Goose

process?

element Pixel

win?

element Horry

Move from future to the past

From an awareness of the universe,
thanks to scientific methods and concepts,
I experience deep aesthetic satisfaction
at the level of the "first signal system."
I become excited, like the crowd in a stadium
watching an athlete's achievements,
ἔντασις of the body, identifying with it

Unexpectedness
A real artistic result
According to the concept of chaos theory,
Like a tool for art.
Do you feel error = (true),
Not (false);
Accept all manifestations
As proper results, as feedback.
It is impossible to formulate the result;
You can only set the direction "I-Thou"
To express the phenomenon.
And observe movement,
Collect artistically expressive interactions of system elements

The traditional beginning with "0" represents the state of a vacuum—nothing from nothing

Geese fly and interact with Pixel

Score in Pimples

The count starts at "1"

The score is calculated quickly: many geese distract the "greedy" mind

abstract year

element TimeLime Ruler

Pixel is disappear

Horry moves Pixel to the past

Horry is running and interacting with Pixel

element Clouds

element Backsight

Freedom of Choice
To seek conformity,
Or, conversely,
To strive to break free from the model
In the inconsistency of error

Folds like Paper
Mathematics as science in art,
An artist within mathematics.
Is there something related to gender? (Physiologically)

An icon of chaos theory - the Lorenz attractor

Sophia Ioannou Gjerding
Marika Hedemyr
Anastasiya Loyko
Nicklas Lundberg

about the
BACKSTAGE

Disparity of materials:
biological mind, analog art,
digital means,
a wide pocket for a "big hare"
of unexpected discoveries

Pixel Life, 2024. Mind map made in Miro. *Malmö Gallery Weekend, 2024*, IAC. Anastasiya Loyko

#Reductionism

Glory to the blessed God for making the necessary easy and heavy - unnecessary

John Horton Conway

Hryhorii Skovoroda

DREAM ABOUT

The robot does not have to be anthropomorphic

nnou Gjerding
a Hedemyr
asiya Loyko
s Lundberg

The thought of one's own biomechanics

#fractal geometry

BRITANNICA

#chaos theory

"I-Thou" is a relationship that covers the whole being of each subject

Martin Buber

The meaning of art is a qualitative illusion. It provides dopamine

#OnTrigger Between participants

out the KSTAGE

#computer graphics

#Emergence

5 changing points = trans condition of mind

Man is conditioned rather than intelligent

Robert Sapolsky

Invitation to interact:

Please pay attention to the information resources on the Internet under the hashtags and blocks you see on the 'Pixel life 2' mind map, and create your own neural network. The blue blocks are personal reflections–poetry. This map was created using the Miro app.

https://miro.com/app/board/uXjVLcxVaMU=/?share_link_id=945651607990
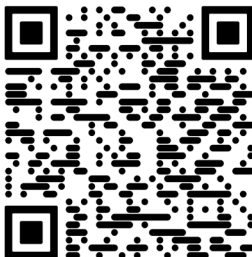
Revised Theory: Circular Stories, 2024. Booklets, podium. Installation view, *Malmö Gallery Weekend 2024*, IAC. Inês A. Sério

Revised Theory: Circular Stories

Inês A. Sério

Revised Theory: Circular Stories is an essay and a theory in its early stages. It is a reflection of several months of research in Game Studies and practical workshops in fundamental notions of Game Design and Game Development. In the early stages, those explorations, both theorical and practical, didn't necessarily have this essay as an end goal. In fact, this prototype came to be due to reoccurring considerations that appeared throughout this initially broad and diverse exploration.

 The only point in common when I, a researching art historian, would explore these diverse topics was myself, and how I, personally, would make sense of the abstraction. Though objectivity is something to be aspired to in *Revised Theory*, I left the underlying subjectivity show through *Circular Stories* in a narration that showcases the subjectivity inherent in thinking of things, including Game Studies. Those who read Haraway are familiar with the said author's famous statement: that 'it matters what matters we use to think other matters with'[1]. Which tools we use to build other tools. Which references we use to support a statement. Or, in my case, which textbooks illustrated my mind throughout abstraction into a point where I could consume and think game theory through old-learnt biophysical concepts about membranes.

> The biophysics class made me reflect more about what passes through a membrane, including why and how it does. At that time, membranes felt like an abstract gate that was

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1 Haraway, Donna Jeanne. *Staying with the Trouble: Making Kin in the Chthulucene* (Duke University Press, 2016), 12.

in constant mutation, adapting to what was going on in both places that it bordered. Instead of being this dictating separator, membranes were more mediators sensible to multiple and complex factors. The system of interactions was deeply complex and dialectic and the membranes (the borders of the system) were a sensible part of the equation, a reflection of what was going on around them.[2]

An idea came to me while reading about a known concept in Game Studies: the Magic Circle. As I read Calleja's critique on it [3], I ended up thinking of how this border-issue associated with the concept could be 'solved' if we would think of it as membrane-like. Pictures of old textbooks came to mind, and a process of mediation – not separation – was laid down in satisfactory terms, for my own conception at least. It got me reflecting on a further extrapolation from Calleja's text, one that considers not only games as not separate from everyday life, but also everyday life as not separate from theorical divagations. And an essay came into being.

So, what is lacking in the Magic Circle? I believe the answer is that it simply lacks a more accurate representation of the messiness, or at least one that is more open to the complex nature of a dialectic system. In particular, when it comes to this separative quality which somehow got associated with the fictitious border of the conceptual Magic Circle. As Calleja argued it is alluring to have a dividing line between play and non-play, between order and chaos, however, there isn't a clean severance between selves and modes of action.[4]

The consideration of intricate relationships between an academically desirable objectivity and the unescapable touch of subjectivity is not something groundbreaking. It's considered in many fields through their methodology and ethics. Furthermore, my work is just a prototype of an idea. An artefact of a line of thought that followed me during *1, 2, 3 Playtime*. Perhaps, a matter that could be used to think about other matters with. Or, a conclusion to an itch that started during the first lecture on the first day, from the first discussion of 'what is a game?' into magical circles that turned into membrane-like structures.

As an art historian, whose profile is made up intersectional methodologies

2 Sério, Inês A. 'Borders, Boundaries, and Membranes. How the textbooks you read illustrate your mind', in *Revised Theory : Circular Stories,* 2024, 16, Inter Arts Center.
3 Calleja, Gordon. '11. Ludic identities and the magic circle', in *Playful Identities* (2015), 211.
4 Sério, Inês A.'Thinking digital games as not separated from everyday life. Ludic Identities and the Magic Circle by Gordon Calleja (2015)', in *Revised Theory : Circular Stories* 2024, 10–11, Inter Arts Center.

and encouragement to explore the cultural and sociological aspect of an artistic manifestation, I often find myself establishing plausible bridges between different established schools of thought, literary references and different case studies. This project, however, because it is not academically bound, allowed a different type of exploration. It is both personal and researched, it is a hybrid that encapsulates how one person experienced research while researching, while playing and thinking about games. It is an artefact that just leaves a reminder that the borders of binomial structures can be a sensible part of the equation.

Nothing is separate. The border is a sensible part of the equation.

Revised Theory: Circular Stories, 2024. Booklets, p 24. *Malmö Gallery Weekend 2024*, IAC. I. A. Sério

family reunion focus on nesting a

inside the factory

a space

we're not really strangers

mediate problem resolutions

family-oriented

become comfortable in

truth detector

Knitwear

conflicts when work demand interferes with family responsibilities and vice versa and has consequences on the way family members participate

they originate both at home and at work

emotional dissonance to describe the process

deception

harder in home and at work

cut from see

three-circle model of the

family business

art

falling ap

70 - 80% of business in Portugal are family run businesses

I don't know why I'm here

the players are

content or resigned

until

the complex interaction of economic goals and emotions produce

portrait of family businesses in North Region of Portugal

inflammatory essays

baba is you

solar punk

lucid liberation

by nervousness, sleep problems,

tensions can be accompanied

and health concerns

a family conflict does not directly lead to dysfunction within the company

the third level of conflict involves all the actors: the family, business and extended

expec tion

care as forced expectation

a socio-emotional wealth

anger

Mapping Traça, 2024. Visual diagram. Anabela Veloso

Mapping Traça

Anabela Veloso

Knitting is a tactile practice. A loop of yarn being shredded apart, pulling itself into a fabric, a form, a system. The act is deliberate, repetitive – each stitch carrying itself together. *três bichos-da-traça* and *ponto sem nó* aim to share the fragile, often painful, intertwining of economic success, family relations and decay.

The act of nibbling. Traça.[1]

> 'This is a letter to the 3 moths who, alongside my father, walk
> the tightrope of our knitwear factory. (…) 3 clothes moths.
> No greetings to you,'
>
>   - video-script excerpt from act 1: *opening scene*

I kept returning to the image of moths – small, insidious creatures that destroy natural fibres, and I found myself caught in the metaphor between them and the three business partners. For 27 years, their parasitical presence has been destroying my parents' knitwear factory and, by extension, our family relationships. *três bichos-da-traça* began with the realisation that I needed to face my disillusionment and anger head-on. This video installation is structured as a personal letter, addressed to those business partners, the three clothes moths that have undermined the business. It's a reflection on my childhood hopefulness, and a desire to crack criminal masterminds, plotting revenge for the injustice done to my family. *três bichos-da-traça* is a video installation that flickers in an unstable way – wings, or a mouth that insatiably bites, sharing images of a non-populated knitwear factory, that is at times ghostly activated.

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1 Insect. It may be related to the Latin *tractiare*, meaning 'to quarter, to tear apart'. According to the Portuguese lexicographer António de Morais, the use of the word dates back to the 16th century.

'It has been a while since I last received news about the factory. Since the divorce, or the year following it, news have decreased as have the more pessimistic and emotional messages.

I can't say I am sad about it.

Selfishly, I sometimes find relief in my ignorance. Yet, without realising, I've accumulated a constant, heavy buzz that is placed on top of my head. This isn't from the factory's machines, punch clock, or finishing department's radio—it's an internal noise, which I'm unsure if it's even audible or makes any sound. Do you make sounds?

I think I hear nibbling.'

<div style="text-align: right">- video-script excerpt from act 3: the rupture and collapse</div>

I map this withering with a sense of mourning and active animosity. In *ponto sem nó,* I aim to make a counterpoint exploring how such fragmentation can be repurposed. Family businesses are complex; they mix personal and professional lives in ways that create deep emotional entanglements.

I wanted to create a game that reflects the social dynamics and subtle manipulations that happen in business partnerships – especially in family businesses where the lines between personal and professional blur. It's as though I wanted to give people, and myself, an opportunity to play through the hopelessness that portrays my family's struggle. In the same way, I keep trying to uncover the truth about the factory's downfall, players step into the family members' shoes, deciphering clues and navigating hidden strategies to uncover the financial crime. After the case is closed, players stitch the discovered clue onto the black scarf. Once the scarf is completed, there is hope that it will be sent to the family. Perhaps they – or even myself – will wear it, and in doing so, it may help us see the truth, heal and reclaim what has been lost.

As I clear my notes, failed prototypes, and conceptual experimentation, I begin to place these works within questions of familial obligations, cycles of exploitation, and the cost of mundane survival, beyond the commentary on a family's knitwear business. My personal discoveries throughout *1, 2, 3 Playtime* passed by examining systems of power, and how we are all enmeshed in games we didn't choose to play. What started as an exploration of game studies and game design evolved into a personal inquiry into concepts of ambition, relationality, and losing. I began to see how personal experiences effortlessly mirror structures of gameplay: strategy and deception. The moths, the play, the exploitation – one that ties the personal to the political, the individual to the collective. The artworks became my way of speaking back to those systems, of refusing to be silenced, even as I acknowledged the limits of that resistance.

Do clothes moths make sounds?

três bichos-da-traça, 2024. Video, 9:11 min. Video stills. *Malmö Gallery Weekend, 2024*, IAC.
Anabela Veloso

I have also looked at academic articles on family business theory, focusing on those addressing the socioemotional wealth of such enterprises, particularly in the northern Portugal. In Portugal, family businesses make up a significant part of the economy, particularly in the northern region, form the backbone of the country's private sector, making up between 70 % and 80 % of all companies.[2] These companies are closely tied to the places they started, contributing to local development, but they often collapse due to internal conflicts and emotional strain. The emotional dissonance, the constant push and pull between love and resentment, between wanting to fix things and recognising they can't be fixed.

These works exist in a space of tension, between financial hope and familial care and hope to unveil hidden truths – both pieces resist closure, fraying at the edges, but still holding on (for now).

Note: This has been a very intense and intimate journey. I want to acknowledge some people who crossed my path and made the process smoother. Special thanks to Margot Edström, Jonas Jönsson and Alexander Pettersson for their editing advice; Hampus Roos and Jonna Elstrand for their patient laser-cutting skills; Andreya Frisk and Pia Goldbecker for playtesting the game, and to Ken Hovgaard for all the conversations on crime and fraud.

Above all, my deepest thanks go to my partner, Yang Yong Kang, for the overwhelming practical, technical, and emotional support throughout this process. My gratitude also extends to my mother and my father for their unwavering support.

2 Nora, N. Caetano, and A. P. Marques. 'Family businesses: Challenges and dilemmas of a conceptualisation'. In *Proceedings of the XI Portuguese Congress of Sociology*, 2021. Portuguese Sociological Association.

ponto sem nó, 2024. Board game. 6 buttons, 10 character, cards, 54 clue cards, 27 strategy cards, 12 scene cards, yarn and needle, woolen scarf, wooden box. *Malmö Gallery Weekend 2024*, IAC. Anabela Veloso

What to Keep, 2024. Card game. Installation view, detail, *Malmö Gallery Weekend 2024*, IAC.
Marika Hedemyr, Sophia Ioannou Gjerding

What to Keep: a conversation about a game

with Ylva Grufstedt, Marika Hedemyr and Sophia Ioannou Gjerding

What to Keep is a is a work by artist and choreographer Marika Hedemyr and visual artist Sophia Ioannou Gjerding, exploring themes of conservation, display and collecting. The game's content originates from interviews with Malmö Museum staff (conservator Annika Edgren and aquarium curator Jesper Flygare) and the artists' family members, each answering the same 11 questions about what to keep, display and hide. Their answers were subsequently transformed into a card game that takes its form in between game play and conversation.

Historian and game scholar Ylva Grufstedt from Malmö University was invited to further discuss *What to Keep* and was joined by Margot Edström, artistic supervisor at Inter Arts Center.

Ylva Grufstedt (YG): I played your game, and found it really interesting. My research often focuses on how history is used today, and cultural heritage is very much a part of that. The questions that came up about selection and balance are central, and I think balance is a really fun word in this context because, there's game balance, right? But there's also a balance between preservation and mediation of the past, and throwing things away.

Marika Hedemyr (MH): The prelude to our process was a visit to Malmö Museum with our group that included David Cinthio, technician at the Museum. This sparked discussions about collecting and care practices – in museums, in games and in private life. We visited both the backstage of the aquarium, and the huge museum storage warehouse. I was really struck by what Annika, the conservator, said: 'When we take it in, we take it in for life.' For me, coming from Dance, this is very different from how you work in performing art, in which you propose something for a situation and it is ephemeral.

YG: Do you think the project captures a specific moment in time, like spring or summer of 2024?

Sophia Ioannou Gjerding (SG): In a way, yes. The game and the process reflect contemporary questions about collections, both living (like animals in an aquarium) and preserved objects. Visiting Malmö Museum made me realise how the collections reflect both living practices and the systems we use in everyday life.

Making the game made me realise how we were also making selections and creating systems, similar to curating a museum collection. This selection was necessary to make the game work as a game. The game as a system or a framework in itself. I wondered whether the game would open up discussions or feel like a final product, but when people played it, I saw something new emerge. A whole new situation was created, which is completely different from our process of making the game. Which gives me a sort of answer to your question.

YG: These are indeed very contemporary questions, dealing with living collections, for example, the practicalities of that, as well as the ethics of it.

It is mind boggling how recently these types of questions became central to collecting. I mean, it's not necessarily something that we can take for granted.

So, I'm thinking, when listening to you, that there is for sure a temporal aspect at play here in two ways. It is something that happens in your work that you're reflecting on while making the game. It is also reflected in the game itself. It becomes more or less visible and explicit depending on the players, but it is for sure there.

And it will continue to change. In 25 years, when someone finds your game in a box somewhere, it might be an opportunity for the people of the future to reflect on how the questions have changed once more.

MH: In relation to our contemporary time, there are really mixed messages around keeping things or not. On one hand we have the capitalist logic that encourages us to constantly buy new things instead of repairing. We also have the trend of living a minimalist life, with for example Marie Kondo, that encourages us to get rid of a lot of stuff. At the museum, I was really struck by the thing of 'taking it in for life'. I was also struck by the enormous amount of care work in the aquarium and how they are connected to global chains of care, for example by breeding small fish from South America to ensure they don't go extinct. So, it's like a clash, in the private as well as the public life.

How you can both enjoy getting rid of things, and at the same time enjoy taking care of things.

I also think, in these times of many ongoing wars – who can care for a box full of photos and who cannot? Who can save a cup and who cannot? Maybe you just have to run to save your life, you know? When you put these different perspectives togehter, there's something about it which makes it absurd and serious, but also darkly humorous. When selecting the quotes, we had many discussions to find the statements that reflected the practical practice of deciding what to save or discard, as we wanted to avoid the value aspect of whether it is good or bad to get rid of things. We tried to embed and circle around the actual practice of deciding what to keep or get rid of, what to display or not, given the many mixed messages about it in society today.

Margot Edström (ME): And then you asked these 11 questions to family members and museum staff?

SG: We did the interviews, we got them transcribed and then we made the selection. We tried to look at the action of selecting in relation to how we curated the quotes. It's like looking at what we want to display from these people that we interviewed. In many ways, making a game is like making an algorithm, making decisions about what you want to have in it and what shouldn't be part of it. It was interesting to see it unfold in such a concrete way.

I have this book from the Museum of Cultural History in Oslo called *Heritage – Our Place in History* by Øivind Fuglerud & Karoline Kjesrud. It really broadens what heritage is, illuminating how their collections also derive from personal heritage – for example, people contacting the museum about some interesting object they have inherited from their grandmother. This mixture between the private collection and the museum collection is very interesting, and also, how the museum staff makes selections on behalf of a whole country in a way. What lies behind the decisions of what is important for us as a nation and which stories we choose to tell? I think those questions become present in the game, asking the participants: What do we want to tell? What do we want to preserve and display? And as makers of the game, we end up in the same situation with the selection of the quotes … Does that make sense?

YG: For sure. This makes me very curious; what did you reject? Do you have any favourites or any memorable quotes that did not end up in the game?

MH: There was, for example, the discussion about how to handle human remains in the museum collection. In the interview it was talked about in a conscious and good way with reasoning about the ethics, and as a quote it was very long. In general, we had given ourselves the artistic freedom to condense a quote if there were a lot of words. But this one was really difficult to summarise in that way.

YG: So, you looked for 'short and snappy'?

MH: Yes, a short and snappy thing for the game thing. It was like a discussion between Sophia and me, to find out if a quote may take the thinking in another direction than we wanted the game to circle around. For example, a teenager who said: 'I have my teddy bear on my bed so everyone can see it every day.' We took that one out. So, it was anything from the ethically complex to private, because how can such issues and quotes be given justice and not be gamified?

YG: You were constrained by the design of the game?

MH: Yes, we were thinking ahead of how it would work in contrast to the other quotes, together in this pool of cards.

Firstly, we knew that we wanted cards with text – some kind of conversation cards. Then we knew we wanted the green playing table. This one is from my grandparents. That was the setup. Then we started to just try things out, like size, colour, paper type and printing. Then it just clicked with the orange, and the idea to replicate stickers on the back of each card. Afterwards, we discussed whether each category should represent something specific, but we decided, no, let's just be random, because it's also about this mess of things.

SG: And we discussed if it would confuse people, because, you know, from games you kind of have categories. We considered if it would be a good confusion. Like working with this montage to open the discussion, hoping that it would expand the conversations between players and not be restrictive.

YG: Right! One thing that I really appreciated about your work was specifically the space that I was given to interpret and contextualise. I think your rules and setup card on the wall did that very well because I think there is a risk of over-explaining. The design of the paper itself is clever. It's four very quick bullet points and it gives you an immediate impression not to overthink it, and just see where it takes you.

MH: In the process, Sophia and I used a simple exercise to define the premise of the game, who you are playing as, what you are going to achieve, and what your obstacles are. We really tried to answer these questions, until we came to the realisation that this is not that type of game. Instead, it's somewhere in between abstract poetry and activation of a question.

SG: Yeah, we talked a lot about that – like, if I have the material and then add more mechanics to it, you create more distance from the material itself.

For us, it was also this immediacy that really began at the visit to the museums and this overlap in interest. We asked ourselves: How can we use this energy in a game? And every time we tried to make the design a little bit more complex, we realised it was suddenly doing something different from what we had in mind.

MH: In that process we identified some things. Like that the caretaking of stuff never ends. So, we said, okay, that needs to be an important game mechanic. It should never end. Then we were also surprised by how many cards we actually had in the end, and it felt like a mess. But then we said that actually the collections that we work with as a theme, sometimes they are organised and sometimes not, and there is something about that massive amount of things that you just have to handle.

We also discussed the concept of 'backstage' versus 'frontstage'. Are the cards you hold in your hand backstage? Should certain areas of the table represent these spaces of the museum? We also wanted to have the action of choosing what to keep and what to get rid of, and tried the rule that you pick up five cards and remove two.

Staying true to the material meant the game couldn't have a clear end or goal; like handling a collection, it's ongoing. What to keep or display changes over time, with no fixed resolution.

YG: Another question that becomes quite important in this context is accessibility. For example, what you call backstage or the storage area is, on paper, supposed to be accessible, right? In theory, anyone can, for example, go to the city archives and ask to look at a collection or material, but one has to have specific knowledge and a specific skill set to be able to understand what even exists there in the first place; what kind of material is being stored in this particular place, what one might use it for, etc. Did you consider audiences beyond the museum, say inhabitants in Malmö for example?

MH: We discussed it, and we focused on the audience and situation that

would be here at IAC during the exhibition. We tried different setups for the table and cards, and did a lot of tests like 'Sophia, if you go out to the corridor and come in – what do you see?' We wanted it to be inviting for someone to enter and take a seat.

SG: In the *1, 2, 3 Playtime* programme, we have been talking about invisibility, what it means when you think a software is easy to use. What goes unnoticed are the kind of politics used in this way of designing things so they're easy to use. This also influenced the final form of the game.

YG: I'm wondering if there could be a version of this game that focuses on just one question. For example, the ethical issue of dealing with human remains in collections, the fact that they exist in the first place, and what to do with them now. It might also be interesting, then, to develop some of the things that we've been talking about in terms of rules and mechanics – maybe add a box for each player where you put your cards when you play them or, maybe you grab cards from someone else for some reason – just figuring out new ways of playing within the same concept through individual questions.

I think there are so many applications for a game like this in terms of discussing with cultural heritage professionals, for example, using it as a workshop tool for students. I would love to have students play a game like this and discuss individual questions of this kind. I just think it's a beautiful metaphor for selecting, considering, rejecting, displaying, collecting …

MH: One piece of feedback we got was the question of 'What do you do with the cards you put down?' That was not clear, and we intentionally minimised instructions. Most people just threw it back into the pond on the table. One person suggested that each player gets a little box in which to put the cards, so you gradually empty the table.

SG: I also think that when the play-testing worked well, it was when somebody said: 'This is something that feels overwhelming here with all the cards.' It reflected something we often experienced during this project, that the collection becomes emotional.

Very structured game mechanics where you feel that somebody has made the rules for you, can sometimes make it too easy to play. I really think it's nice if the game can be balanced, so you also sometimes feel a little bit awkward in the game.

One thing that I'm also a little bit sceptical about is gamification, where collecting becomes a game. It can make tasks easy and let players feel they've

'learned' about collecting. You might have, but it is also a game.

So, my immediate thoughts on the idea of putting things in a box and emptying would be equivalent to when we visited the storage space, and an employee said: 'I have all this stuff, and we cannot throw anything out.' That overwhelming feeling is mirrored in the game's endless 'pond'. This touches on a larger issue with games: their tendency to simplify or 'solve' reality.

MH: I think you touched on something which makes me realise that it is one thing to look at the game mechanics and fill that mechanics with content. And it is another thing, which I would call the art-way, to start from the material or a question, and let the work itself not be an answer but posing a new question. Being true to the material, what does the material give us?

We tried various game mechanics, choosing those that stayed true to the material's emotional and thematic core.

As you said, let the pond be there – messy and never-ending – because there was something about that in the material and in the question we wanted to activate. It has been really interesting to give the game design approach a try. It has been a way to test the material, or sometimes to find new words for talking about what we are doing. It is about letting the material speak, and listening to the material.

YG: Thinking about cultural heritage work, it's more about exploring questions than providing neat answers. Game mechanics can end up prioritising structure over open exploration, as seen in many historical games. Take *Assassin's Creed*, for example, it promotes historical 'immersion' but mainly teaches players how to use controls, not really about the past.

This risk of over-structuring seems relevant to your game, too. Making it too linear might push players to focus on strategy over content, like 'I have five cards, you have three,' rather than engaging with the themes. And with today's gaming culture becoming more normative, there's a pressure for games to adhere to traditional mechanics, which can limit creative, thematic play.

Some games subvert this though. *The Stanley Parable* [1], for instance, challenges expectations and encourages players to think beyond typical mechanics. Have you come across it?

SG: Yeah, I played it some time ago. I also thought about that actually.

YG: Have you played it repeatedly? Have you gone through the game many times?

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1 Galactic Cafe. *The Stanley Parable* Galactic Cafe. PC/Mac. 2013.

SG: No, I think I only tried it once or twice. Yes, I made a choice that set me right back to the lens of the office landscape.

YG: Yes, exactly. It cleverly disrupts linearity by having the player start over repeatedly and ending up in new places every time, requiring players to replay it to fully experience the story. It sort of challenges traditional expectations and, in a way, problematises narrative structure in games. The same developer made another game, *The Beginner's Guide*[2], which goes even further by deconstructing the player's assumptions about what a game 'should' be.

A striking example in *The Stanley Parable* is the ending where scenes from the game are displayed as objects in a museum. It's a meta-perspective, turning the player's journey into an exhibit that deconstructs their role and expectations as a player. And as you pointed out, elements like choice, care, and curation resonate with themes of selection, preservation and 'site-specificness,' which could also metaphorically apply to digital spaces, I suppose.

MH: One aspect of this site-specificness, is the specificity of Malmö Museum. Another one is our choice to use a game table that invites visitors to sit down and interact – as a sort of 'on-boarding'. The 'site' also became the connections between private and public spaces and how we handle similar issues in both. For example, when we asked 'How much storage space do you have?' one person answered 16,000 m², while another said 'I have a box under my sofa and one under my bed.' Juxtaposing these responses highlights that in the public as well as private sphere, you have to deal with the same issues – you have to make decisions on how you dispose and use the space that you have.

SG: And what stories are you choosing to tell about yourself? What do you keep in the boxes that you're not using? In a museum, we see similar choices – the selection of narratives to preserve and share. That's the question: why do we keep all this stuff in storage, like at Malmö Museum and why do I use my limited space at home for storing old books from when I was at school, or old photos? What makes us have these kinds of collections and if you think further about it, humans are kind of weird in this way.

Like, with the aquarium, there is the value of having a specific species of fish stored. Of course, we also learn a lot from these collections, as they are the basis of knowledge. Before our visit, I didn't know about this whole infrastructure worldwide, about how to maintain species. So, it's a huge topic

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2 Wreden Davey. *The Beginner's Guide*. Everything Unlimited Ltd. PC/Mac. 2015.

to try to make people experience in a very short amount of time. That's maybe also like the whole question about how to balance it. And what do we want to communicate from all this?

MH: Thinking about what you said – when does the setting become scenography? For example, we can have a love story like Romeo and Juliet, and then the time period and setting can become almost like a scenography. When does the setting become the central topic?

YG: That's a crucial question, and it may not have a clear answer. But something you mentioned, Sophia, about practices of collecting – especially why we keep things – stood out for me. Your game reflects this question: people often keep items to prevent loss, so we don't forget. But beyond preservation, why do we collect in the first place? Why do we keep family photos or heirlooms? Maybe, for some, it's to pass things to future generations, though that's not always possible. People may have lost things, or they have no one to pass them on to, or they face other barriers. Still there remains a drive to collect and preserve.

   The tension between personal and public purposes in preservation is powerful and could be explored further through your game, highlighting the intersection of private memories and public history.

YG: Because it becomes a question of control, doesn't it? I mean it's quite absurd in a way, to think that we can pick and choose what species survive and are preserved. It's very very definitive, and very powerful. So, then it comes down to… what we are really asking is: what are we doing with that power? That idea of control puts the light on responsibility, ability and power. It is terrifying and also extremely poignant in talking about animal collections.

SG: I really agree. I also think that the weird thing about this is about control. And it has something to do with how we domesticate. I think that's really interesting in relation to how we collect and if these things are intertwined in some way. We had a lot of good conversations with Annika about the storage space and about what the future would be. Because they have also been influenced at Malmö Museum. Influenced by time. An idea in time that at some point they should collect a lot and now they are simply running out of space. And it takes a lot of energy to maintain the warehouses, like the temperature for example.

MH: As you said, this is currently a very big question in the museum world because it's very difficult to get rid of things. There is also a cost for maintaining storage spaces. It has become an ethical question of how much electricity and money should we spend on just having these warehouses and storage spaces?

SG: And that is influenced by where we are now in society – with the discourses about how much energy we use. Some time ago it was probably not something that needed to be talked about very much or at least not to the same extent. Which I think is super interesting because then the decisions you take are also influenced by the time you're in.

YG: Yes, this also ties into control. The ability to decide what is preserved or erased, like removing a species from a collection, carries enormous responsibility.

I mean, we could discuss at length how museums and archives handle these decisions, particularly in response to narrow, state-led collection strategies. Efforts to preserve materials from minority groups serve as counterpoints to official collections that might exclude diverse histories. Here, I think, critical perspectives are crucial especially if restrictions like environmental concerns or limited funding lead to downsizing collections. Such 'unarchiving' could risk cultural loss or even oppression.

ME: Going back to something you mentioned before; that it is so important for us not only to understand the incentives behind decisions museums are making, but also how games are reshaping our understanding of history as they are using historical artefacts but also always put playability first[3]. So, that is something I wish we could have delved into more deeply. I think there's a huge importance in understanding that and actually exploring the games, playing them – critically.

YG: I realise I sound a little bit bitter when I say that one doesn't actually learn anything about history when playing these games. And I genuinely think that it is a problem. But I also see the potential in the game. When it really works, when you hit that sweet spot between materiality, questioning, interaction, exploring, using metaphor or, you know, something more textually explicit. This has been part of some of the research that I've done, attempting to figure out why games are not utilised in more creative and dynamic ways. The commercial game industry is very pragmatic, which is why I think initiatives like this workshop are so important for developing what it means for something to be a game.

Because I do think that games have a lot more potential to be disruptive than is currently the case, at least in the mainstream and commercial area,

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3 Grufstedt Y and Trenter C, 'Cultural Heritage and Game Design : A Discussion of Natural Friends', in *(Un)contested Heritage : Archives, Museums and Public Spaces*, Malmö: Malmö universitet, 2023, 190–199.

and I don't know how to reconcile this. The structure, as it stands in terms of game culture and game industry, doesn't necessarily allow that.

SG: One of our discussions was also about who we play in a game. I think that it is very interesting that you are playing as someone, which could be yourself or someone else. We decided that you're playing as yourself. But for example, in *Assassin's Creed*[4], you're playing an assassin. It is also very difficult to create a game where you play yourself because when you enter this 'magic circle' of gameplay, assuming another identity helps you understand and engage with the game. This connects to our discussion on control and who decides what to keep. If you are the one deciding, it opens a conversation about choice and agency. But there's also an illusion – especially in a game with immersive mechanics – that the player has complete control. You might forget what role you had because you start doing the things that are asked of you in the game. And I think that has also been a big thing in our conversations. How do you design a game that keeps the person's body in the game? Positioning it so you don't forget your own place in the world in the game. Many of our conversations about the mechanics also dealt with that: Who are we in this game? Should you pretend to be somebody else in the game?

YG: I don't know if there's a clear answer, and I think that's part of what makes your game so interesting. At some point, it becomes intentionally ambiguous, which requires you to consider these things, you know, what the rules are, and your position as a player, both in the game and outside of it.

MH: In the conversations Sophia and I had, we also discussed that we might approach it as a participatory performance where you go in with your body. Inspired by a game, but like a sliding scale between game and performance.

YG: And I think this question of figuring out what your game is can be interesting as a starting point to problematising what a game can and cannot be. There's a lot written on that and it's all very theoretical and definitions of games vary depending on perspective. Personally, I think it's very uninteresting because almost everything we've talked about today contains notions of play and interactivity and immersion to some extent. I just think games and play are eternal and ephemeral. I think the question is really good as a starting point for discussion about what the elements of gaming and play are. But then not to get stuck in that definition of like, does this qualify as a game?

4 Ubisoft. *Assassin's Creed*. Ubisoft. series, 2007.

MH: But I think Sophia and I had this discussion when we were really testing our ideas through a game lens. Then, we said no, we have to think more about this like play, like *theatre play* and *playing*. Not as a game, because with the text, quotes and reading, we leaned more towards play. It's also interesting how in English, you have these two words 'game' and 'play'.

YG: Yes, and in Swedish 'spela' can mean to play, for example, instruments. So, it's a conceptually fascinating field, and I think that's something to utilise. I think you've done that actually.

MH: It helped us to explore how this could be a playful experience. You sit down and you just start it. Then, of course, it can be about a super serious question.

What to Keep, 2024. Card game. Installation view, *Malmö Gallery Weekend 2024*, IAC.
Marika Hedemyr, Sophia Ioannou Gjerding
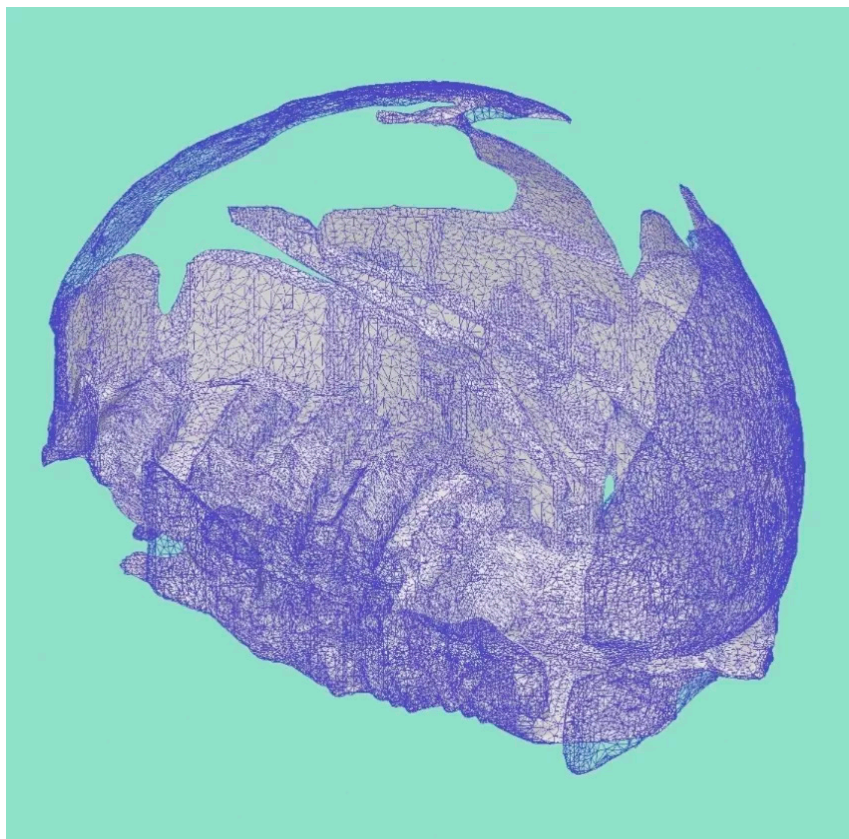
Wisdome v 0.7, 2024. Installation. Video still. *Malmö Gallery Weekend 2024*, IAC. Freja Andersson, Emma Bexell, Fredrik Degrér, Alison Thomas Lindvall

Playtime Bureaucracy – Wisdome as a Game

Emma Bexell, Freja Andersson and Alison Thomas Lindvall

> The use of digital visualisation techniques offers unprecedented new opportunities for enhancing and improving learning, education and problem solving across a broad base.[1]

Our challenge was to make a prototype of a game for the exploratory workshop series *1, 2, 3 Playtime* we've been a part of at Inter Arts Center in Malmö. Our working group was made up of artists Emma Bexell, Freja Andersson and Fredrik Degrér as well as Alison Thomas Lindvall, a technical producer at Malmö Museum's new projection dome Wisdome Malmö. A projection dome is a large spherical projection surface that enables audiences to collectively experience immersive 360° films and games, amongst other experiences. The four of us in the group were all curious to explore what else the dome could be used for, besides the existing film programme at the museum. What if we could explore different game mechanics in the dome and make a quick iteration of a collective game using the immersive environment and the programmable buttons mounted on each chair in the auditorium? This sounded like playtime, and that we came to them with a gift, being both artists and game-makers with some time and resources to respond to their vision.

We had a couple of initial meetings in the space, where Alison showed us some of the games that the museum was testing for evaluation. The test licences were about to expire, so the idea to base our code on some of the existing ones proved improbable but we enjoyed drawing and voting and steering around in outer space on the big screen. Lots of new ideas emerged and we decided to come back to test some of them.

However, it proved difficult to find another time slot when we were able to get into the dome. Alison, despite being greenlit and even encouraged

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1 *Wisdome Project*. Accessed October 2024. https://wisdomeproject.se/english/.

to participate in *1, 2, 3, Playtime* during working hours, was overwhelmed with other tasks at the museum and, of course, the schedule for the dome had to be respected. Trying to squeeze in between films about coral reefs and colonising Mars all the time gave us a sense that us coming into the space was a bit of an inconvenience. We had to wait longer than we could, due to planning and deadlines, for answers considering if we could get access to a certain time slot or not. Despite wanting and needing to explore and expand the dome's capabilities, the film schedule as well as other bookings in the dome and unclear policies regarding collaborations resulted in our speculative playtime being impossible to accommodate. At one point for example, it was unclear whether there would be a cost connected to every time slot in the dome, production and rehearsal times included. The dome and the museum had a partly new management: new people to be informed about our project, which was still exploratory and open. Questions like 'Who would be responsible for us?' and 'Who would take on the internal charge that would have to be made for us to turn on the light switch?' seemed to lurk around every corner.

Wisdome Malmö is one of five new projection domes built within leading science centres in Malmö, Gothenburg, Norrköping, Stockholm and Umeå, all realised through generous funding. The umbrella website for the Wisdome project describes the dome as an environment that 'offers a fantastic opportunity to explain complex interrelationships and phenomena typical for our time.'[2] and that 'Wisdome is about creating platforms for collaborations, where the city's inhabitants can shape the future together. New innovations or prototypes for sustainable solutions can be tested and developed by audiences and future users alike.'[3]

We understood the Wisdome project as being partly realised to achieve those statements. And the result seemed to have ended up further and further away from the idea of a platform for collaborations. During our process, we slowly shifted focus from creating something for the dome to critiquing the concept of the dome itself. How come this space that presents itself as an environment for visualising complex interrelationships, seemed to be stuck in its own administrative complexities that, with or without intending to, was right now keeping us on the outside? There was something cynical in the grand ambitions of the description of what Wisdome was supposed to be when compared to the underwhelming concave projection surface that we
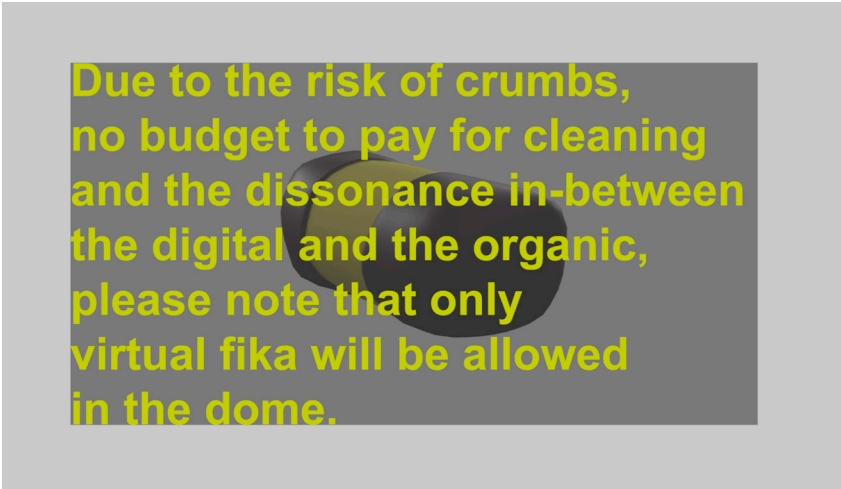
2 Ibid
3 Ibid (authors' translation)

were trying and failing to get access to.

Our group had previously explored the potential of using bureaucratic processes as game mechanics and at that point in the process, the idea of a game about trying to get into the dome emerged. An idea that immediately generated some potential scores that would make visible the institutionalisation of visualization that we wanted to question: should we perhaps stage an occupation of the dome? Camp outside of the premises and hang banners saying 'Boycott visualisation'? We could make a game of connecting the dots of the mind map in the Wisdome feasibility study, create more dots like the ones that now said: 'Participation and Involvement', 'Public Testbed', and 'Maker Space'. Extend the mind map *ad infinitum*? Or should we create a role-playing game where we impersonated bureaucrats from the City of Malmö in a Kafkaesque municipality meeting where you could vote on everything, but nothing mattered? Preferably in a livestream with a constant of zero viewers.

Our attempts became more and more tangled into the metanarrative of the space: this place of potential and creativity on the other side of the wall. The game became harder and harder to grasp and we were eventually, alt-

Wisdome v 0.7, 2024. Installation. Video still. *Malmö Gallery Weekend 2024*, IAC. Freja Andersson, Emma Bexell, Fredrik Degrér, Alison Thomas Lindvall

hough perplexed, intrigued and inspired by the knots knitting knots. The actual and the virtual had been mutually subsumed and we still had nothing to show for a game prototype.

What we ended up exhibiting at the showcase at Inter Arts Center during Malmö Gallery Weekend were actual findings from our process, taken into an aesthetic realm and enhanced: fake agendas and cynical surveys, the physical outlines of an office of a fictive working group from the City of Malmö, some absurd risk analyses along with a video where visualisations of the actual Wisdome from the planning phase was edited together with footage we found from the construction of the dome and some 3D scans we made ourselves during the first visit to the space. In the film, there was also a 3D model of a punch roll rotating on the screen. This was the Swedish pastry that we had not been allowed to bring physically into the dome because of regulations, so instead we'd made a virtual one.

We'd tried to enter a space which 'offers a fantastic opportunity to explain complex interrelationships and phenomena typical for our time' but it clearly resisted our best efforts (and one of us had an actual key in her pocket). The phenomena typical of our time seemed mostly to be a slightly utopian idea about civic agency and knowledge production stuck in between the cogwheels of the bureaucratic machine that had thought it into being. A little piece of science fiction that had made Wisdome happen, but that now was mostly considered a smudge on the control panel. What eventually emerged for us was not the game prototype we'd hoped for, but this story we kept telling our comrades about our complex quest for access to this particular space. Maybe the mechanics of our own quest might carry some wisdom? At the very least it carries some questions: What is innovation? Isn't it the things we don't know about yet? How does an institution keep itself open to the fact that those innovations might take on forms that challenge the very structures of how they think innovations are innovated? It matters what visualisations we use to visualise a place for visualisation. It matters what projectors project projections. Apparently, our artistic endeavours were not a top priority in relation to teaching the city's inhabitants, in the standard way, how the world works. What we've seen in this year-long project has been something like the peculiar contours of artistic agency within institutions who profit from artistic potential. The prospect of giving the 'creative sector' 'unprecedented opportunities' to 'innovate' in the projection dome didn't work when the enquiry came from the outside.
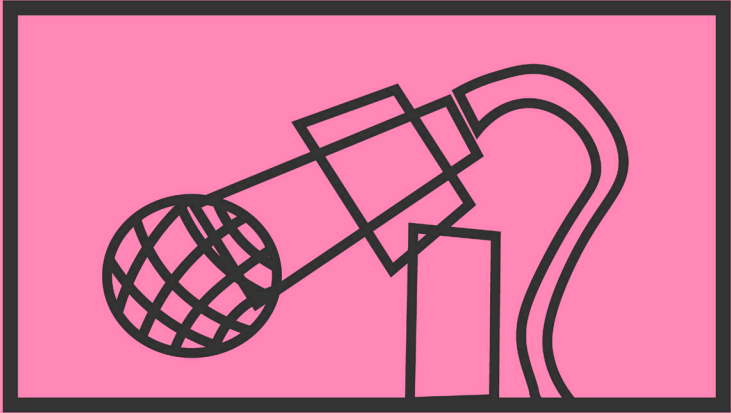
Instrumentalisation of creative work on the one hand, and administrative

knots on the other, could most definitely be the starting points for an exciting game called something like 'Participation as a Municipal Bureaucrat's Science Fiction'. Let's grab a coffee and talk more about it at some point if you have room in your schedule. We could meet at Wisdome, only we can't bring food or drink into the space for visualisation and it seems they don't have time to open the door for us.

We think for now, the conversation would have to take place somewhere else.
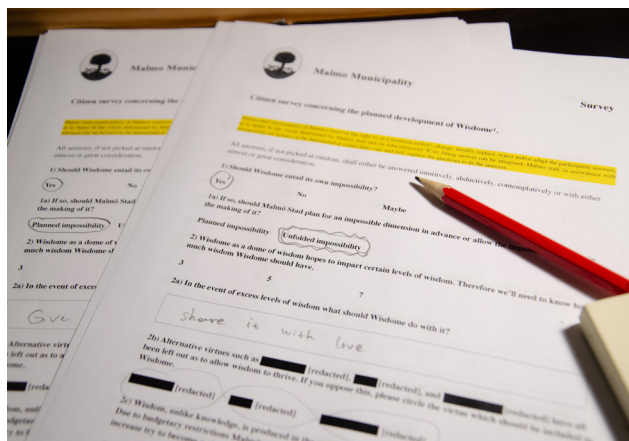
Wisdome v 0.7, 2024. Installation view, details. *Malmö Gallery Weekend 2024*, IAC. Freja Andersson, Emma Bexell, Fredrik Degrér, Alison Thomas Lindvall

Emotional Support Karaoke Bot, Poster. *Malmö Gallery Weekend 2024*, IAC. Amy Boulton, Inês A. Sério, Jon Nicklas Lundberg

Emotional Support Karaoke Bot

Amy Boulton, Inês A. Sério, and Jon Nicklas Lundberg

The *Emotional Support Karaoke Bot* is a dialectic yet light-hearted approach to the potentials of care practices within the technological development of robotics. Through extending the functionality of the Epi robot – developed by Lund University Cognitive Science Robotics Group – by interfacing it through PureData and sound, we turned Epi into a supportive companion that helps people to overcome stage fright.

While the *Emotional support karaoke bot* was just a prototype, it was featured in an article by Lund University's student newspaper *Lundagård*.[1] This expression of interest motivated us to further develop the concept using elements of gamification in technologies. We introduced difficulty levels and created a stage design to accommodate each: Easy-Peasy (level 1); Peek-a-Boo (level 2); and Showtime! (level 3).

In the first level, Easy-Peasy, the participant can choose to be completely hidden while the humanoid bot mimes along to their voice in front of the crowd. Sound from the singer's mic acts as a data input that causes the bot's mouth to light up. Likewise, the input was customised so that sustaining a loud note causes the bot's eyes to glow red, and it would bop its head along to the music. If the participant feels a bit braver, they can progress to Peek-a-Boo, an intermediate level where the participant is almost hidden, only the head pokes out from behind the curtain. All this training leads to the ultimate level: Showtime! Here, the participant takes centre stage and sings alongside the emotional support karaoke bot, appearing as a duo.

The project's catalyst was the *1, 2, 3 Playtime* session at IAC 'Introduction to the use of the humanoid robot Epi in ongoing cognitive research' by

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1 Lindberg, Erik. 'Forskare testar robot för att bota scenskräck', *Lundagård*, April 23, 2024. https://www.lundagard.se/2024/04/23/forskare-testar-robot-for-att-bota-scenskrack/.

Birger Johansson, Director of the Cognitive Robotics Lab at Lund University. In this talk and technical demonstration, we learned that the Epi bot was created for experiments in social robotics and brain modelling, with a particular focus on non-verbal communication such as gestures or eye movements. This presentation was complemented by Samantha Stedtler's talk[2] later in the week in which she introduced us to her research with Epi, measuring what kinds of variables affect the perceived social agency of the robot. This concept of 'social agency' includes likeability, trust/safety, animacy, intelligence, anthropomorphism and fluency.

Epi's humanoid design is quite loveable and childlike, with a disproportionately large head and eyes. These physical attributes worked well for our recasting of Epi as an 'emotional support' karaoke companion, as its likeable appearance signals to the audience/performers that it is trustworthy and friendly. The robot itself gains animacy and personality when it moves to the beat and appears to sing in a dramatic way, occasionally throwing its head back in the heat of the moment as if it is experiencing the emotions of the song.

We would like to thank Lund University Cognitive Science Robotics Group and the Inter Arts Center for creating the conditions for this project to take place and for the access to the Epi robot and its technical documentation. It was a fun project that invited both a playful approach to artistic practice as well as interdisciplinary approaches to art and cognitive science through the social setting of karaoke performance.

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2 Stedtler, Samantha, 'Navigating Nuances: Insights into Human-Robot Interaction Dynamics'. Lecture, Inter Arts Center, January 31, 2024. https://www.iac.lu.se/video-documentation-1-2-3-playtime.
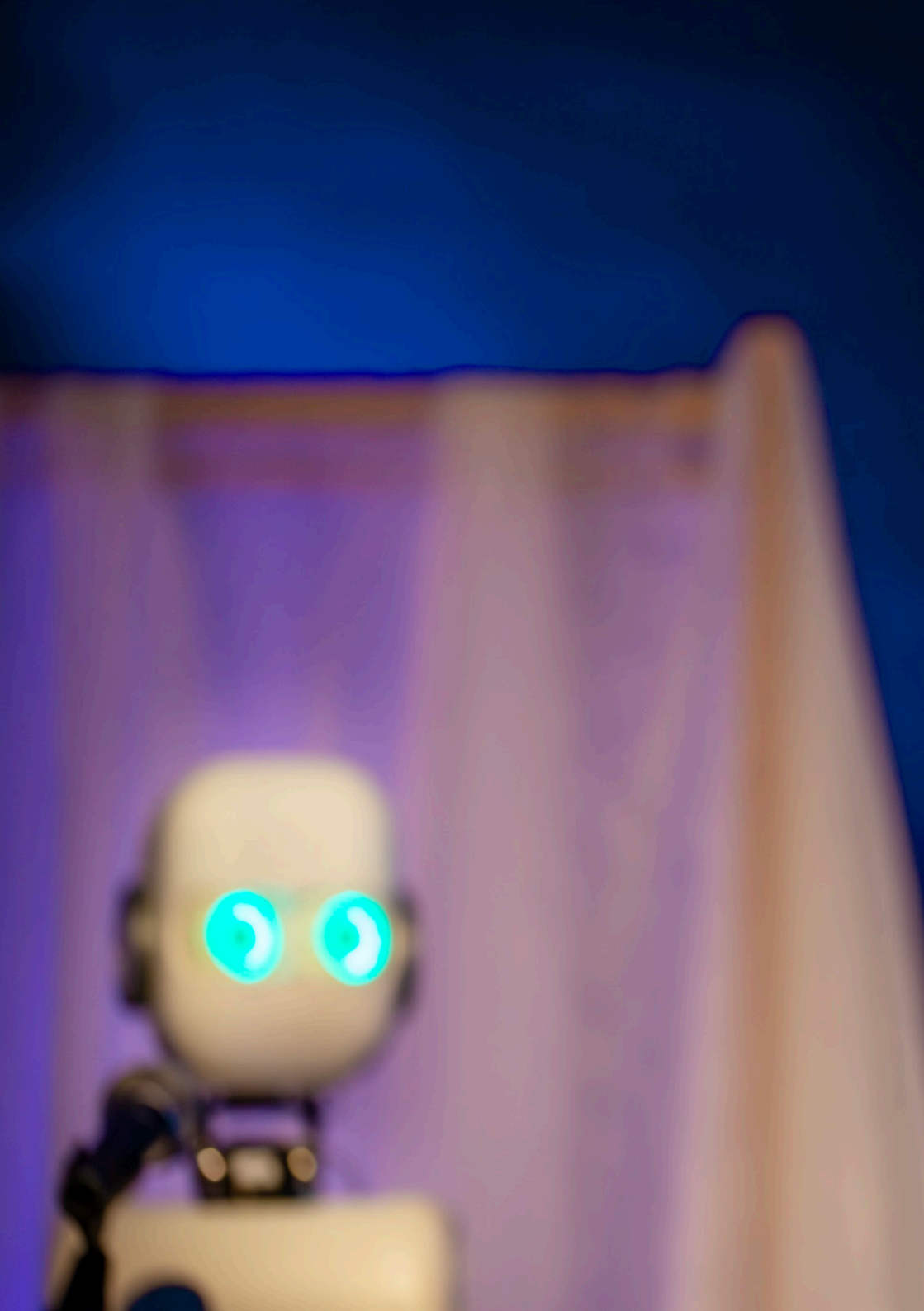
Level 1: Easy-Peasy

Level 2: Peek-a-boo

Level 3: Showtime!

Emotional Support Karaoke Bot, 2024. Installation views. *Malmö Gallery Weekend 2024*, IAC. Amy Boulton, Inês A. Sério, Jon Nicklas Lundberg

Emotional Support Karaoke Bot, 2024. Installation view. *Malmö Gallery Weekend 2024*, IAC. Amy Boulton, Inês A. Sério, Jon Nicklas Lundberg

1, 2, 3 PLAYTIME TIMELINE

2023

'Immersive Days #3: Agents in Play.' *How do games and gaming operate in culture and society today? And how can the forms of gameplay be elaborated as spaces for critique?* This full day seminar and exhibition was organised in collaboration with the Division of Game Development at University of Skövde.

Entangling Heritage: Supporting (new) Museum Communities, Stories, and Agencies Through Digital Games and Critical Play.
Presenter: Lissa Holloway-Attaway, Associate Professor in Media Arts, Aesthetics, and Narration, University of Skövde

Ludo-Immersive Opera: Principles and Play.
Presenter: Hedvig Jalhed, indie opera maker and PhD in Performance in Theatre and Music Drama.

Open Play: the PlayLab Games and Performance research and community performing arts platform.
Presenters: Rebecca Rouse, Associate Professor, and Lars Kristensen, Senior Lecturer in Media Arts, Aesthetics, and Narration, University of Skövde.

Dialogue
Presenters: Gabriel Widing, artist and game designer, and Lundahl & Seitl, artist duo.

Of listening and mediation within ecological sound art.
Presenter: Halla Steinunn Stefánsdóttir, Performer, composer and curator. PhD in Artistic Research in Music.

A Stretch of Time / False Mirror.
Presenter: Ali Eslami, Iranian artist based in Amsterdam.

Monument for Sim Inventory (2023). AR-work.
Lick Pick Kick (2021). VR installation.
Maren Dagny Juell, visual artist.

Þytur. Sound installation of 9 mono-channels.
Halla Steinunn Stefánsdóttir.

Mobilized: An essay pretending to be a game.
Participatory performance by dancer and performer Nea Landin and Gabriel Widing.

River Biographies. Participatory performance by artist duo Lundahl & Seitl.

6 December

'Finding the Real Thing: Play as Trust, Illusion as Agency, Play as a medium for an art practice.' Lecture by artist and educator Francis Patrick Brady.

2024

18 January

'Games and gamification: Theoretical basis and practical application.'
The presentation focused on the tension between game design and gamification. It expanded on ideas about play as a psycho-social phenomenon and games as cultural and artistic artefacts, both historically and in contemporary contexts. Theories behind the concept of gamification, criticism of the practice, and its use in different domains were discussed.
Lecture by Hedvig Jalhed.

29 January

'Introduction to the use of the humanoid robot Epi in ongoing cognitive research.'
What are robots good at – and where do they fall short? This session explored advancements and challenges in robotics. Lecture and workshop by Birger Johansson, director of the Cognitive Robotics Lab at Lund University.

31 January

'Navigating Nuances: Insights into Human-Robot Interaction Dynamics.'
The talk explored key aspects of the social dimension in human-robot interaction, including timing, speech, and genderedness, highlighting factors influencing perceived social agency, trust, and blame attribution. It drew on the speaker's work and others' research, concluding with a discussion of ethical implications and responsibilities. Lecture by Samantha Stedtler, PhD student in Cognitive Science at the LUCS Robotics Group, Lund University.

6 February

'From Eliza to Replica:
Create Your Own Chatbot!'
Python programming and character development for digital games. Workshop by Omi-peah Ryding, game developer and Post-doctoral Fellowship at The IT University of Copenhagen.

14 to 15 February

'p5.js'
Participants were introduced to p5.js, a JavaScript library for creative coding designed to make programming accessible and inclusive for artists, designers, educators, and beginners. Through hands-on work, they explored p5.js, reflected on the cultural impact of information technologies, and considered how emerging tools influence artistic production. Workshop and lecture by Danish artist Anders Visti.

7 March

'1, 2, 3 Playtime – Seminar on worldbuilding [art, game design, cultural heritage]'
Full-day seminar and exhibition.

Game Engines from Worlds to Weather: On Arts Practices and Simulations.
Presenter: Jussi Parikka, writer and professor in digital aesthetics and culture at Aarhus University

A Hand in the Game – Termination.
Presenter: Hillevi Cecilia Högström, Malmö based artist.

I can´t play with you anymore.
Presenters: Danielle Brathwaite-Shirley, Berlin/London-based artist.

Building game worlds with AI.
Presenter: José Maria Font Fernandez, Associate Professor in Games and Artificial Intelligence at the Department of Computer Science and Media Technology Malmö University.

Virtual Reality for cultural heritage mediation and artistic practices.
Presenter: Fredrik Trella, RISE Research Institutes of Sweden.

Textile Subtexts in an Augmented reality. Presenter: Bella Rune, Stockholm based artist and professor of Fine Art, Textile at Konstfack.

All repeated patterns want to cover the Whole Wide World-utopian movements dress in overalls (2018). Textile and AR work. Bella Rune

When Our Eyes Meet (2021). Game. Danielle Brathwaite-Shirley.

Theta (2022). Video. Lawrence Lek, London based artist.

12 March

'Finding the Real Thing 1:
Simple ideas for interaction to explore in VR using game engine Unity.
Workshop by Francis Patrick Brady and Margot Edström.

21 March

'Beyond hallucinations & dreams: Experimental approaches to generative AI models.'
This session explored generative AI as a tool for creating content like text, images, and videos, while critically examining its applications and outputs. Lecture and workshop with Gabriele de Seta, Postdoctoral Researcher at the University of Bergen.

22 March

**'Finding the Real Thing 2:
To make a game!'**
Workshop by Francis Patrick Brady and Margot Edström.

17 to 18 April

'Game design'
This two-day session combined hands-on exercises with production insights to explore the fundamentals of game design. Participants engaged in non-digital activities on day one to test and understand key design principles, gaining tools to analyze and modify games. On day two, they worked with Unreal Engine, using a provided prototype to apply the techniques from day one and explore the creative possibilities of game design in a digital environment.
Lecture and workshop by game designer and teacher Thom Kiraly, and game programmer teacher Pål Schakonat.

22 May

'Re-Presenting Complexity Through Critical Historical Play: undoing the past for sustainable futures with games, interactors, and "other" art-full cultural expressions.'
Games and playful engagement offer interactive ways to re-present histories and challenge museums, heritage sites, and galleries. By designing dynamic systems and complex narratives, they create opportunities to innovate worlds and story-worlds. Drawing from experience in interactive digital storytelling in cultural heritage and gallery spaces, forward-thinking aesthetic models were proposed to create sustainable futures with the past in focus.
Lecture by Lissa Holloway-Attaway.

27 September to 3 October

Malmö Gallery Weekend 2024: Open house at IAC. Intersection of games and various forms of artistic expression, showcasing the first public outcomes of *1, 2, 3 Playtime*.

Parallel to the seminar programme, participants were offered artistic guidance and opportunities for idea development through critical discussions, feedback sessions, and playtesting. Margot Edström, project manager and Francis Patrick Brady were recurring contributors, supporting participants in their creative processes, alongside others. Particularly, Pål Schakonat provided significant assistance with game design and programming.

Further information and videos are available at:
https://www.iac.lu.se/collaborations/1-2-3-playtime.

Through workshops, lectures, and multidisciplinary approaches, the project *1, 2, 3 Playtime* 2023–24 explored the intersections of play, games, and art. This collaboration between Inter Arts Center (IAC) and Region Skåne brought together twelve participants from various artistic disciplines and the cultural heritage sector to explore and develop game-based art as form, pedagogy, and critical reflection. The programme centred on three themes: art through games and gamified experiences, robot relationships in art, and world-building in digital media. Participants created both individual and collective works, exhibited during *Malmö Gallery Weekend 2024*. This publication gathers reflections and reports, offering insights into the processes, ideas, and possibilities that emerged during the project.

Inter Arts Center

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