Installations, Disruption of Technology & Performing Play

A Social Play Design Portfolio

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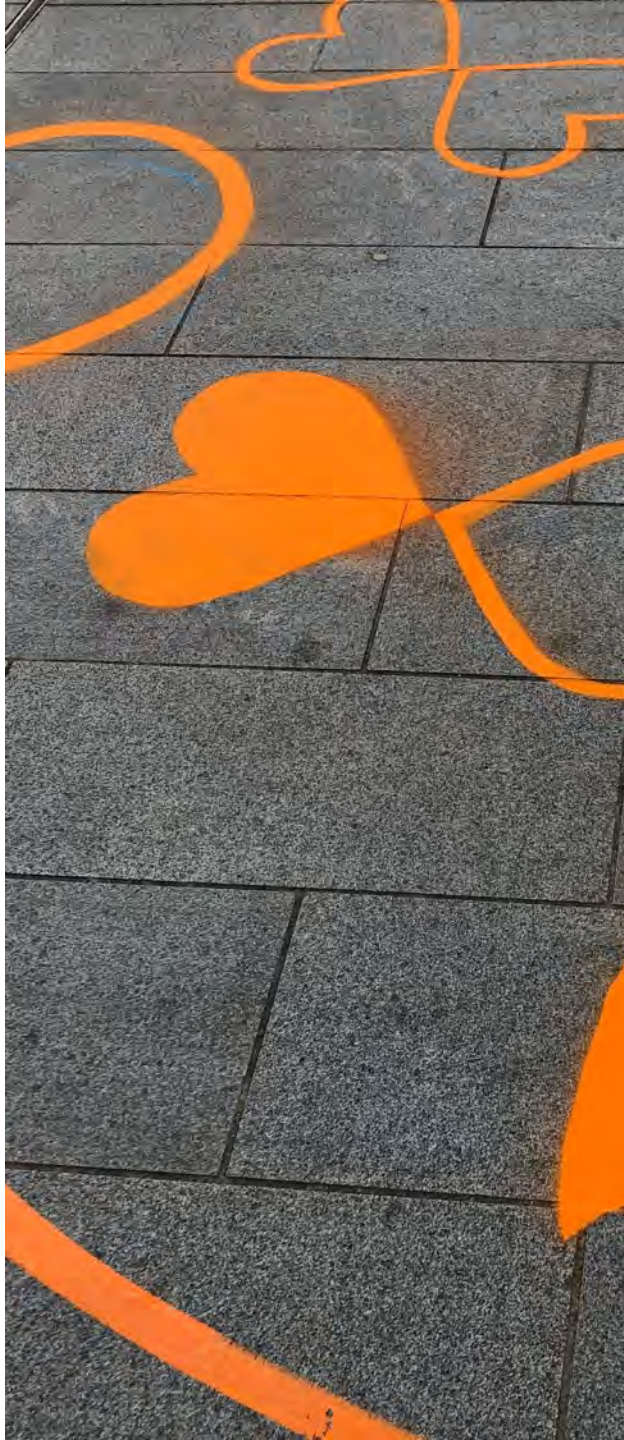
A Social Play Portfolio

Abstract

Installations, Disruption of Technology, & Performing Play (IDTPP) is a portfolio of original play interventions created between 2014 and 2020 that sought to instigate connections between people through the shared experience of play. The portfolio comprises practice-based research projects, with outputs in digital and analogue forms that have been showcased internationally. Each contribution interrogates the application of social play design strategies within set design constraints. As a result, IDTPP presents a rigorous examination of design practices for play that aims to bring people together in the same space.

IDTPP is informed by engagement with digital game design practices, pervasive games, street games, installation, video game curation, play theories, and user experience design. The portfolio is structured around specific design constraints such as: access (limited timeframes vs extended timeframes); permission (low level vs high levels of participation); setting (how play can be helped or hindered by its site); and social technology (easing or highlighting social interaction). The constraints for each project are sequential and interdependent, with the learning from one project feeding into the research questions of the next. Findings have been drawn from analysis of the work, drawing upon artist-as-researcher reflections, critical evaluation, and user feedback.

IDTPP makes a significant contribution to knowledge by demonstrating that play, in its many forms, has social benefits, whilst also mapping out audience and site-specific design strategies that can be applied by other practitioners in the field. The significance of the design concepts within IDTPP has been recognised, through an invitation to showcase social play on BBC Click Live in 2019, the formation of a partnership with Cadbury Heroes in 2020 to promote the benefits of social play for creating connections and addressing isolation caused by the Covid-19 pandemic and the commission of a large-scale installation for socially distant play at V&A Dundee.



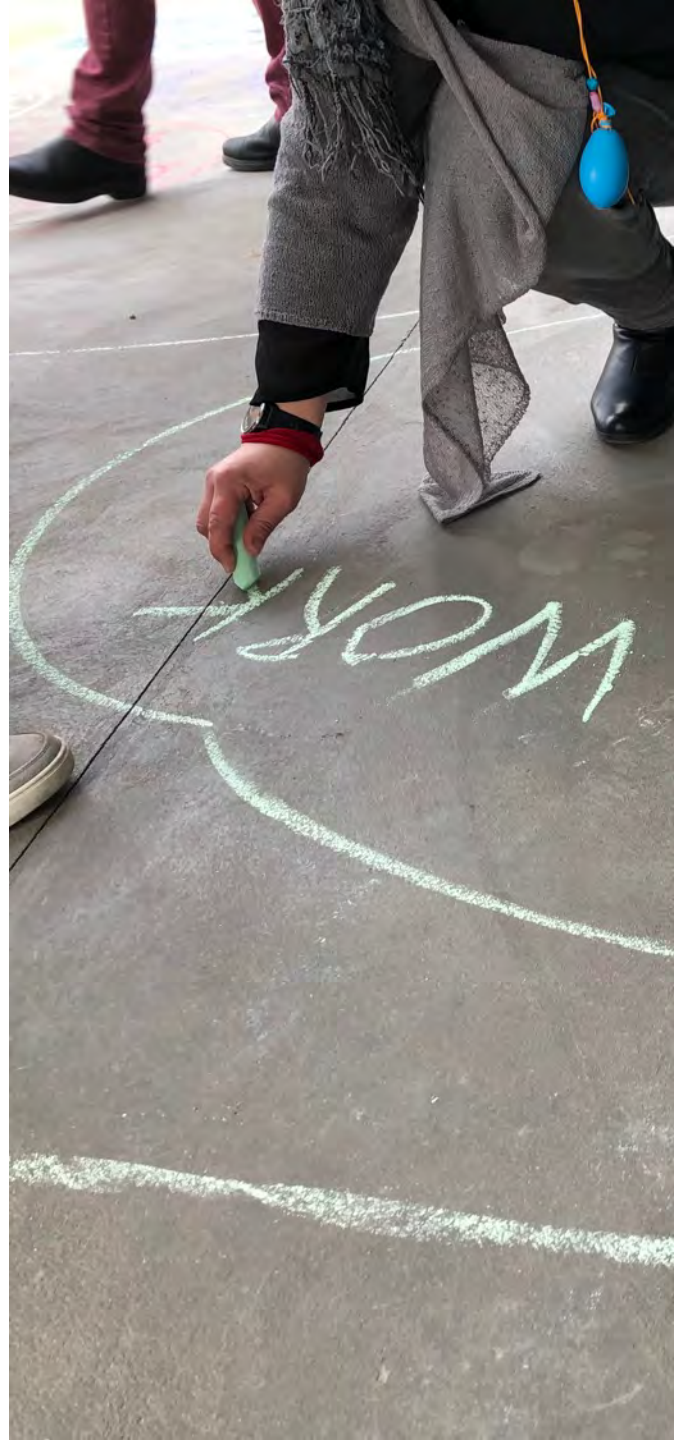
A Social Play Portfolio

Introduction

The IDTPP portfolio showcases nine practice-as-research projects which were created by the researcher, in collaboration with other practitioners between 2014 and 2020. The projects within the portfolio are organised by their prominence in using four design constraints (access, permission, setting, and social technology) and the impact of the projects.

Each project is structured using a consistent format that begins by introducing the high concept, then outlines research questions and methodology, describes design process and presents evaluation prior to providing an account of public engagement and impact around each work. Not all projects have evaluation which include player testing feedback for evaluation and instead have been evaluated through observations, engagement with key literature and artist-as-researcher reflection.

Some projects have associated academic papers, artist-as-researcher design documents and extended abstracts which are included in the external links section at the end of each project.



A Social Play Portfolio

Project Overview

The following nine projects are presented within the portfolio:

- Ola De La Vida (2017): A social play video game
- #oneplaything (2018 – Present): Encounters with the play community
- The Playful Chalkscape at V&A Dundee (2020): A #oneplaything installation
- Tales of Monstrous InTent (2018):
- Islands (2019): Mapping commonalities to create interpersonal links
- Overeactor (2020): Asymmetric social play video game
- House on Fire (2019): Screenless social play
- Phoenix down (2014): Physical competitive social play video game
- Quandary (2015): Playing with perspectives on play video game

The final section of the portfolio is a summary of key research findings contextualising the portfolio against the design constraints at play within each project.

IDTPP

Projects & Design Constraints

Each of the projects within the portfolio explores within its research questions at least one of the four design constraints:

1. Access to play. (e.g. Is the play ephemeral or is it more permanent? How does this change its social potential?)
2. Permission to play. (e.g. In what ways does the play allow different levels of participation? How does this affect accessibility and in turn social play?)
3. Play setting. (e.g. How does the site shape the social potential of the play? How does the play address this in its design?)
4. Social technology. (e.g. How does the design of play facilitate, ease or draw attention to social interaction?)

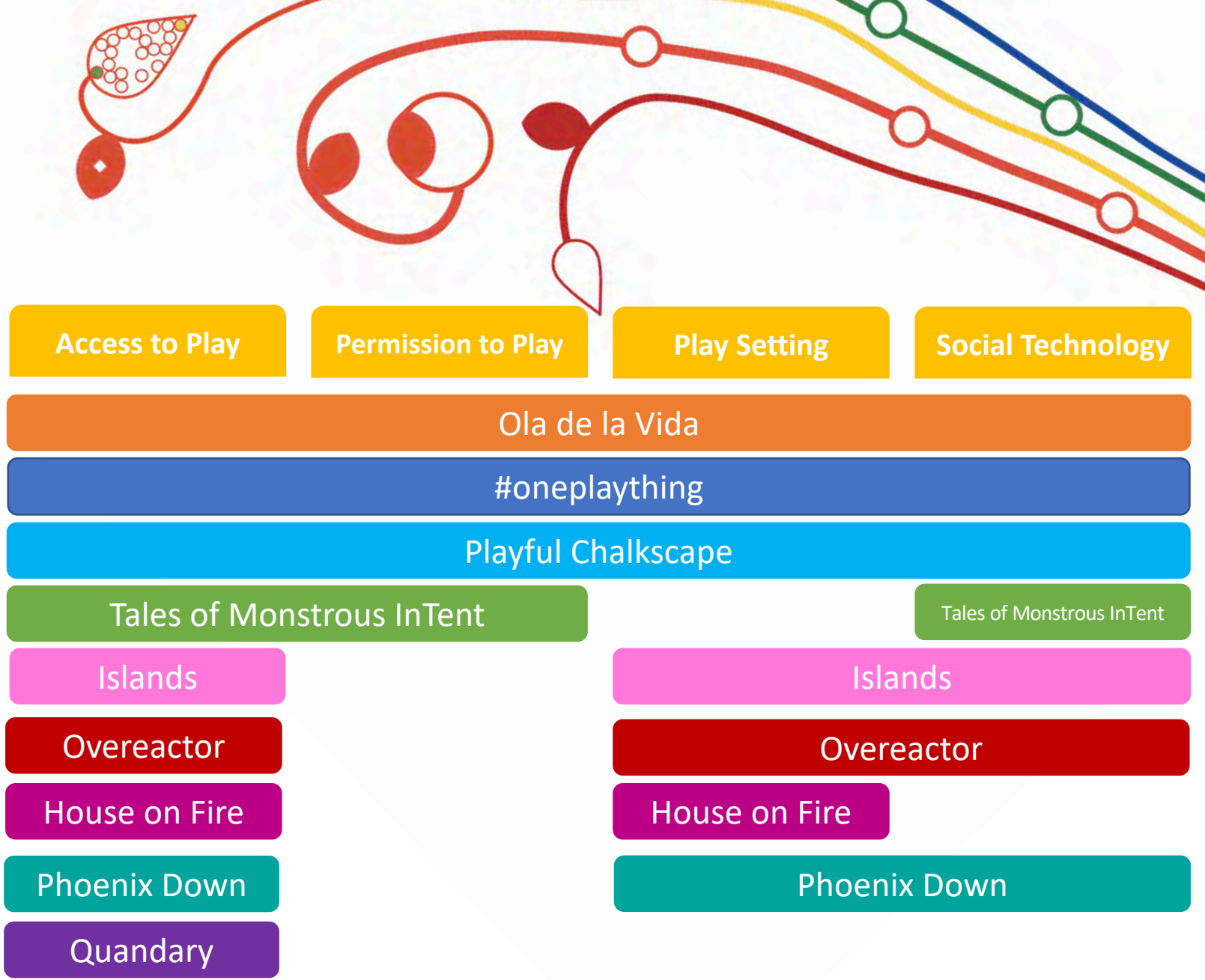


Table 1: Projects and their corresponding design constraints

The Social Play Design Portfolio

Social Videogames, Installations, and Playful Interventions

Ola de la Vida (2017)

Videogame Installation, showcased internationally (2017 – 2020)

Ola de la Vida (2017)

Mona Bozdog, Lynn Love, Danny Parker & Alex Pass

Ola de la Vida (ODLV) is a three-player cooperative video game which was produced over the course of 48 hours within Global Game Jam in January 2017, at the Abertay University Jam Site.

The game is a playful intervention (an object or event which seeks to bring people together through play) that aims to invite players to form temporary relationships with their co-players through physical contact, collaboration and coaching during play in a co-located context (i.e. where all players are present in the same play space). The game also seeks to expand the play experience beyond the three players to the wider audience by inviting spectatorship through play as performance.

ODLV is a makeshift installation made for social play spaces. It uses large scale projection, costume, custom controllers and mimetic input to create spectacle and draw attention to itself in a play party or indie game night (one-off game consumption events held in social settings like bars or clubs).

Ola de la Vida (2017)

Contribution

The game was designed by Mona Bozdog, Lynn Love, Danny Parker, and Alex Pass. Since its inception, it has undergone significant development to improve usability (through tutorials, for example) and its features to enhance the development of a community of play, including the introduction of clear player scores and high scores for the game.

Lynn Love contributed to the design of physical interactions within the game, the enhancement of usability through tutorials and scores and the creation of digital art for the game in partnership with Alex Pass.

Ola de la Vida (2017)

Research Questions

Ola de la Vida explores the following research questions:

- What techniques can be used in the design of a social play game to foster spectatorship?
- Can designing for spectatorship enhance the play community around a social play game?
- In what ways does the level of participation of a player in a social play game change their play experience and relationship to their fellow players and spectators?

Ola de la Vida (2017)

Gameplay

In preparation to play, the players don an oversized poncho for three and step onto their individual balance boards facing the digital play space. Players then hold each others' hands and the player at either end of the wave holds one of the two maraca controllers to complete the wave. The resulting physical contact between the three players complete the maraca controller's circuit and if weight is also detected on each of the balance boards, the game begins.

To play, each player must shift their weight from one side of their balance board to the other in order to tilt their part of the on-screen wave. The player parts of the wave are represented by three platforms, one pink, one red and one blue, each individually controlled by the players. Tilting their bodies to the right will tilt their part of the wave to the right and so on.

Ola de la Vida (2017)

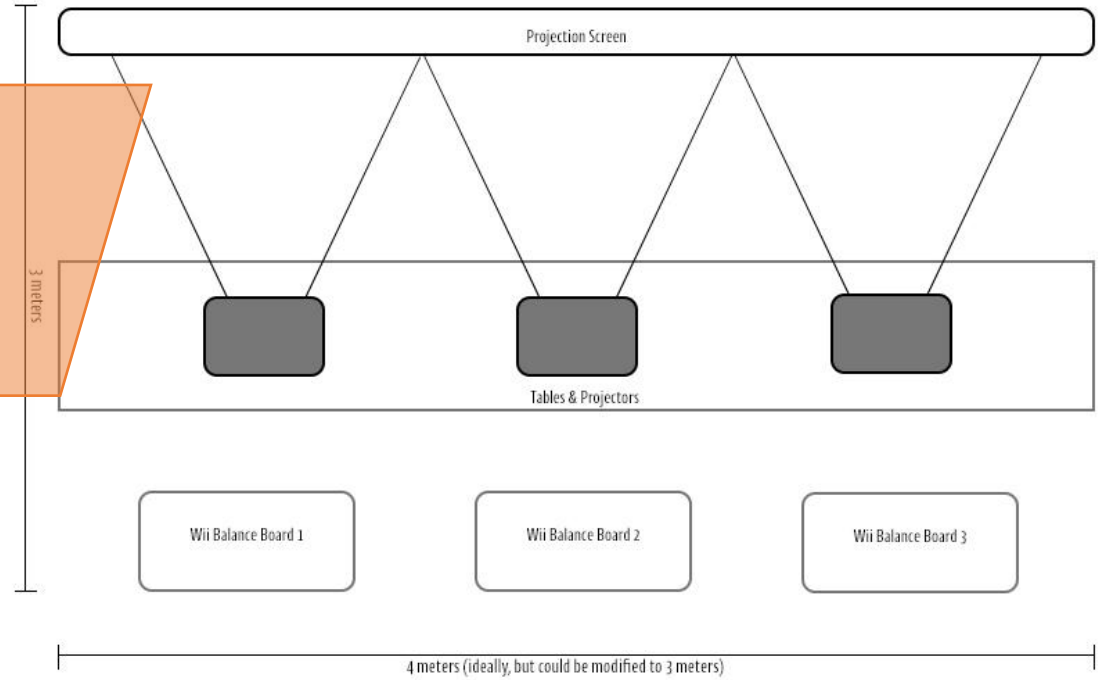
Gameplay

Each player wave segment is adjoined by physics driven ‘connectors’ which are affected by the tilting action of the two adjacent players (i.e. player one and player two’s actions affect the behaviour of the connector which joins their platforms). Together, the players tilt to and fro on their balance boards, whilst holding hands, manipulating the form of the on-screen wave.

Players must work together to manipulate the wave to help piñata to cross safely from one side of the screen to the other. The piñata are driven by physics simulation and spawn from the left side of the screen. Each player uses their body to affect their part of the wave and the negotiated wave space between. They must use in game gravity and real-world momentum in their physical (and thus also digital) movements to coax the piñata across. When a piñata successfully crosses the screen, the players score one point. Play continues for one hundred and twenty seconds or until the players let go of each others' hands.

Ola de la Vida

Installation



Ola De La Vida is a three-player game which requires players to use their bodies as input devices to manipulate digital platforms within on-screen gameplay. The game makes use of three Wii balance boards and two custom built maraca controllers as input devices. The balance boards are positioned side by side, spread arms-length apart from one another. The maraca controllers are connected to a Makey Makey to form a circuit, which is completed when the three players connect hands to begin play.

The maracas detect physical contact between the players during the game and will pause the game if players lose contact. The digital gameplay is displayed via three projectors which create an oversized widescreen play area positioned in front of the balance boards. Each player has a dedicated screen in front of them driven by a Triple-Head-to-go adapter and game play is continuous from one screen to the next, resulting in a large-scale wide ratio projection.

Ola de la Vida (2017)

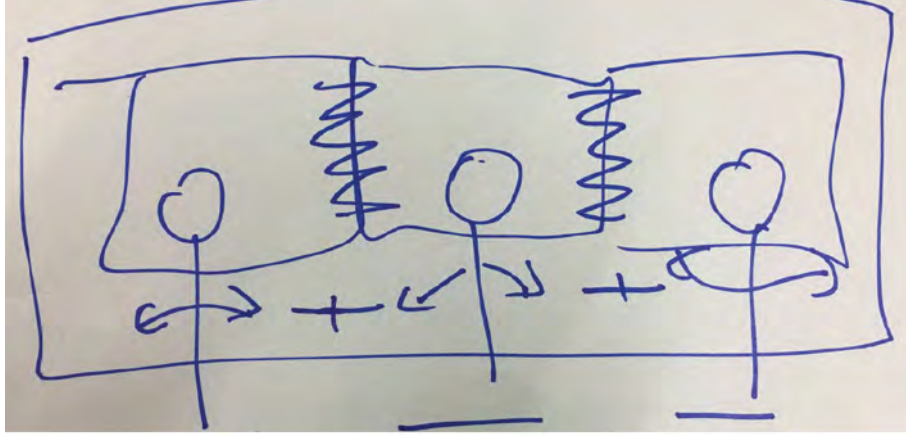
Methodology

The research questions were initially explored through practice-as-research where a game was designed that utilised spectacle and performance in order to invite spectatorship and enhance the social potential of a game to create a temporary community of play. The game was then evaluated in relation to the research questions using the following methods:

- Focus group with developers analysing design approaches, the links between physical and digital design, the perceived player and spectator experiences and the potential community forming aspects of the game.
- Three semi-structured focus groups in a controlled environment analysing gameplay, spectatorship, the role of the poncho and general observations.
- Anecdotal player feedback collected via an open social media call.

Ola de la Vida (2017)

Design Process



The game was created over the course of a 48-game jam in response to the theme “waves.” The designers, due to other commitments, input 20 hours each in total.

The design approach drew from industry practices, using an iterative approach. Key features were implemented, polished and developed. The most important features (the balance boards, wave and piñata physics) were implemented first, then art, then visual polish.

Game feel was very important and thus was tested repeatedly by the team through play testing. The feel focused upon the connection between player movement on the balance board and the reaction of the on-screen wave. The interaction had to be direct to feel purposeful but not so fast that the on-screen wave would ‘twitch’ and become visually unappealing. This creates a mimetic interface (where on-screen and real world actions mirror one-another) which blurred boundaries between physical play and digital play.

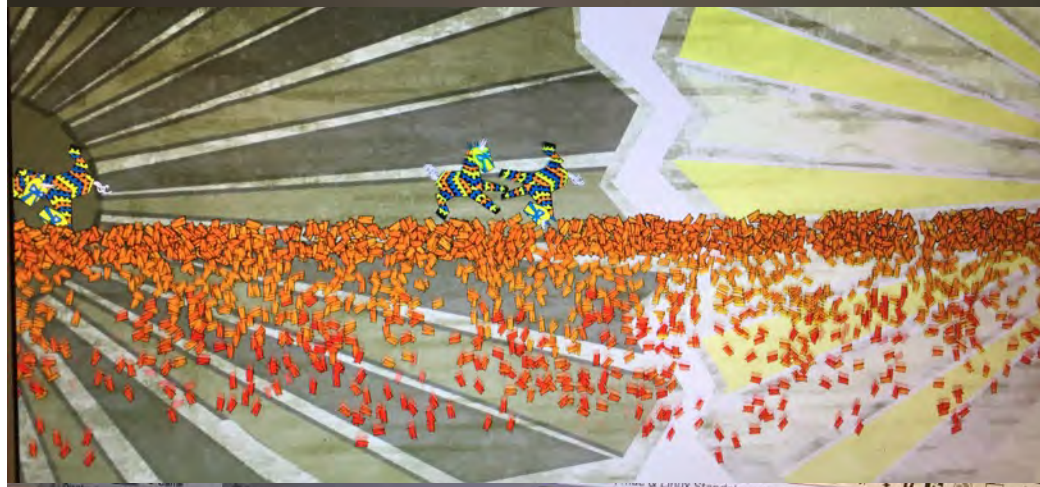
Ola de la Vida (2017)

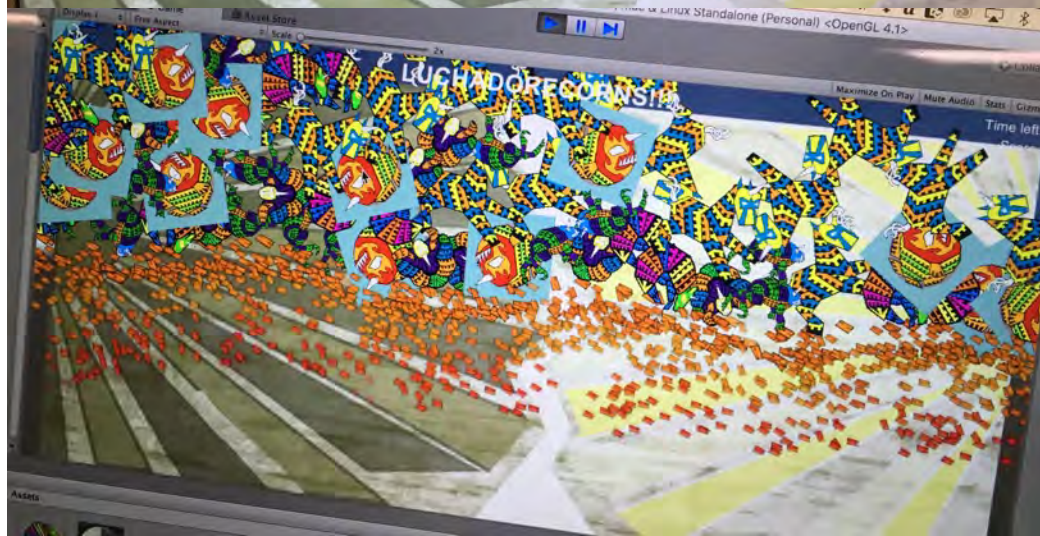
Design Process: Gameplay

The balancing of challenge in the gameplay design was also important to encourage teamwork and camaraderie. This was designed first through perfecting the number of piñata on screen at any time; second through adding dynamic shifts in the position of each player's on-screen wave; and third by pacing the game to allow for internal semi-spectatorship.

Every time a point is scored, the game vertically repositions the position of each player's avatar a random amount. This complicates gameplay as it changes the angles of the bridges between players, meaning that players must recalibrate their approach in order to transfer piñata from one player to another in the negotiated space between the two players.

The change in height in the platforms means players may need to lean more or less in either direction in order to get the bridge between their two play spaces to the right angle to allow the piñata to roll across to the next player.





Ola de la Vida (2017)

Design Process: Interdependent Play & Workload

The gameplay is interdependent. The first player (represented by the pink mask) has to successfully pass a piñata to the second player (represented by the red mask), before the second player can do anything. The third player (represented by the turquoise mask), similarly, has to await the delivery of a piñata to them before they can pass it over the wave and score a point. Interdependent play means that at times, not all players are actively carrying out their own task on screen, but rather are watching the game (undertaking internal semi-spectatorship), advising their co-players and actively helping the keep the wave alive through physical contact with their co-players and the maracas.

Ola de la Vida (2017)

Design Process: Interdependent Play & Workload

Interdependency can lead to “piñata pile-ups” (see image below) where some players are overwhelmed by piñata. The game was balanced to ensure that the workload for each player builds over time in the game. The number of piñata that spawn increases as the game continues, building the workload for players as they get to grips with how the game works (balancing). In the closing stages there is a final rush with a high number of piñata being spawned to add to the climax of the game and enable high scoring in the closing stages. Players have to work together to score points, thus interaction is encouraged – both within the early stages, before the workload increases and through the interdependency of play.

Ola de la Vida (2017)

Design Process: The Poncho

In designing ODLV players are encouraged not to take the game seriously through use of costumes, props and an audio-visual style that embraced the ridiculousness of aesthetic clichés. One player notes that “The game was lots of fun ... it took us a while to get the hang of the game and stop giggling about wearing a giant shared poncho! But when we did it was great.”

The poncho amplifies the comedic effects of gameplay by hiding the individual bodies of the players and morphing them into a 6-footed, 3-headed, protean blob. ODLV literally re-configures players' bodies in space, creating a co-dependent physical chain of players, who are reliant upon one another to achieve digital gameplay goals. Players widely acknowledge the importance of the poncho noting that it encourages their “enthusiasm” to play the game, that it helped them to embody a character when playing the game (taking on a role in a performance)

Ola de la Vida (2017)

Design Process: The Maracas

Forming a circuit between the players emerged as an opportunity to physically complicate the play experience. It also provided the potential to create interpersonal relationships between the players through physical contact and negotiation of physical limitations during play.

The addition of the maracas to gameplay during development motivated a significant change to game play from players effectively being ‘alone together’ (Ducheneaut et al 2006) (i.e. only paying attention to their own play actions) to instead acknowledging their co-players in a cooperative play experience driven by physical interconnectivity and reliance.

The physical grounding in the world also blurs boundaries between the physical play space and the digital play space, drawing player attention to the physical play space through their use of their bodies as input devices and the impact of their co-player’s movement on their physical capabilities (i.e. the extent to which their movement is limited by holding hands with the other players).

Ola de la Vida (2017)

Analysis and Player Feedback

Observation of players, reflection upon the game play experience and formal and anecdotal user testing data has led to the identification of the potential for what could be called, a ‘new’ form of spectatorship: Semi-Spectatorship. The semi-spectator is believed to exist in two forms: internal to the game, as afforded by the design of the game, and external to the game, as afforded by the design of the game and the game’s play space.

ODLV enhances social potential and creates a temporary community of play through: The Curation of Spectacle; The use of physical game design to heighten social potential; The use of digital game mechanics to support internal semi-spectatorship; The widening of the magic circle through external semi-spectatorship. These claims were assessed against user experiences in both formal focus group testing and through anecdotal evidence shared by players via an open call on social media. User experience suggests that ODLV achieves its goals through these four design approaches to varying levels. For more information on user testing and game evaluation please see the ODLV practice-as-research document in the external links section at the end of this project.

Ola de la Vida (2017)

Analysis and Player Feedback

“while I was watching I saw teams formed of strangers who happily joined each other to play, and for the couple of minutes of the game had a shared experience with collective goals. We were required to cooperate and learn how to work together, which is way more rewarding and more fun than solo games.”

“Ola da la Vida (ODLV) is a game just as entertaining to watch as it is to play. ODLV is an intimate and physical game, which promotes teamwork and thinking carefully about how you should move your body. Fun, physical and visually satisfying.”

“The experience of playing the game was even more interesting, especially with people I didn’t yet know as it requires both physical interaction and strong teamwork, forcing you to overcome any social awkwardness extremely quickly.”

Ola de la Vida (2017)

Public Showcases

American Association for the Advancement of Science Annual Meeting, Seattle, USA, 16th February 2020. 20 attendees.

BBC Click Live. TV and live show. V&A Dundee. 19th October 2019. +400 attendees and screened 17 times on BBC World News Channel to date.

Young People's Design Day: Videogames, V&A Dundee, 22nd June 2019. +100 attendees

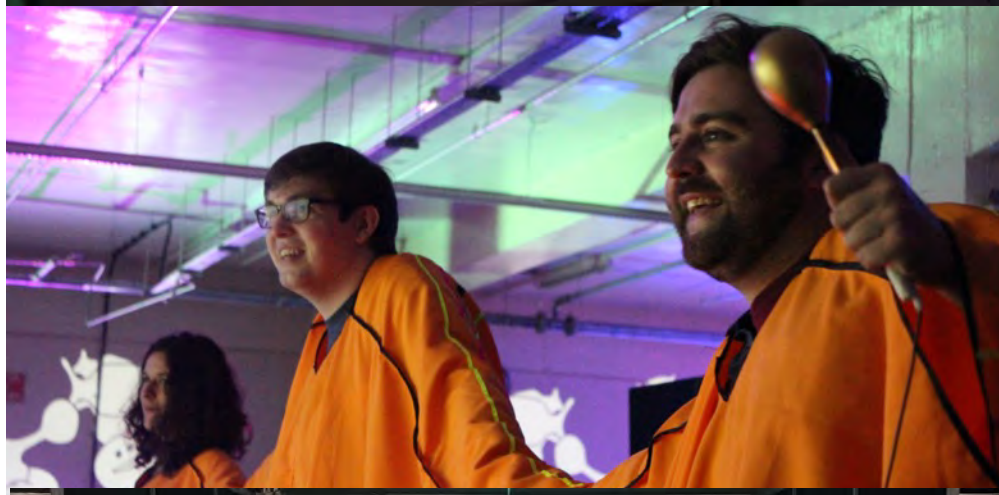
Arcadia Games Festival. 8th September 2017. Dundee, UK. +100 attendees

Games are For Everyone Volume 5. 21st April 2017. Edinburgh, United Kingdom. 500 Attendees.

Game Jam 2. 20th May 2017. Perth Museum, Perth. 60 Attendees.

Scottish Parliament. 21st February 2017. 150 Attendees.

International Game Developer Association Dundee Play Party. 9th February 2017. Dundee, United Kingdom. 200 Attendees.



Ola de la Vida (2017)

Installations and Invited Presentations

Installations

- CHI 2019 Installation. 4th – 9th May 2019. Glasgow, UK. +1,000 attendees.
- Futureplay Installation. 2nd - 28th August 2017. Edinburgh International Fringe Festival, Edinburgh , UK. 1385 plays, 826 unique.

Invited Presentations

- Would you like to play a game? Adventures in expanding participation in playful encounters. RES|FEST Courtauld Institute, 29th November, V&A Dundee
- Games at Abertay (2019). [Invited Speaker], BBC Click Live, 19th November 2019, V&A Dundee, United Kingdom.
- Designing Social Play (2019). [Invited Speaker], SGDA Presents Mike Bithell, 15th November 2019, Abertay University, Dundee, United Kingdom.
- Space Invaders, Pint of Science, 22nd May 2019, Clarks, Dundee

Ola de la Vida (2017)

Significance: Showcase

ODLV has been exhibited internationally in entertainment and academic settings including a month-long installation in Futureplay, a technology exhibition in Edinburgh's International Festival Fringe, CHI, an international conference examining human computer interaction and was showcased on BBC Click Live, filmed in Dundee in 2019. The recording of BBC Click Live has been screened on BBC World News 17 times.

The game has been played by over 2,500 players and has been academically evaluated through the perspectives of the practitioners and players.

Ola de la Vida (2017)

Significance: Semi-Spectatorship

Ola De La Vida as a practice-as-research work offers design insight into use of spectatorship to create a temporary community around a game and to enhance the facilitation of discussion between active players, previous players, spectators, and semi-spectators. The work builds on the varying levels of participation in play, proposing semi-spectatorship: where players are active in a game but have a critical distance afforded to them by the design of the game which offers them and their co-players (where appropriate) potential benefits in play.

Semi-spectatorship is achieved in two ways in ODLV: The use of digital game mechanics to support internal semi-spectatorship; The widening of the magic circle through external semi-spectatorship.

Ola de la Vida (2017)

External Links

ODLV Design Document: https://bit.ly/2O47OUF

DiGRA Paper: https://bit.ly/3rwaXuJ

CHI Extended Abstract: https://bit.ly/3rwbi0t

ODLV Website: http://oladelavida.com/

ODLV Global Game Jam
https://globalgamejam.org/2017/games/ola-de-la-vida

Gameplay Video: https://vimeo.com/223760086

ODLV CHI 2019 Extended Abstract Video:
https://www.youtube.com/watch?v=qu5uU4lKhAw

ODLV on BBC Click Live:
https://www.bbc.co.uk/programmes/m000cwsq

RES|FEST: https://www.youtube.com/watch?v=AHQy8ikbh9M

#oneplaything

Social play interventions, showcased internationally (2018 - present)

#oneplaything

Malcolm Hamilton & Lynn Love

#oneplaything is a social play movement which aims to draw attention to playfulness in our everyday environments. It is also a way for play communities to record and share their activities online with one another, staying connected, encouraging interchange and debate.

#oneplaything began at Counterplay Leeds in 2018 as a way that the attendees might stay playful and in touch beyond the event itself. Malcolm Hamilton and Lynn Love have been active, leading experimentation with #oneplaything concepts in their work.

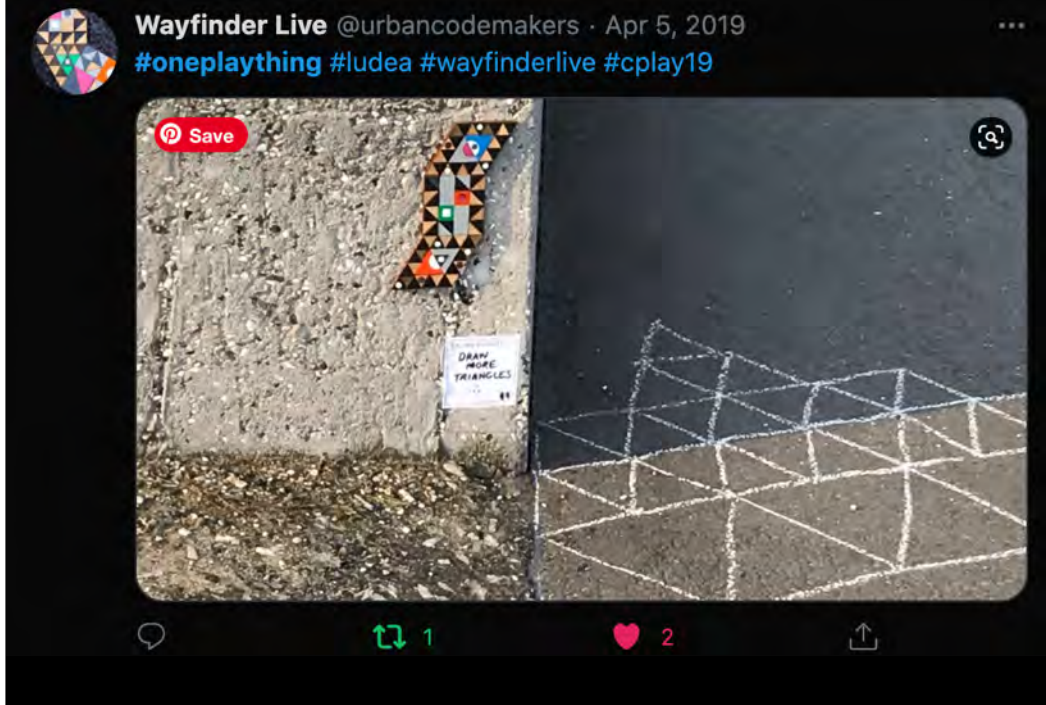
#oneplaything

The Forms of #oneplaything

#oneplaything is a grouping of playful activities which seek to enliven public space and draw the public's attention to playfulness. These activities fall into the following categories:

- Impromptu public invitations (Hamilton & Love)
- Play Kits (Hamilton & Love)
- Conference interventions (Hamilton & Love)
- Semi-permanent installation (Bozdog & Love)
- Interactive conference presentations (Hamilton & Love)
- Creativity workshops (Hamilton)

#oneplaything also exists online as a way for people to share their playful interventions or their interactions with found interventions/workshops etc. The hashtag allows people to share, discuss and create together on their preferred social media. Twitter has been the most active platform.



#oneplaything

Research Questions & Methodology

Research questions

- How can play be highlighted through temporary interventions in everyday landscapes?
- Can playful invitations inspire real world and online playful activity/interactions?
- How can playfulness be inspired in a real-world and online community?
- In what ways can an online community motivate play in real-world communities?

Methodology

The diverse nature of activities which make up #oneplaything mean that several different methodological approaches have been undertaken. On the following pages, each approach and its research and design methods will be discussed one by one.

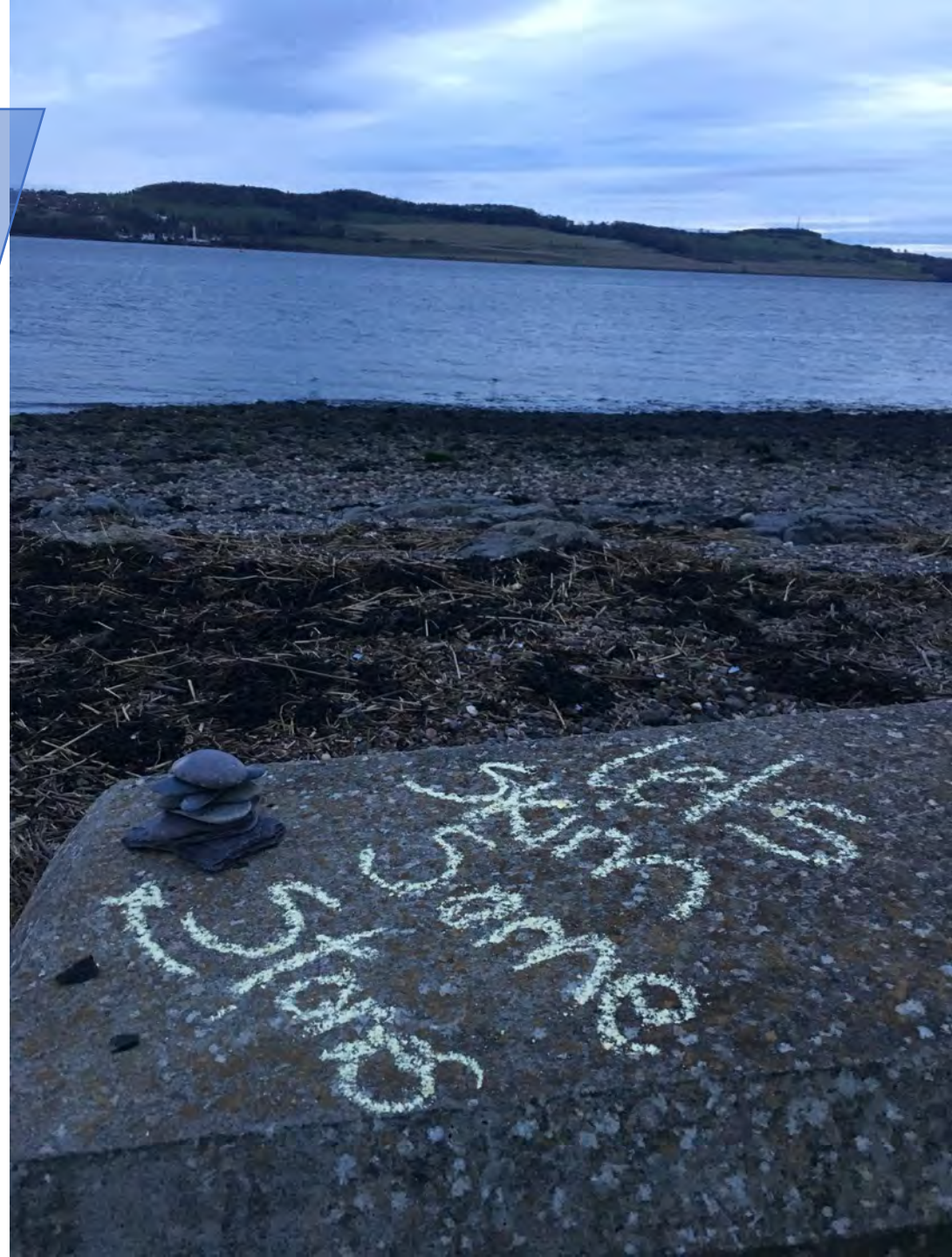
#oneplaything

Impromptu Public Interventions

Impromptu public interventions are chalked messages games, invitations and questions which react to the specific site. They are opportunistic and take advantage of playful aspects in the environment.

These interventions sometimes take the form of drawings, site-specific observations and invitations and questions that aim to draw the attention of the public to a playful opportunity.

Over the course of the #oneplaything project, the researcher has created 149 images public interventions out of chalk, or drawings in snow and sand since October 2017. These interventions make use of practice-as-research and researcher reflections, with each intervention building on learning from the previous intervention.



#oneplaything

Impromptu Public Interventions

Early interventions were mainly questions posed for people passing by but as confidence in practice developed, the interventions became more site specific (for example, an invitation to skim stones at the river) or creative interpretations of everyday objects, marks in the street or patterns that could be found. The latter approach received positive feedback on social media from the play community following the #oneplaything hashtag which motivated further experimentations in this area.

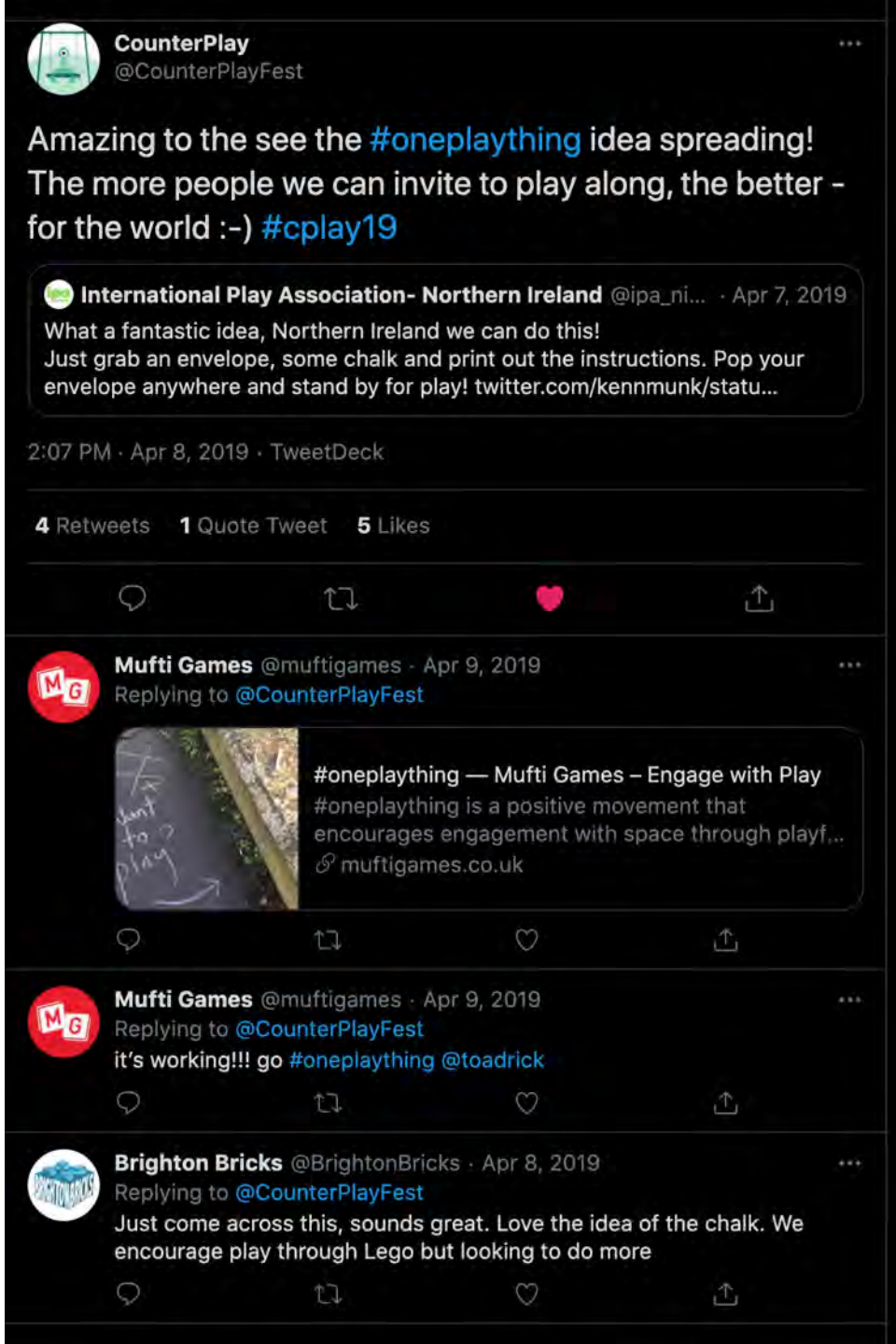
The interventions are temporary, exploring constraints of time and temporality. The work also questions permissions of appropriate public behaviour. The researcher has only been questioned by a passer-by three times when creating an intervention but has had people distance themselves when an intervention was being created.

#oneplaything

Social Media & the Play Community

All impromptu public interventions were posted to social media using the #oneplaything hashtag. As the movement originated at an event, there was an existing audience for this work. The researcher has been the most active participant posting play to this hashtag. Malcolm Hamilton of Mufti Games uses the hashtag to document formal workshops and impromptu public interventions around similar themes.

Other participants include the organisers of the Counterplay event in Leeds where the movement originated, the organiser of Counterplay, and people who have seen the work on social media. There have been posts from at least five people who were not originally involved in the movement. However, all but one has professional connections with the instigators of #oneplaything online.



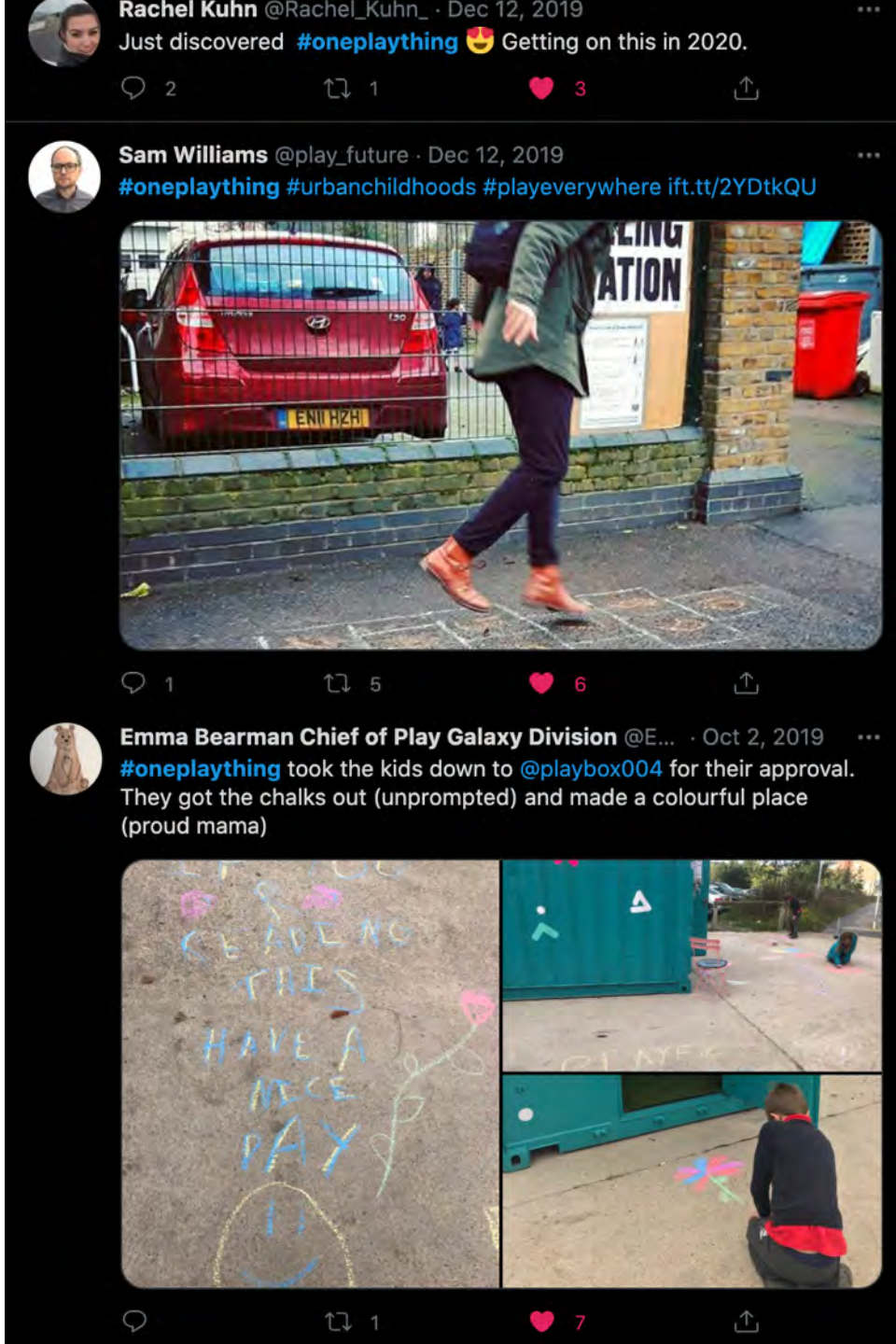
#oneplaything

Social Media & the Play Community

A review of post content on social media suggests that #oneplaything has been successful in helping people involved in the original Counterplay Leeds event to keep in touch. There are a number of threads, motivated by #oneplaything posts that develop conversations or evoke action in the community.

Social media has not been a successful way to engage the public in the movement. There have been very few posts (less than 10) where a member of the public reports finding or interacting with a #oneplaything intervention.

Hypotheses for the barriers to social media interaction for the public include concerns that posting to social media may be one step too far as it makes participating a three-step journey (doing, photographing then posting), or issues around permission to mark or act out in public spaces (as previously discussed) or that playfulness does not appeal or is not inviting enough to disrupt western ideas around play being unproductive or for children.



#oneplaything

Play Kits

The researcher developed #oneplaything kits inspired by the “free art” movement of leaving artistic objects in public places for people to take. The kits have been iterated over four installations in Aarhus, Denmark, Bristol and Dundee, UK.

The kits contain chalk, an invitation sheet and a range of different objects depending on the setting (including eye stickers to make faces in the world, invitation stickers, chalk paint recipes, and #oneplaything stickers).

The kits act as an invitation for the public to participate in #oneplaything by providing them with a range of different materials to create their own play invitations. Over 60 kits have been left in public locations for people to find and 1,000 were made for the playful Chalkscape to be distributed by V&A Dundee.

#oneplaything

Play Kits

The kits have been iterated with each revision, motivated both by setting (e.g. invitation were written in Danish for the Counterplay kits and stickers were removed for V&A Dundee based on feedback from the museum staff) and by reflection on the purpose of the kit.

Early iterations had a broad invitation outlining the aim of #oneplaything only whereas the most recent versions include specific prompt cards with a range of potential actions to carry out. These prompts were driven by the target audience, which has most recently been children and families as the packs have been distributed by V&A Dundee as part of the Playful Chalkscape Installation. The kits have also increased in polish and quality, with better grades of chalk to make a greater visual impact on the environment and professionally printed materials

#oneplaything

Conference Interventions

Hamilton and Love collaborated on a programme of events to bring #oneplaything to life at the Counterplay 2018 festival in Aarhus, Denmark. Hamilton's performing arts background and absence from the festival drove the creation of a series of pre-recorded news programmes hosted by Norman Peters – A figure meant to embody the suppression of play in society. Each day of the festival Norman would report on "worrying" play activity being undertaken by #oneplaything-ers at the conference. The newscast was broadcast on screen to all conference attendees each morning and actively recognised their participation and reacted to the emergence of playful behaviour at the event.

Norman Peters evolved from discussions between Hamilton and Love around the barriers to participation for the public in creating chalk interventions in the street. Hamilton recorded pieces to camera each day which were cut together into a narrative newscast by Love who gathered footage from the conference to intercut in the style of a news bulletin.

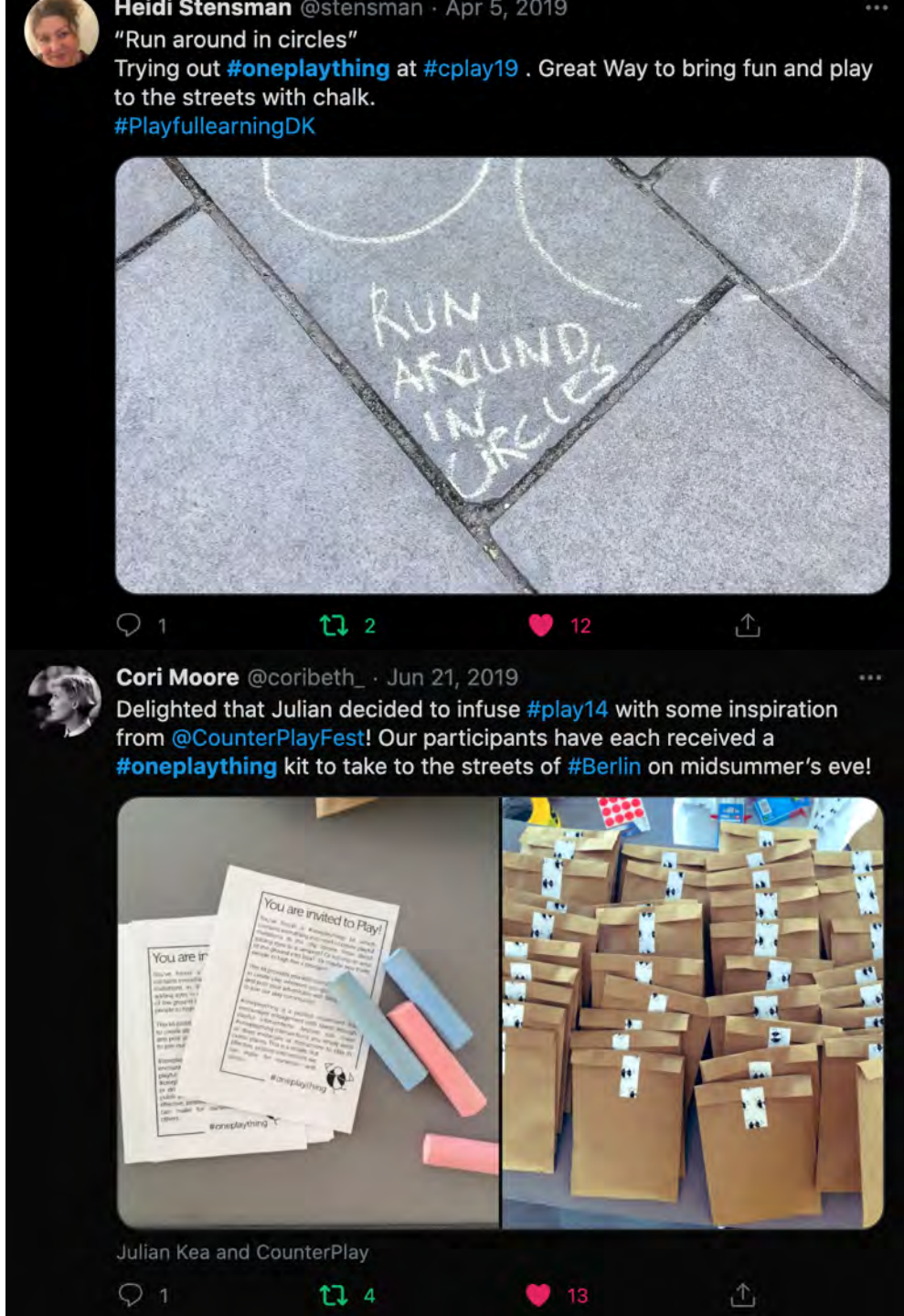
#oneplaything

Conference Interventions

The interventions into the conference were also supported by providing every attendee to the conference with a #oneplaything kit on the first day of the festival (200 in total).

Interventions were observed both around the conference venue and near social gatherings of conference attendees, but very few of these interventions became social media posts.

Anecdotal evidence at the event was very positive. Norman Peters became a comical character, who over the course of the event, became overwhelmed by the urge to play. This was received well by the audience and rounded off the narrative of the event well on the final day. The social media activity about the kits in particular led to them being picked up by other events including #Play14 in July 2019. Interest in the kits also led to the publication of the kit materials online in an open-source #oneplaything kit, free for all to use.



#oneplaything

Game as analysis and reflection

Hamilton and Love's collaboration at Counterplay led to exploration of their individual #oneplaything experiences and the creation of two abstracts for the Play Perform Learn Grow (PPLG) conference in Greece.

At PPLG the #oneplaything choose-your-own-adventure game was presented as a paper. The game presented the concept of #oneplaything whilst also discussing the challenges to evoke public play through chalk.

The game was produced in Twine by Hamilton and Love, inspired by the play principles, a set of 10 observations from their collective experiences of carrying out #oneplaything interventions.

As you rush to your desk you see a sign.

Your boss clearly doesn't want you to take part.

get on with the to-do list

#oneplaything

Play Principles

1. Participation is promoted if there are as few barriers as possible (e.g. skill, cost, prior knowledge)
2. Materials engender play behaviours
3. Play in public space draws attention to permission (personal, peer, social, authority) for facilitator and participants
4. Participants need to see value and reward for themselves and their community to participate beyond initial instance
5. Posting online expands potential impact beyond local space
6. Link to digital world allows voluntary engagement with larger conversation and international community
7. The public nature allows participation to grow organically (e.g. people stumble upon a #oneplaything and may be inspired to participate).
8. You don't need to participate to benefit (just seeing it can be playful enough)
9. Open invitations and the invitation to invite spark curiosity
10. Doing it is sometimes enough (people don't need the internet to get something out of #oneplaything)

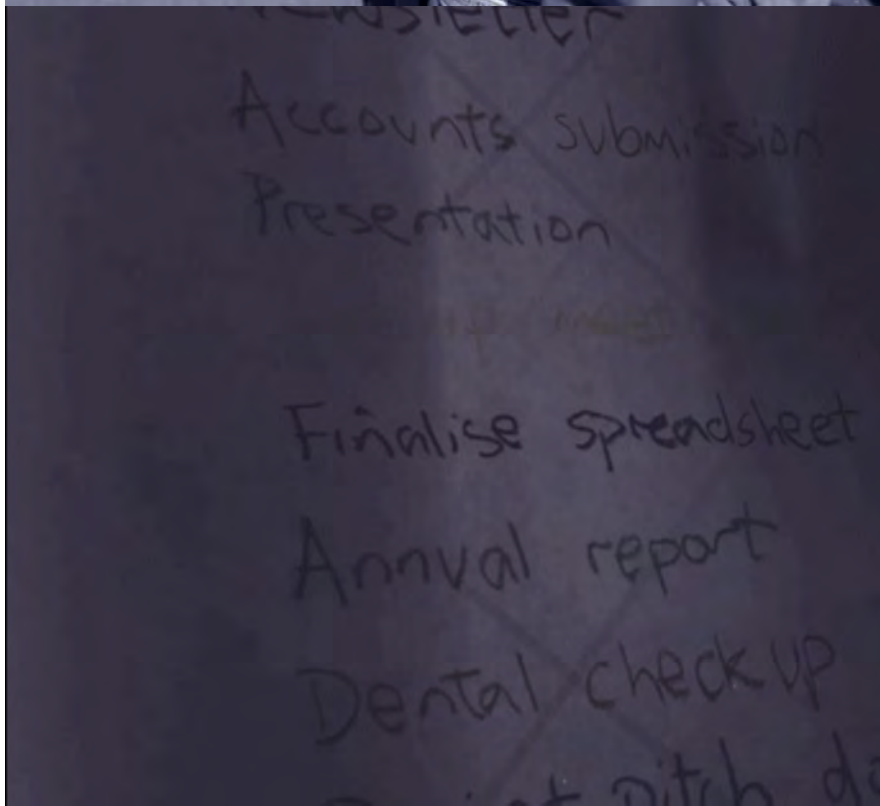
#oneplaything

Play Principles

The play principles were created during a two day workshop reflecting upon the impromptu public interventions, Hamilton's use of #oneplaything in creativity workshop settings, observations of the play kits in public settings and the experience of #oneplaything at Counterplay in 2019.

In reflecting upon these experiences and their link to motivating play in public, patterns emerged related to the accessibility of chalk, the barriers to participation in public settings and the possible issues around social media engagement. The result of this reflection was the creation of the play principles.

These play principles were used to inform the design of the choose-your-own-adventure game by defining a branching narrative for a player. In the game, you play as Norman Peters or Norma Peters and encounter both opportunities and barriers to play. The game represents barriers in the form of people (developing Norman Peters blue features from Counterplay 2019 as a visual indicator of disapproval of play), ourselves and our responsibilities.



#oneplaything

Play Principles

The game was presented at Play Perform Learn Grow in Theassaloniki, Greece in October 2019. It is also publicly available. During the presentation, members of the audience were provided with #oneplaything kits.

#oneplaything workshop was also delivered at the conference, which practically explored the play principles by envisioning barriers to play through sculpting, prior to inviting participants into public space to create their own play interventions. The workshop finished with a debrief and reflection.

Feedback was very positive, exploring the democratising potential of chalk in public space and its ability to reimagine ways of living.

#oneplaything

Impact

#oneplaything has:

- Formally been presented in academic and play sector settings (approx. 300 people) and has been encountered by countless members of the public through playful interventions on the street in the UK and Europe.
- Inspired the creation of #oneplaything kits by other members of the play community for large events, including #play14
- Led to the commission of the playful chalkscape at V&A Dundee
- Had minimal but some impact on social media posts by the general public, both in relation to and in the creation of their own interventions

#oneplaything

Showcases/Interventions

Public Showcases

Conference Workshop, Play Perform, Learn, Grow: Bridging Communities, Practices and the world 2019, Thessaloniki, Greece, 4-6 October 2019

Conference Play Intervention, Counterplay 2019, Aarhus, Denmark 4 – 6 April 2019

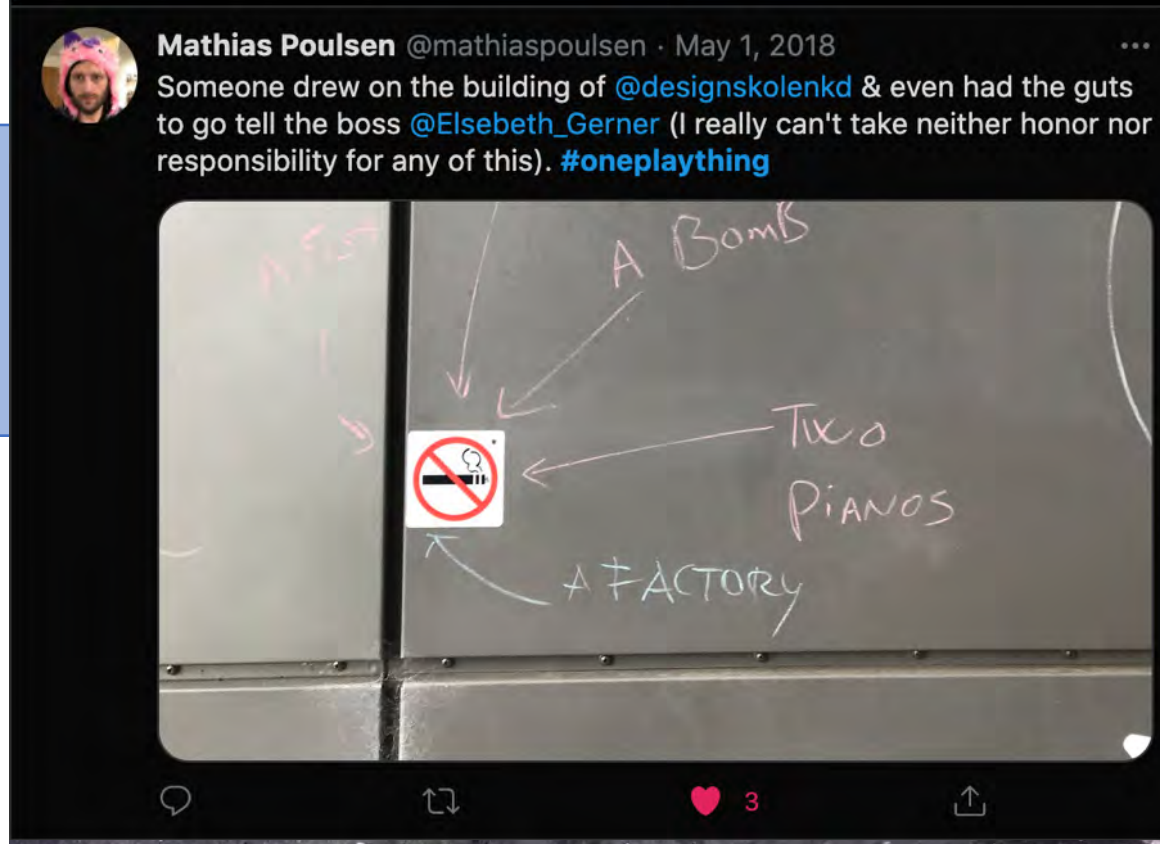
#oneplaything found object kits, Summer Streets Festival, Dundee, UK, 20-21st July

#oneplaything at V&A Dundee, Dundee, 8th August 2020 – 6 May 2021.

Twitter Posts

By Love (@toadrick): https://bit.ly/3bsFtjK

By the entire community: https://bit.ly/2PLkm3H



#oneplaything

External Links

#oneplaything THE GAME: http://bit.ly/3aaEUIF

PPLG Paper Abstract: https://bit.ly/2OcM1tS

PPLG Workshop Abstract: https://bit.ly/3ekvTRR

#oneplaything Open Source Play Kit resources for the play community: https://bit.ly/2v3sf6U

Conference interventions Counterplay 2019: https://vimeo.com/showcase/5895810

Mufti Games Blog by Malcolm Hamilton: https://www.muftigames.co.uk/play-blog/2019/3/27/one-play-thing

The Playful Chalkscape (2020)

#oneplaything Commission, 8 August 2020 – 6th May 2021, V&A Dundee, UK

The Playful Chalkscape

Mona Bozdog & Lynn Love

The chalk playscape was commissioned by V&A Dundee based upon the researcher's involvement in the #oneplaything movement on social media. The playscape aimed to explore how people can play together in outdoor spaces whilst respecting social distancing guidelines and is part of the Now Accepting Contactless: Design in a Global Pandemic exhibition.

The resulting installation is made up of six play zones, each of which focus on a different aspect of playing together, both in co-located and asynchronous ways. Each zone is supported with a QR code leading to an instruction video, guidelines and some suggestions to extend play. V&A Dundee also installed a play cart within the space and museum labels for each area.

The Playful Chalkscape

Mona Bozdog & Lynn Love

This playscape seeks to celebrate the connectedness and return to community that emerged within the first national lockdown. It also draws from the ways people have found to show their support and gratitude in a time when the pandemic makes it impossible for us to show our thanks in person.

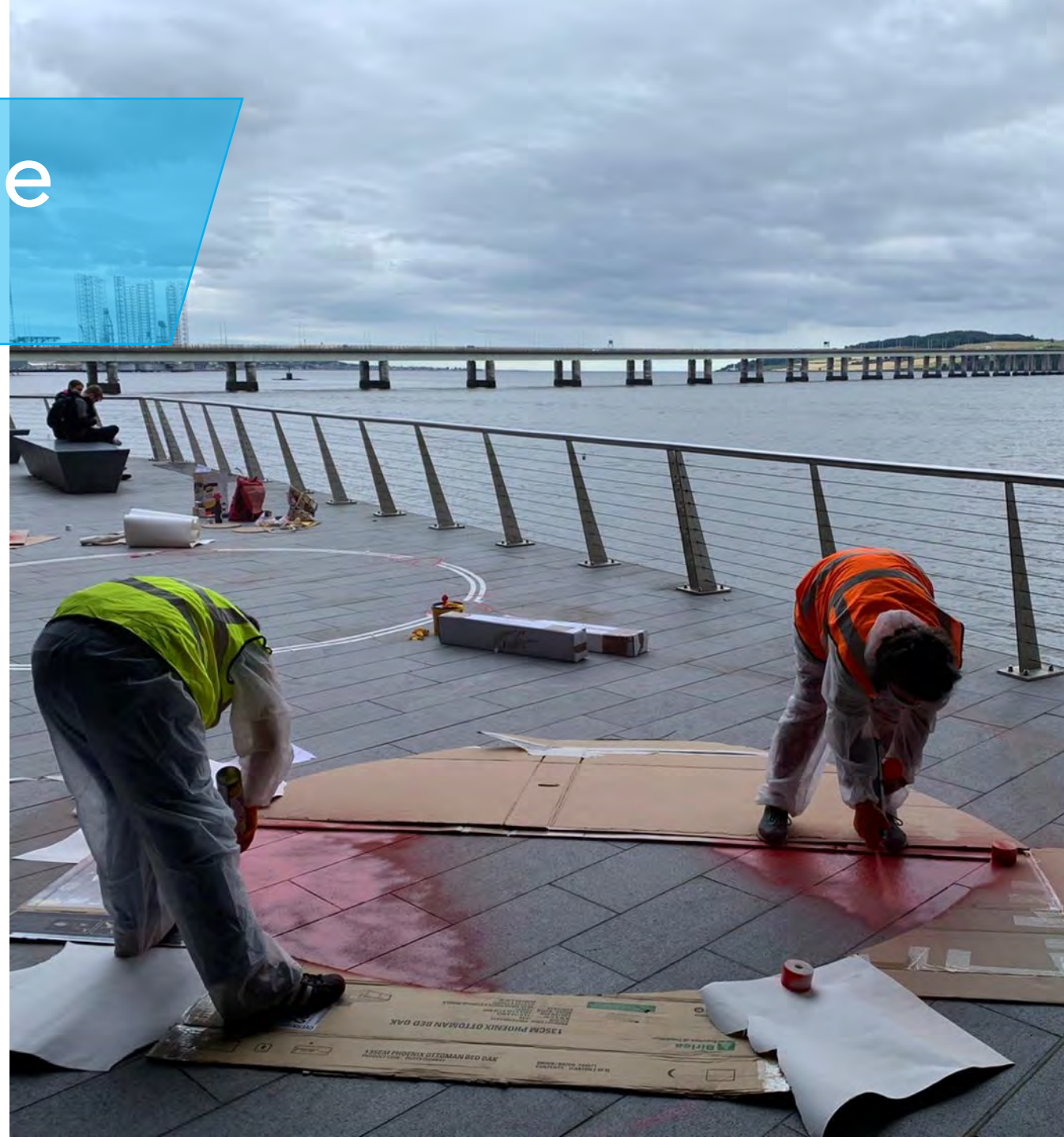
The zones include physical play in the form of a two-player socially distanced dance across a play board and multiplayer follow the leader game. Audio play is encouraged using the unique architecture of the V&A where players follow the installation and create an audio soundscape in the tunnel of V&A Dundee. There is also a free play space where visitors can use a #oneplaything kit to draw in the space, leaving their mark and adding to the installation. The installation also has a space to create a socially distanced selfie and a space which invites thanking and sharing thoughts of others.

The Playful Chalkscape

Contribution

The playful chalkscape was designed by Mona Bozdog and Lynn Love. Lynn Love was responsible for the development of shape language for the installation and the visual look whilst the playful encounters were co-designed by both Love and Bozdog.

The installation was carried out by Mona Bozdog, Lynn Love, John Bruin, Robin Griffiths, Jek and Tanith, supported by John Louden. The supporting #oneplaything website was created by Danny Parker. Playtesting was undertaken by the families from Home Start Dundee and staff and their families from Abertay University.

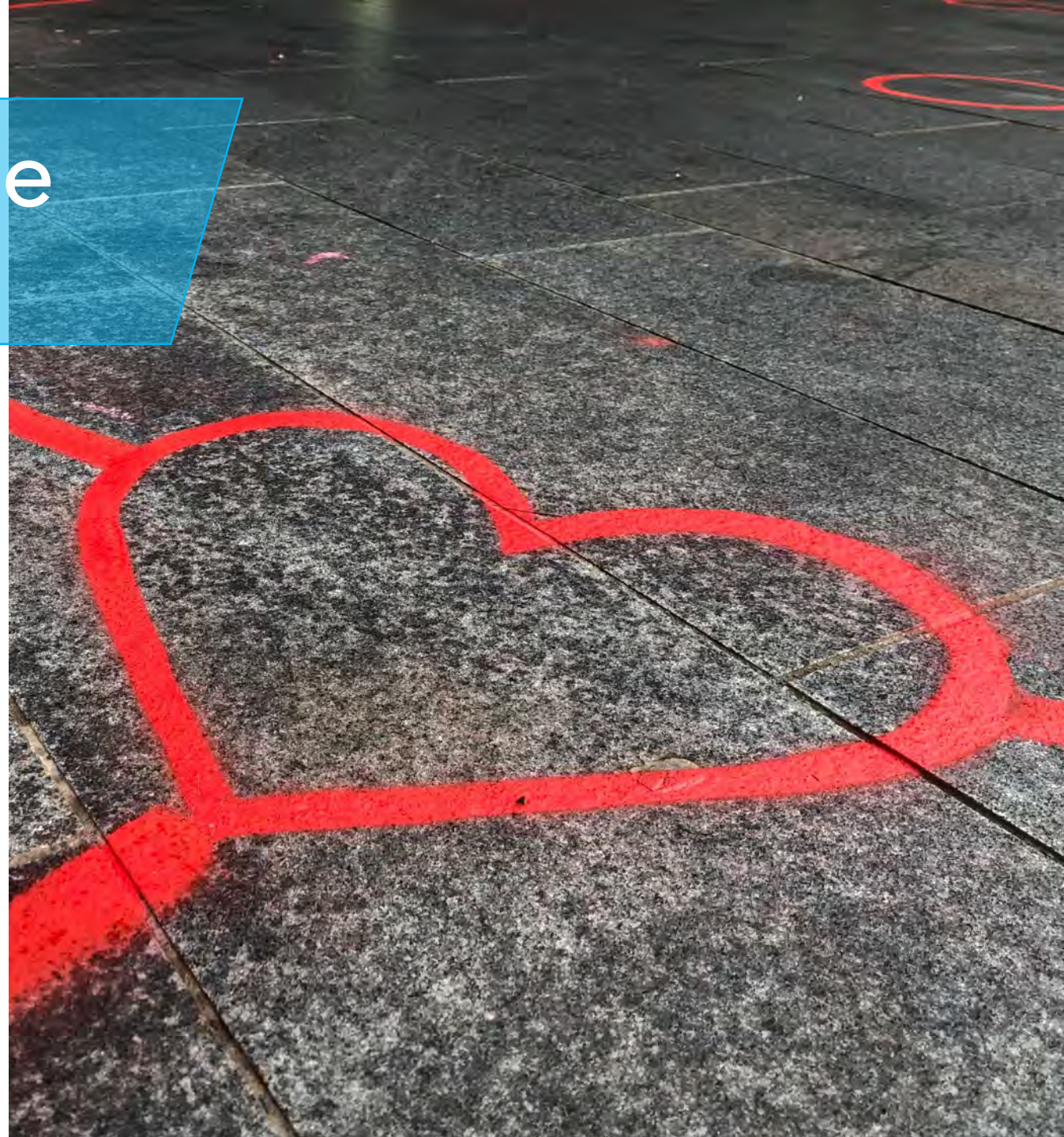


The Playful Chalkscape

Research Questions

The playful chalkscape aims to address the following research questions:

- How can co-located social play function in a socially distanced society?
- How might play be activated in a site-specific landscape, in a safe and fun way?
- How can socially distanced play be invited and also inspired through a site-specific installation?
- How can co-creation of play be invited within a socially distant installation?



The Playful Chalkscape

Methodology

The playscape was created undertaking the following methodology:

- Literature research into pervasive games, street art and symbols of the pandemic
- Ideation and pitching to the client
- Iteration based upon client feedback, user testing and artist-as-researcher reflections
- Installation and further testing
- Iteration based upon feedback, user testing and artist-as-researcher reflections

The Playful Chalkscape

The Six Play Zones within the Installation

Zone 1: Slow Dance

(2 - 3 Players)

One player acts as “time” and on their count, each player can take one step across the play landscape which choreographs their movements in line with social distancing guidelines.

Play ends when each player reaches their goal (yellow moves to green and green to yellow).

Features:
Physical play, game-like, competitive and collaborative aspects, fun to watch

Zone 1: Slow Dance

The final installation

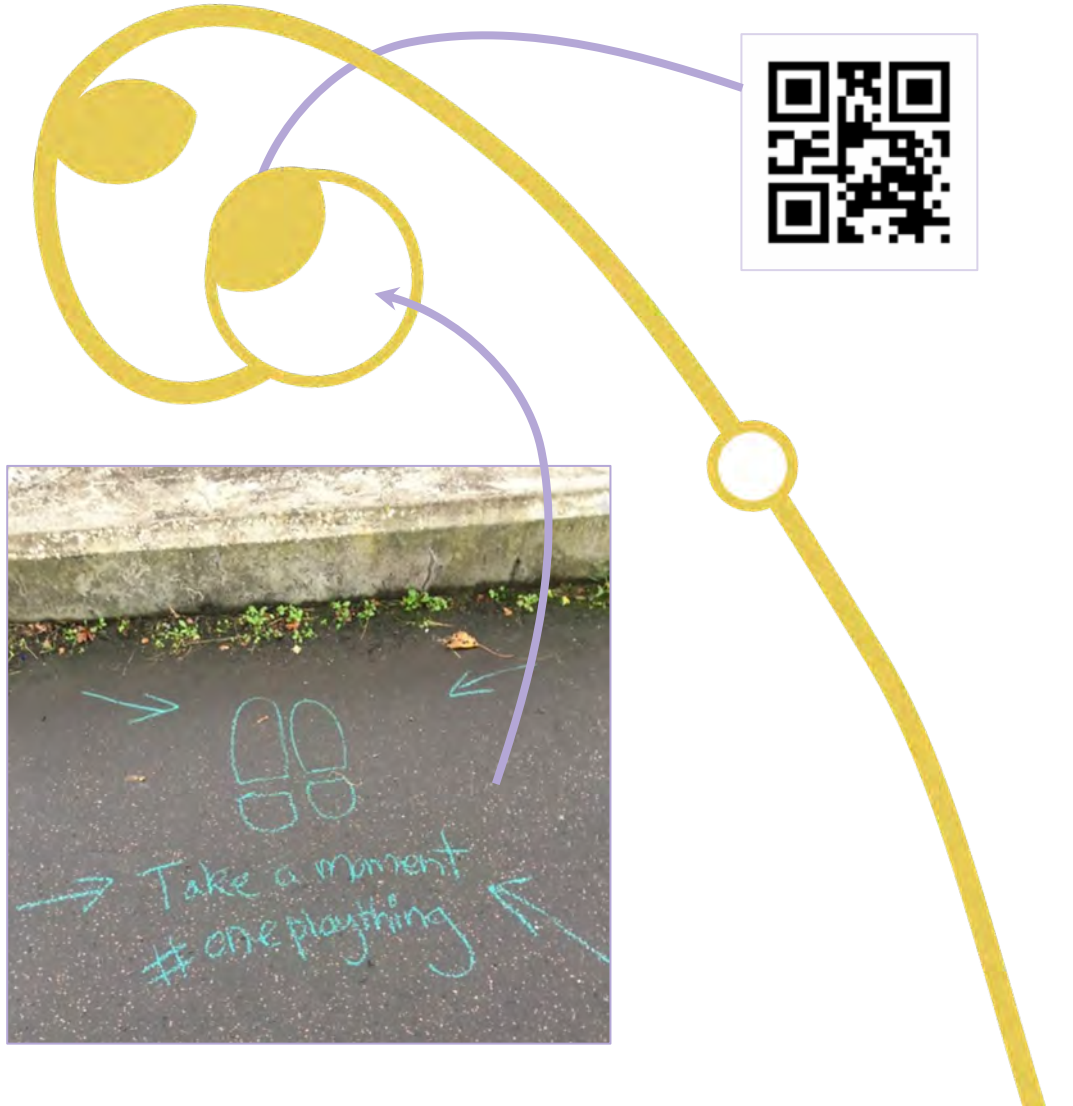
Zone 2: Endless Playground

(1 - ∞ Players)

This is a series of ambient play rulesets which will change over the run of the installation. The play space nearby will also be an area where prompts can be written to encourage contemplation of the space, the pandemic and design more broadly.

We suggest these are written in chalk with a new prompt each day/week. A series of prompts can be provided and this may be a nice opportunity to crowdsource prompts via social media.

Features:
Playful perspectives, community potential, moves within and out with the building, secrecy and camaraderie, contemplative.



Zone 2: Endless Playground

The final installation

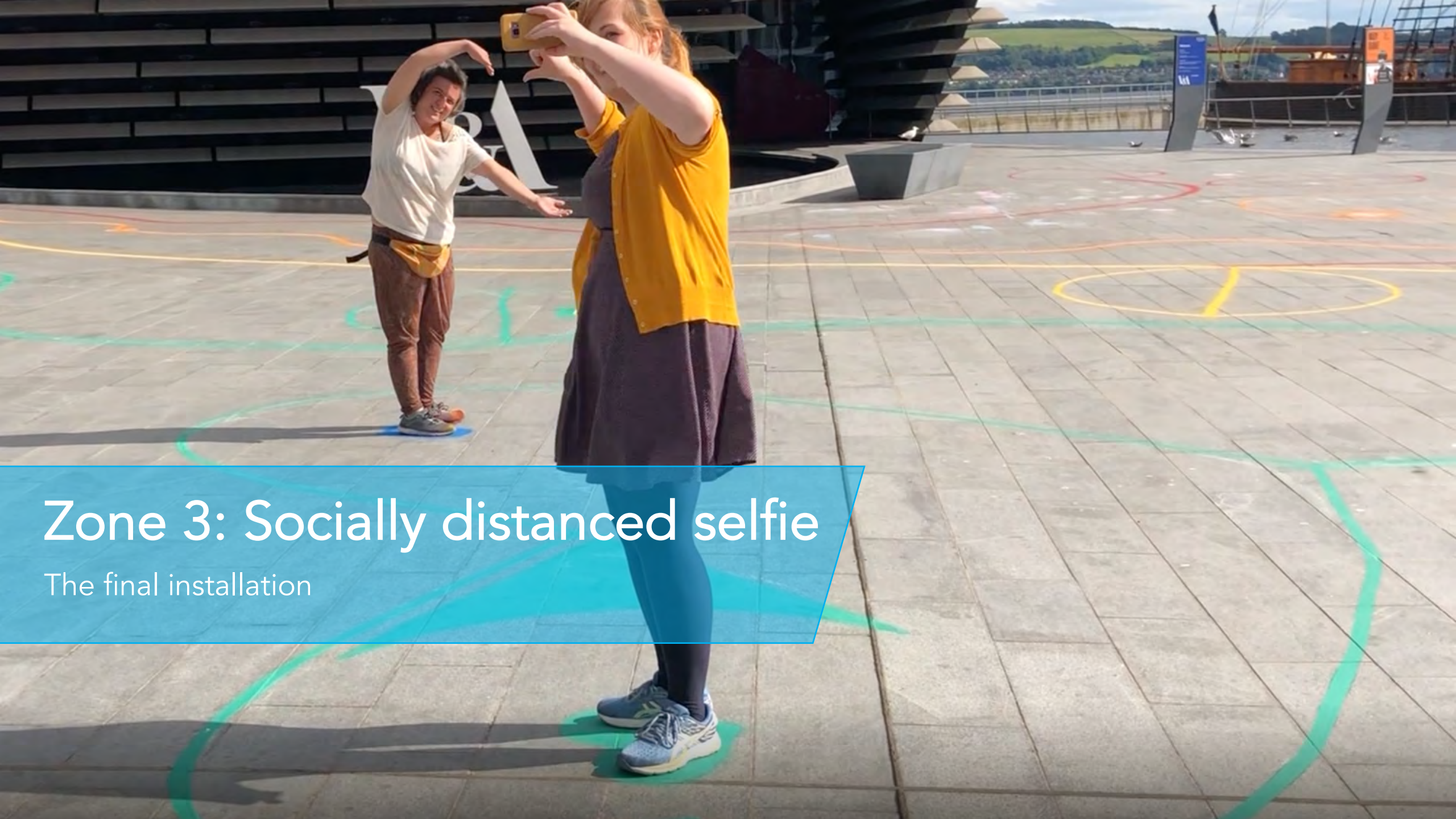
Zone 3: Socially distanced selfie

2 Players

A person stands in each of the circles. Marks on the ground point out where to stand and indicate how to stand. The people can then work together to create a love heart around the V&A sign

A QR code will also be in the space with a link to instructions and a demonstration video

Features:
Physical play, communication, collaboration, social media opportunity, fun to watch



Zone 3: Socially distanced selfie

The final installation

Zone 4: Social Sculpture

4-6 Players

In this space, like zone three, marks will be painted on the ground which suggest what players need to do to create a sculpture that will look appealing from both the balcony above and framed by the building from the other end of the tunnel.

Features:
Physical play, communication, inter-group collaboration, social media opportunity, fun to watch

Zone 4: Social Sculpture

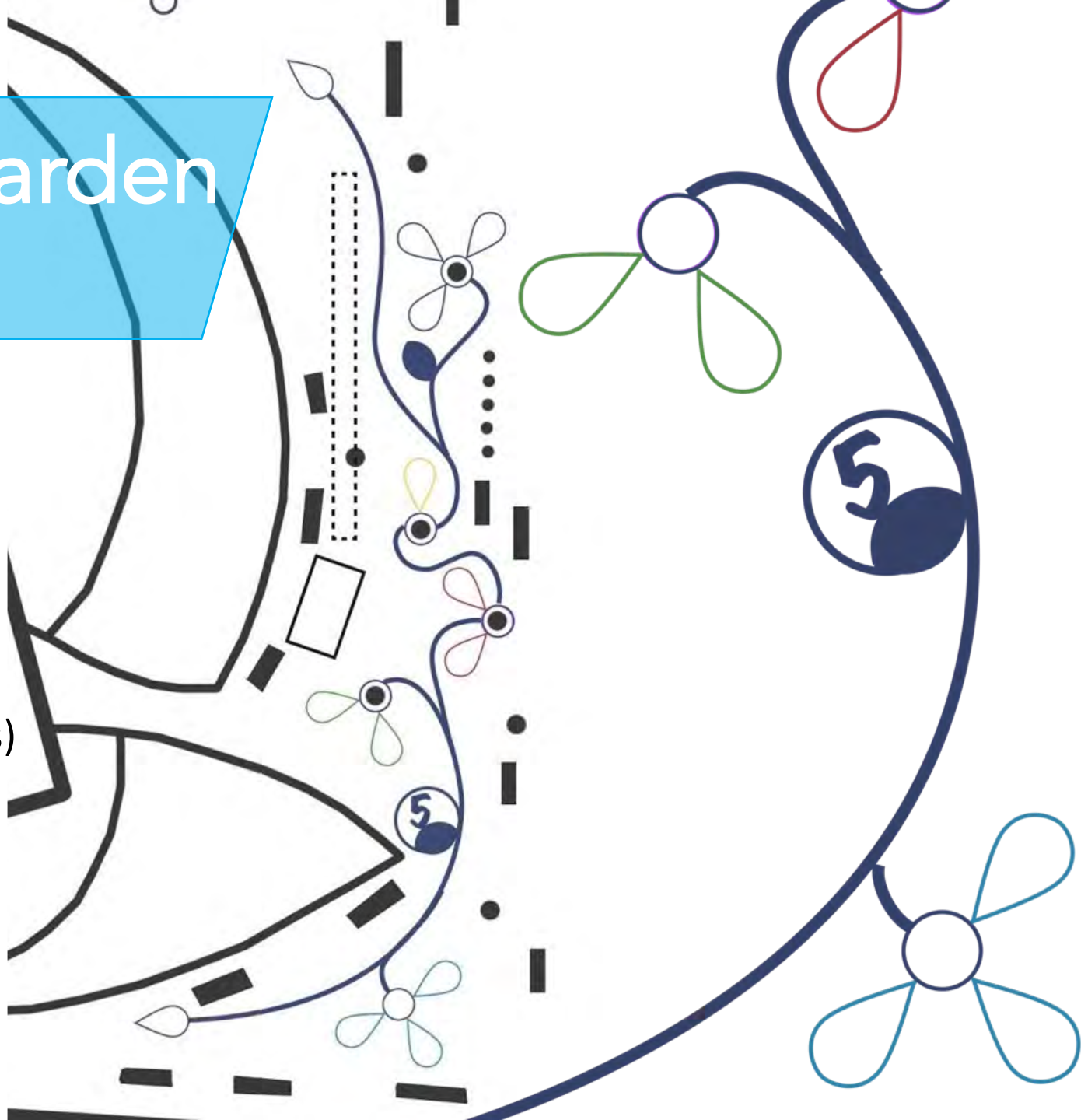
The final installation

Zone 5: The Chalk Garden

12 groups simultaneously

In each petal of the chalk garden, a social bubble are invited to use their #oneplaything packs to draw and augment the space.

Interconnecting lines make fun paths to follow/balance upon whilst the petals surround the trees in the space (in most cases) making a landscape specific to the V&A Dundee.



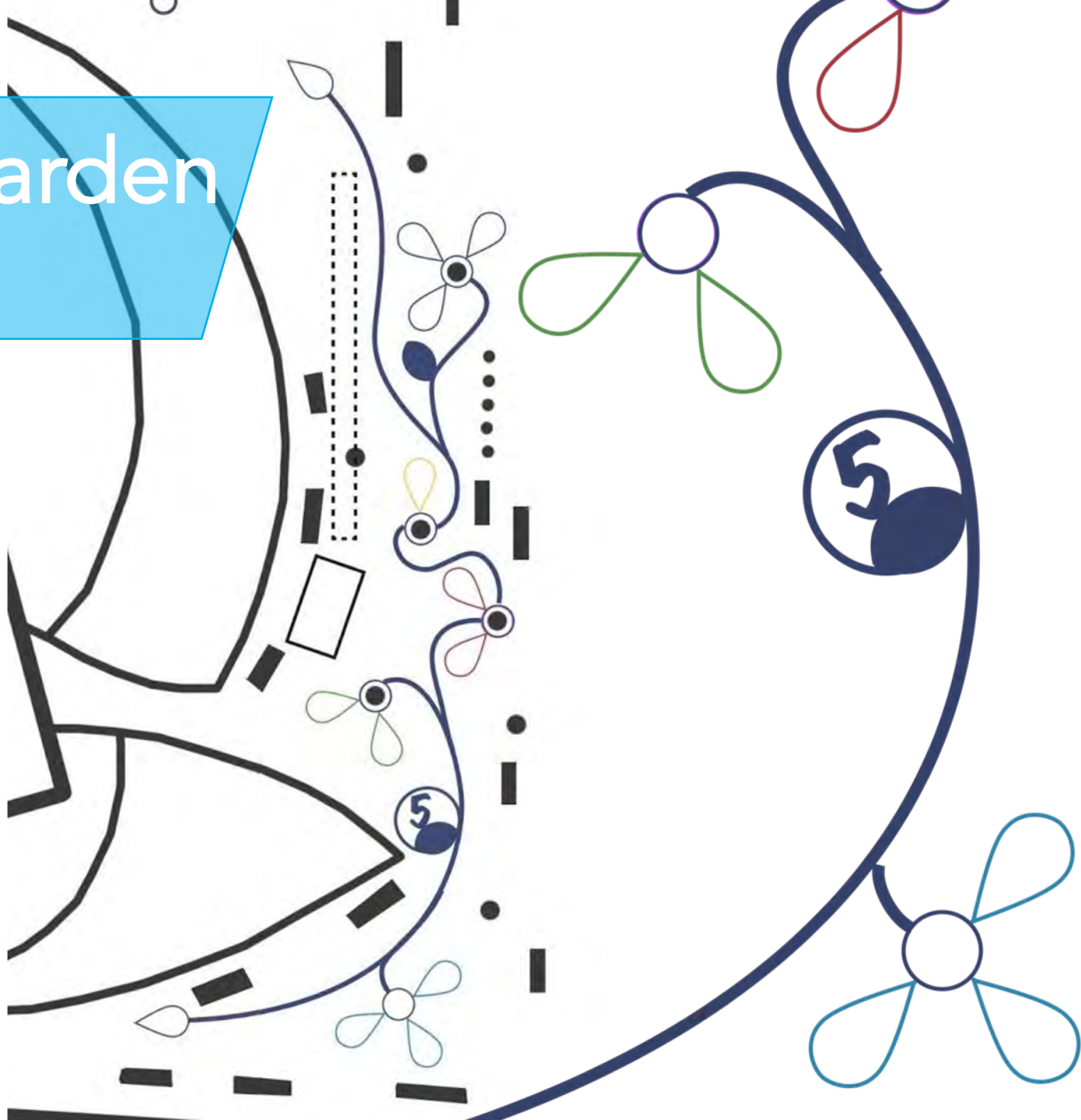
Zone 5: The Chalk Garden

12 groups simultaneously

The area marked zone 5 provides prompts for interaction through illustrations and text. #oneplaything kits also provide prompts (10 different sets across the packs)

Those without kits can enjoy the landscape and drawings of others. The weather will naturally reset the space, moderation will be required to avoid profanity.

Features:
Creativity, ownership, community and communal play



Zone 5: The Chalk Garden

Final Installation

#oneplaything kits

Inviting co-creation

The chalk garden was designed to facilitate co-creation and to help visitors feel like they could make the chalkscape their own, adding to the play.

Kits had been created for #oneplaything previously but the chalkscape kits took a different approach. They were tailored to families, being presented in brightly coloured envelopes, having two large sticks of chalk, a recipe for making chalk paint to create your own installations outdoors at home and a prompt card which described what the chalkscape and #oneplaything was about. It also gave 1 of 10 possible suggestions for ways you might want to use the chalk in the chalk garden.

1,000 kits were made for the launch of the chalkscape.

#oneplaything kits

Final Installation

The V&A produced a play cart which allowed contactless pick-up of #oneplaything kits for visitors.

The play cart also had some signage about the chalkscape, a brief overview of the play in each zone and some information about the designers.

The play cart had been planned to be placed next to the chalk garden, but due to unforeseen operational matters, was instead located at the front door. This invited visitors to chalk at the entrance to the V&A, rather than within the chalk garden. This unexpected use of the kits motivated some design changes to the chalkscape which will be discussed later in this document.

Zone 6: Echo

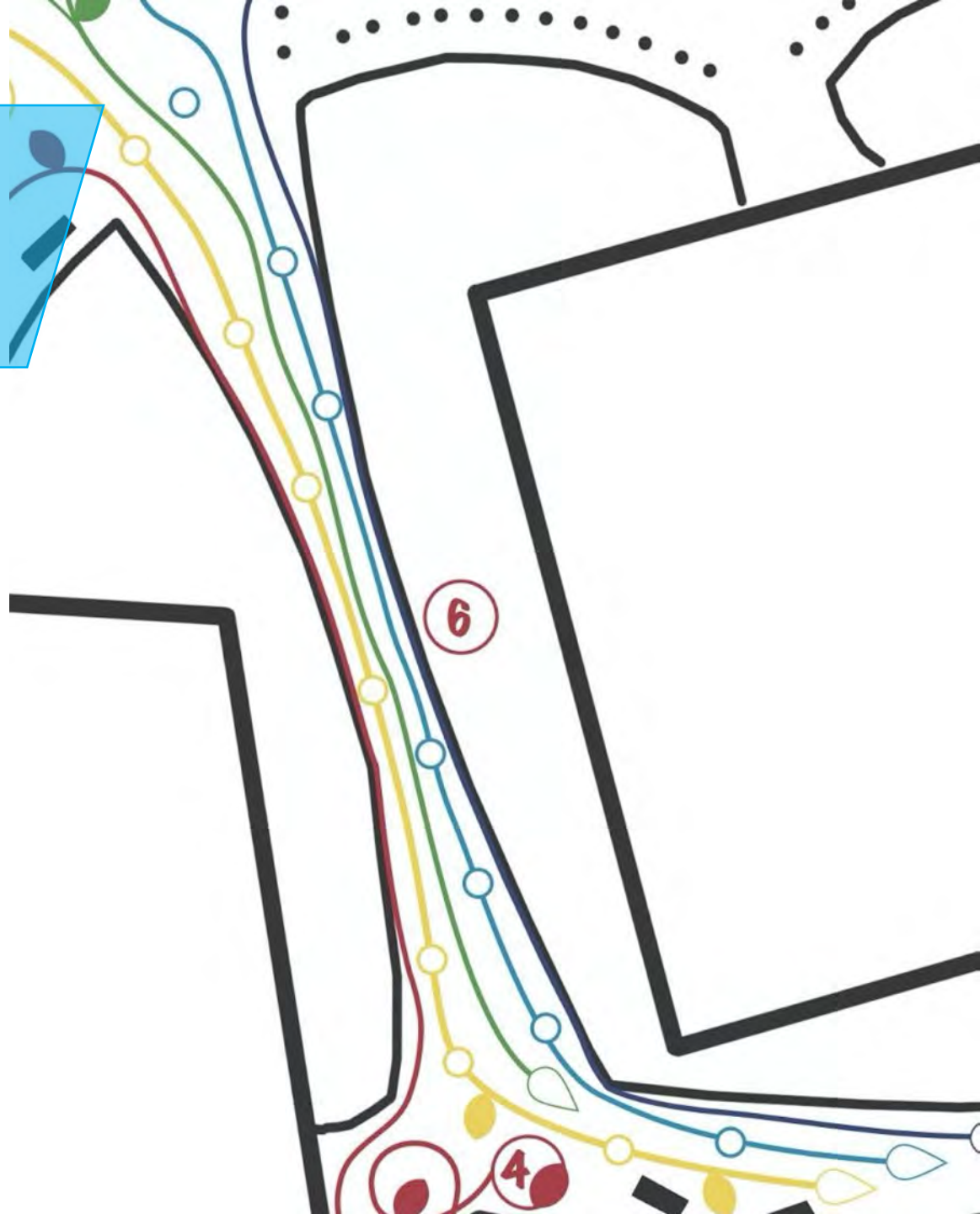
1-14 players

Echo (1 - 14 players)

The rainbow pathways have echo spots which invite cyclists and pedestrians to make a noise (ring bell, shout or clap their hands) at each spot to create a rhythmic aural landscape.

One player can hit all spots to perform a solo whilst moving through the space, two can perform a duet and 14 can combine to create a communal soundscape.

Features:
Sound play, creativity, solo and group play, potentially physical play



Zone 6: Echo

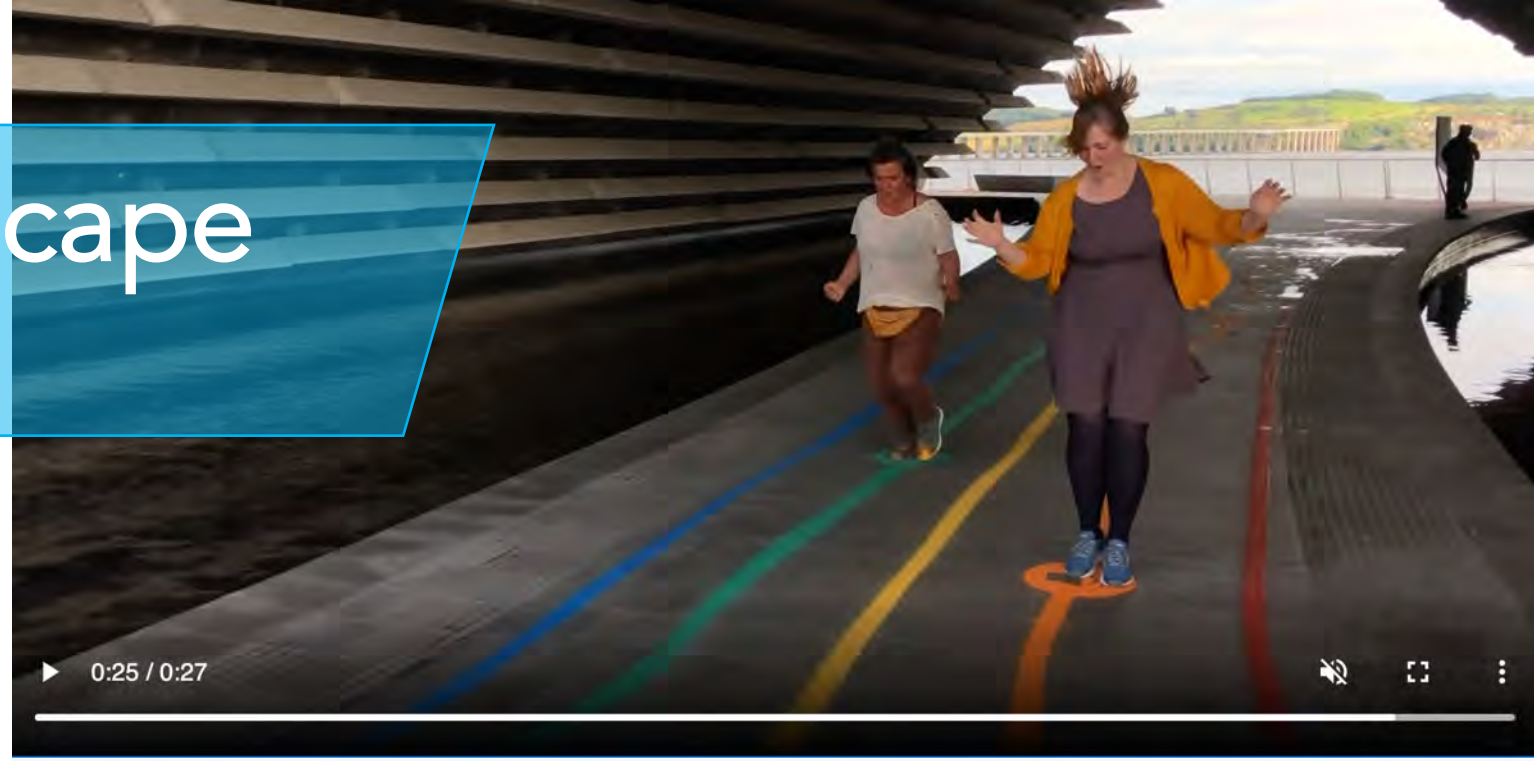
Final Installation

The Playful Chalkscape

QR Codes

The QR codes are installed as vinyl non-slip stickers within the installation, one for each of the six play zones. When scanned, the player is taken to the #oneplaything website where there are videos demonstrating how each zone can be used, a set of rules to try out and some suggestions for inventing different kinds of play for each zone.

Each QR code takes the player to the specific page for the zone that they have scanned so that the instructions for that zone are immediately accessible.



Welcome to Echo

Players 1+
Play time: 5 minutes

Echo is a soundscape which takes advantage of the architecture of the V&A building itself.

To play: Find the first green or orange circle on either side of the V&A tunnel. At this circle, make a noise! Clap, shout, ring your bell if you are on a bike - any noise will do! Walk through the tunnel, following your coloured line, making a noise every time you see a circle.

If there are two players, you can take a colour each and perform a duet as you walk through the tunnel. If you have more players, you could each stand on a spot and work together as a choir, making noise in turn, in pairs or all together!

The Playful Chalkscape

Design process

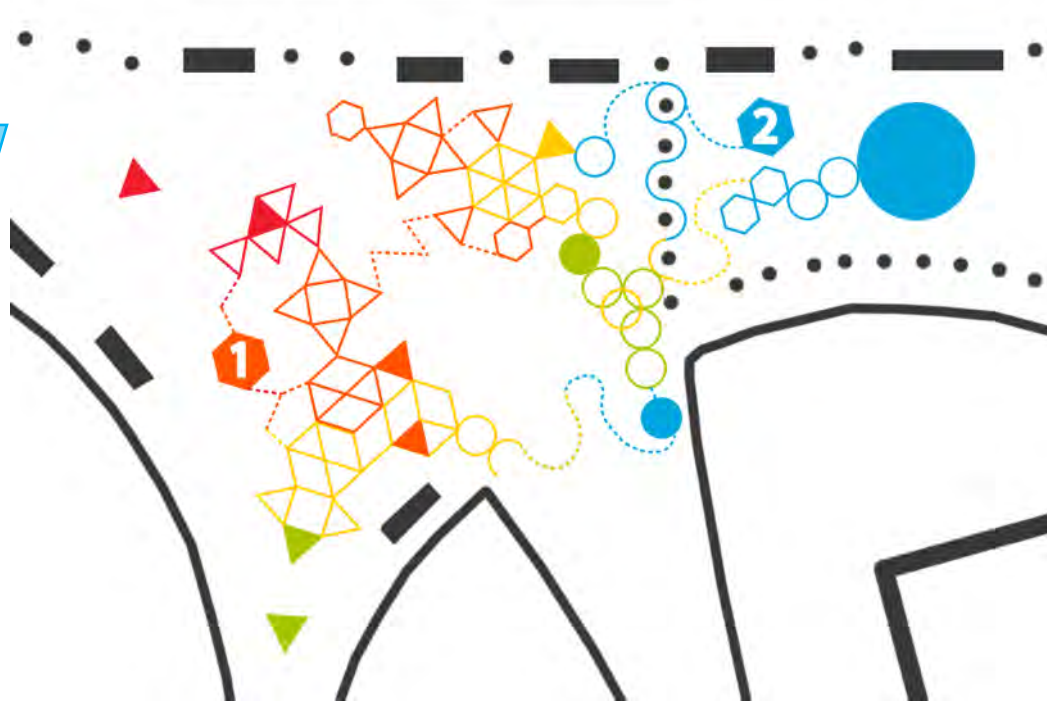
The Playful Chalkscape

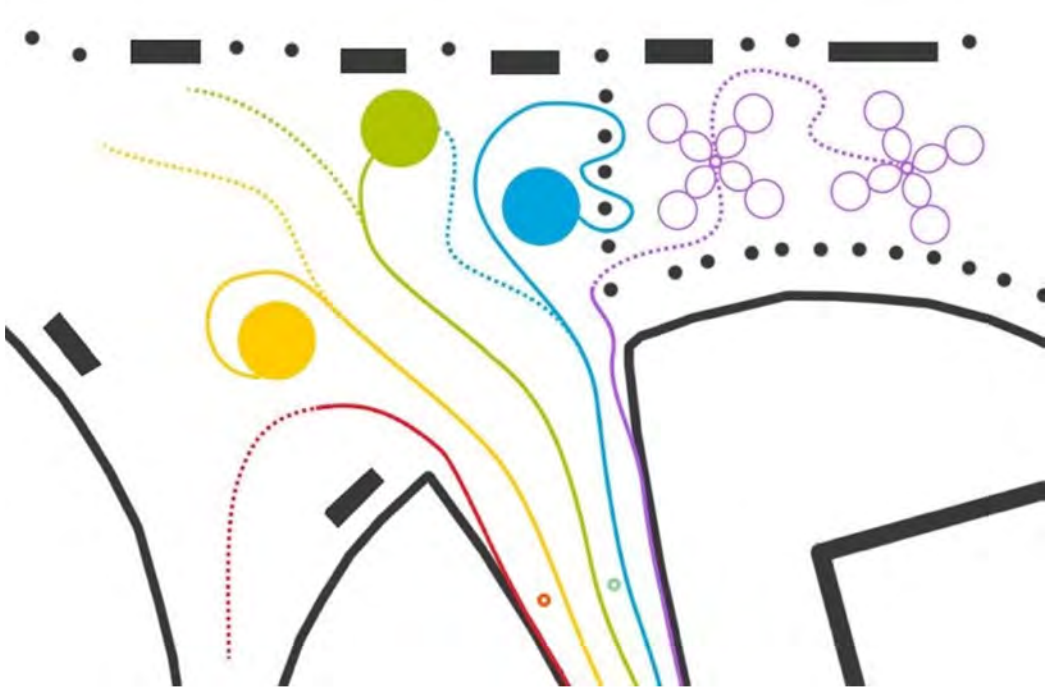
Design process

Two ideas were pitched to V&A Dundee:

1. The social web, a game board which inspired different types of movement and behaviour (top image)
2. The rainbow landscape which created a series of play zones interconnected by a rainbow landscape of undulating lines (bottom image)

The rainbow landscape was selected due to referencing key symbols of hope and connectedness in the pandemic – It makes references to the rainbow of support, clap for carers and reliance of digital technology to feel connected in its design.





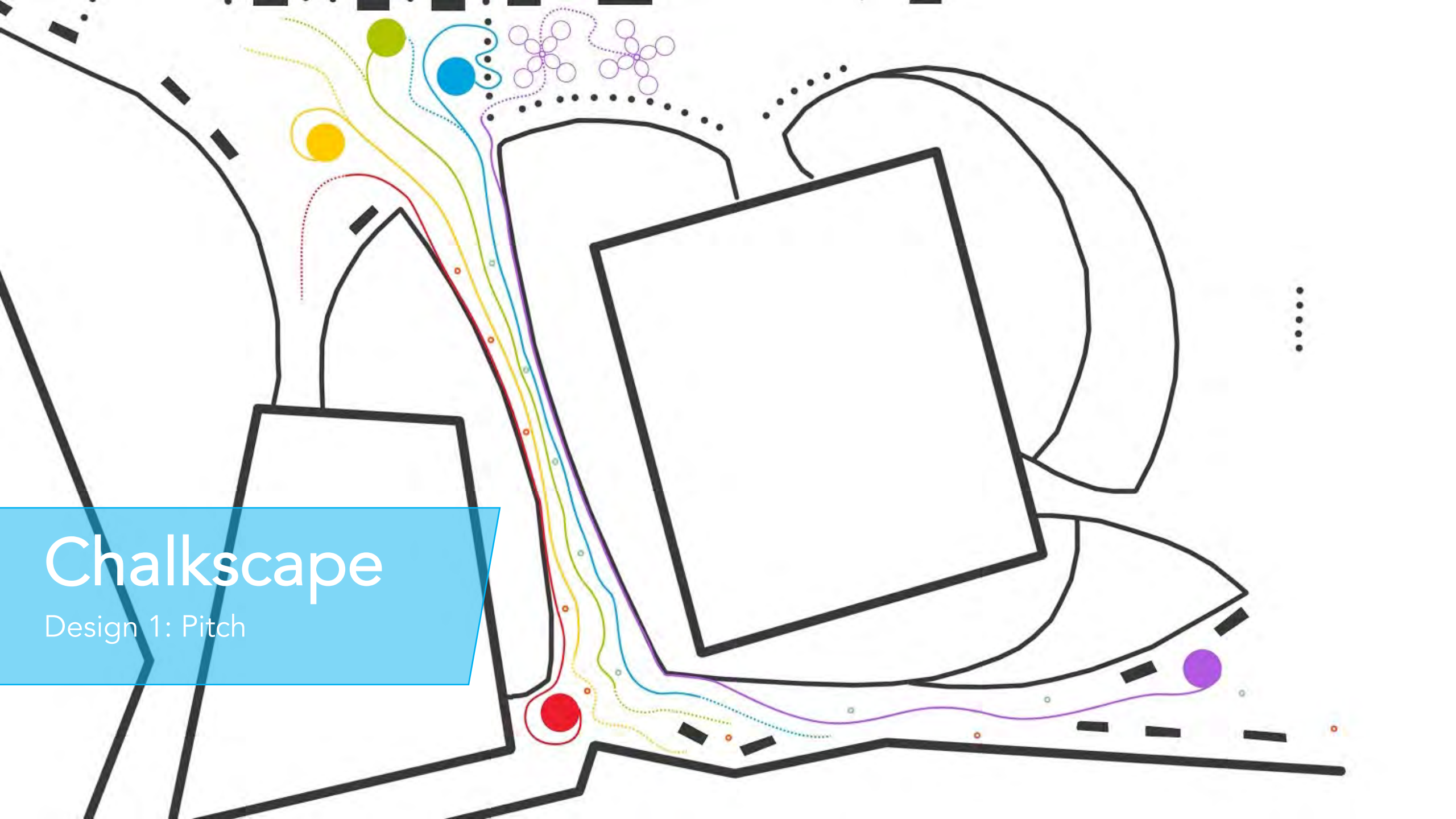
The Playful Chalkscape

Design process

The design is structured around rainbow pathways and whilst being a visual spectacle it will also offers lines that can be traversed and, within the tunnel, will act as lanes across which cyclists and/or players can collaborate to make playful rhythmic soundscapes inspired by the clap for carers.

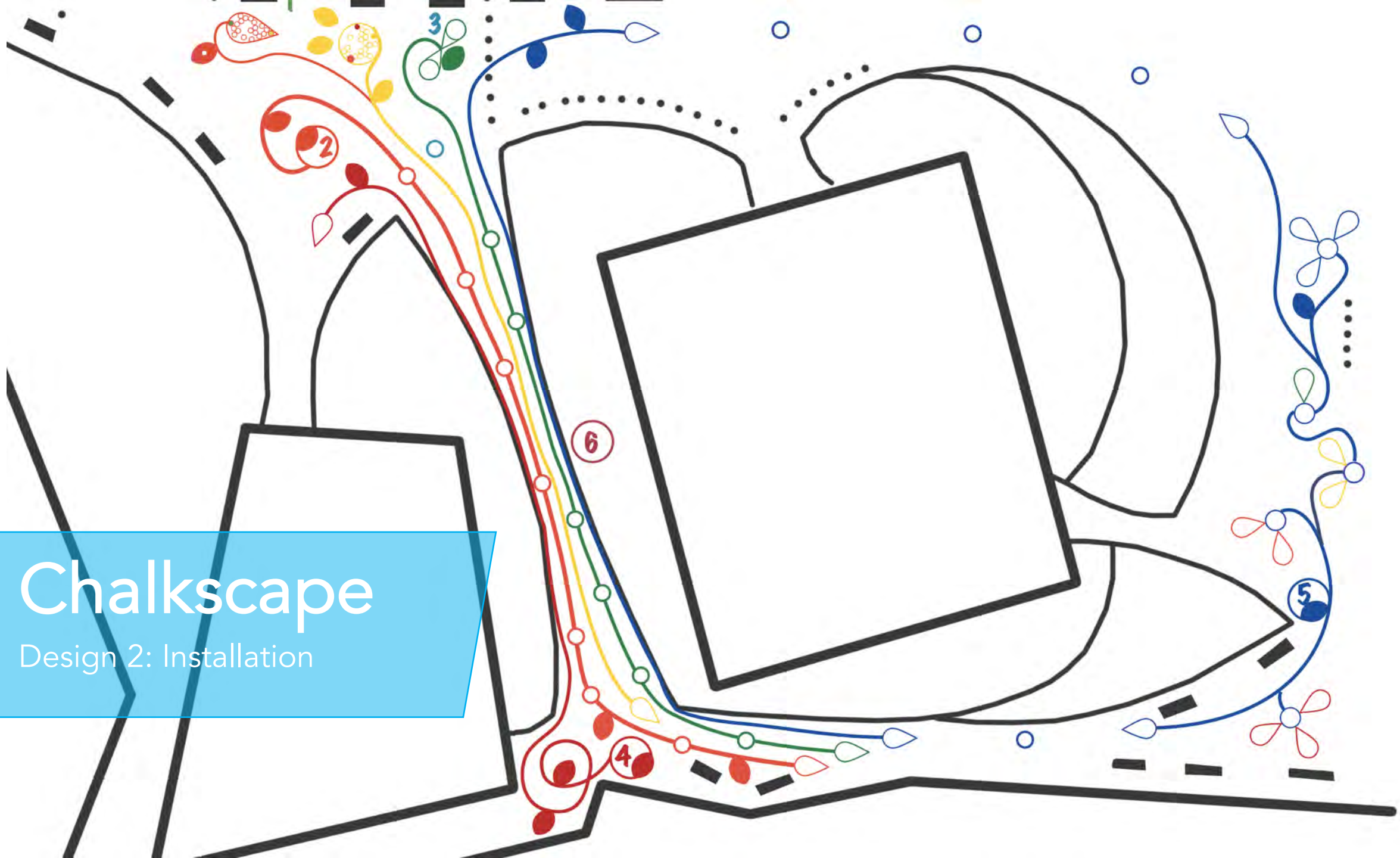
Observations of the space after chalking implied that pathways will be very effective play for families, providing them with alternative ways to navigate the space.

The design was iterated, based upon feedback from V&A Dundee to make greater use of space to the back of the V&A, consider the routes for cyclists through the space and to develop the shape language to give players clues to follow and create play as can be seen in the following two pages.



Chalkscape

Design 1: Pitch



Chalkscape

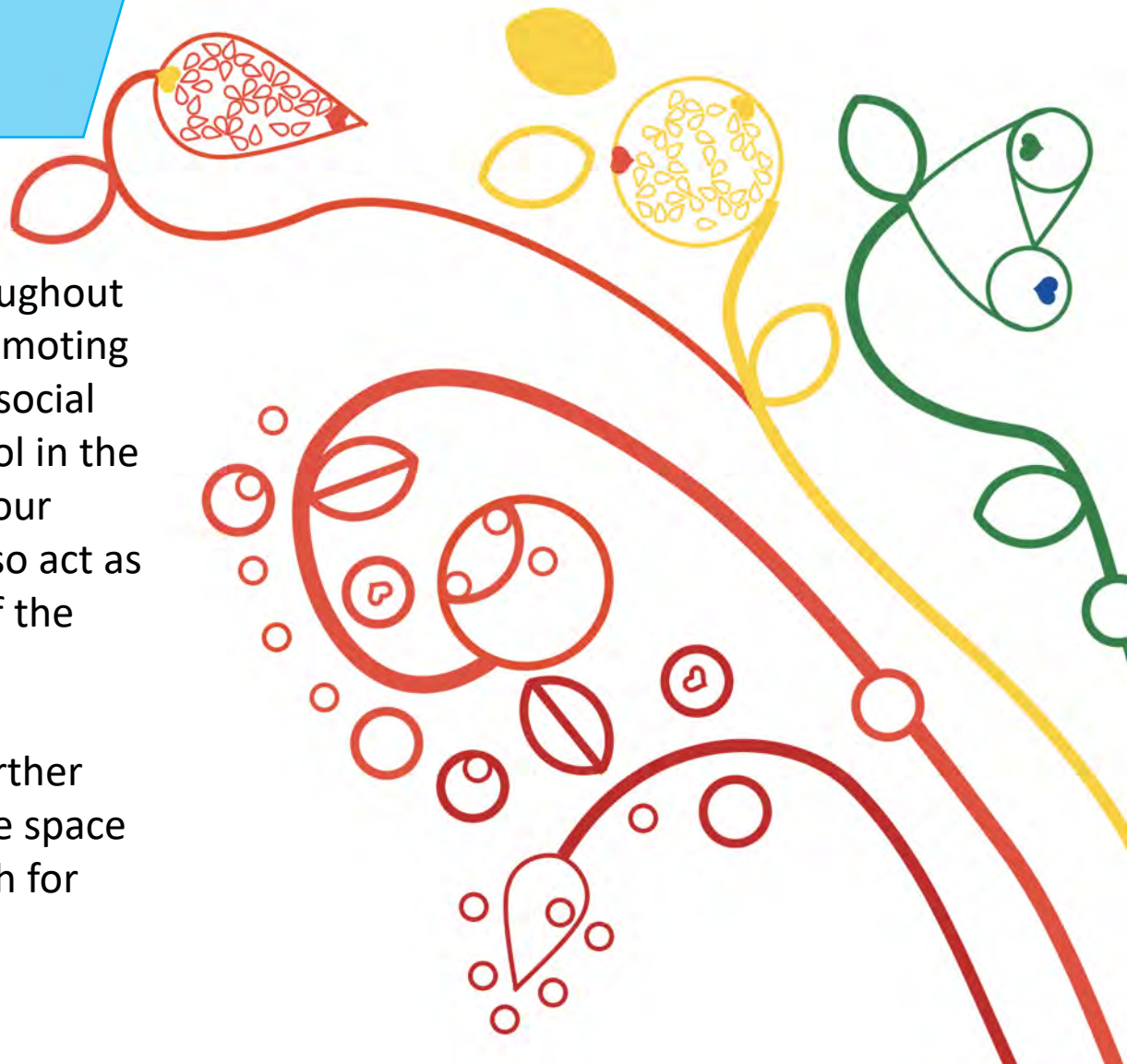
Design 2: Installation

The Playful Chalkscape

Design process

The colour palette is inspired by the rainbow, a sign of hope throughout the pandemic. The shape language was inspired by plant life, promoting thoughts of growth and new beginnings, imagining a time when social distancing is no longer needed. Hearts also became a core symbol in the installation, echoing not only the love we have rediscovered for our families, friends and community in this difficult time, but they also act as invitations for players to stand in particular spaces – the shape of the heart echoing two feet coming together at the heels.

Once the installation had been in place for two months, some further modifications were made, inspired by how players were using the space which can be seen in the design to the right. The design approach for these modifications will be discussed later in this document.



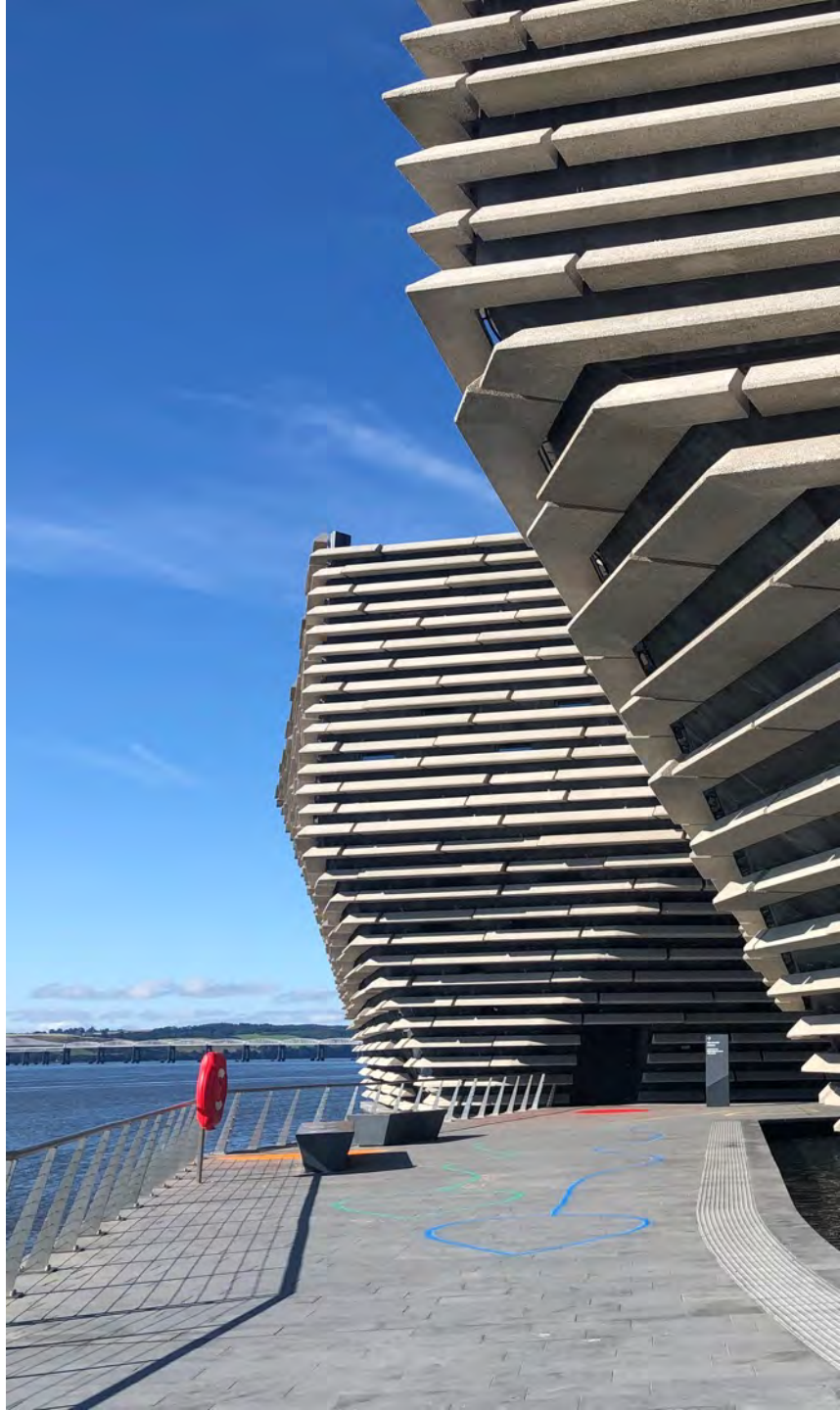
The Playful Chalkscape

Design process

A period of research, both observing the space and its use by the people of Dundee and online research around the rules, regulations and symbols of the pandemic were used to inspire and develop the play zones within the playscape.

People used the space to eat their lunch and look at the river, families would walk through the tunnel shouting to make an echo, children liked to balance on the walls next to the water features and climb on the benches, skaters liked to use the benches and surface as a space to skate and gather.

The versatile role of the space for many different age groups meant it was important to offer different levels of participation, to suit the diverse users of the space. Low demand invitations to play that would suit anyone were considered as were more physical ones and higher risk, but higher reward for those who chose to pursue these play invitations (ideal for families and teens).



The Playful Chalkscape

Design process

Research into the pandemic resulted in an interest in developing a visual language for the installation, one which built on the key iconography that was used to manage queues and groups of people in public spaces during the pandemic: footprint stickers, circles on the ground, hazard tape lines, etc.

Community initiatives such as children painting rainbows and the clap for carers also inspired the design and play in the space heavily (echo is inspired by the clap for example).

The image to the left is an example of one-way system signage implemented by Dundee City Council, building on the city's reputation of being "Sunny Dundee." This is one of the more contextually considerate designs identified during research.

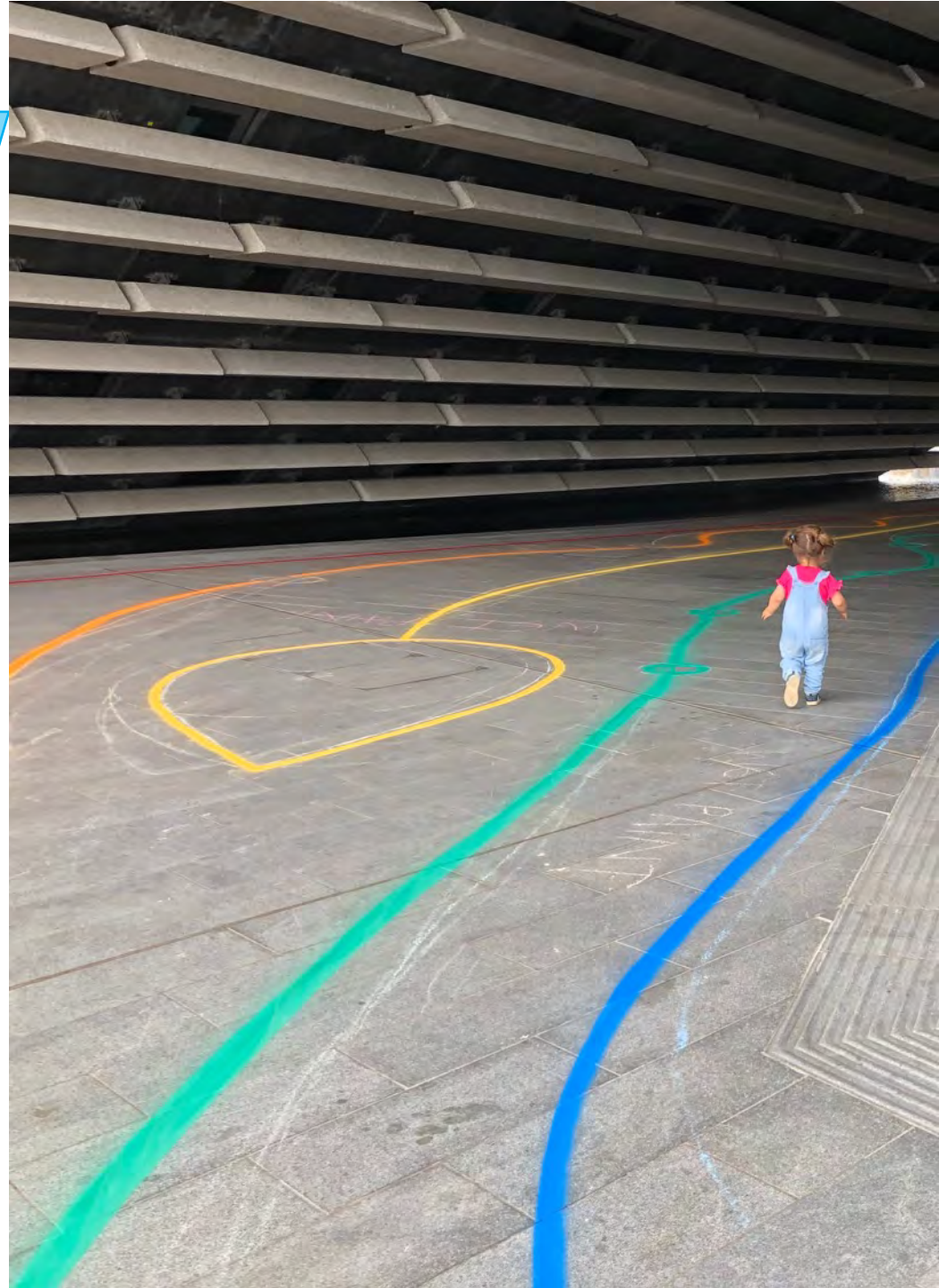
The Playful Chalkscape

Design process

The design had to be visually appealing offering a low level of participation for those who didn't want to play directly but could benefit from appreciating the spectacle. This was the main motivation behind the scale of the installation, the use of bright colours and addition of non-play spaces which added to the appeal of the overall design.

There had to be accessible free play with very little instruction needed that would suit younger families. The undulating lines in themselves invite free play and the #oneplaything kits invited players to add to the space and make their own play, which particularly appealed to young families.

We also used selfie culture to inspire play for older children and adults, inventing a socially distanced selfie which also took into account a key feature and heavily photographed aspect of the building – the V&A sign



The Playful Chalkscape

Design process

The space was designed to promote open play, so whilst there are symbols to encourage particular types of behaviour, the space seeks to be open to interpretation and to encourage people to be creative, making up their own play by exploring the shapes, symbols and undulations of the lines within the space. Players can use the labels and QR codes for specific instructions, but if without a phone or interest in the instructions, can make up their own games and enjoy the colour and scale of the installation as they explore the building and surrounding landscape.

The labels in the space were added by V&A Dundee three months after the installation opened to create a clearer link between the chalkscape and the exhibition inside the museum. They also provide further context for players where required.

The Playful Chalkscape

Playtesting

The Playful Chalkscape

Play Testing

Playtesting occurred both prior to installation and upon installation. The aim of playtesting was to see how the space was used by visitors, to evaluate how easy play was to interpret and to develop shape language in order to support different kinds of play.

The first round of playtesting involved creation of the planned games in chalk outlines outside the V&A. Staff and their families from Abertay University tested out slow Dance, the Selfies, Echo and the Social Sculpture.

The Playful Chalkscape

Play Testing – First Round Results

Echo was particularly popular with players of all ages and was simple enough that younger children could play this happily.

Slow dance worked well with adults and children enjoyed jumping from marking to marking across the space, making up their own games.

The selfie required a great deal of prompting to help players to achieve the desired result and a great deal of further design was undertaken to create icons to clarify what to do in the space. The selfie also inspired the inclusion of videos on the #oneplaything website to support players.

The social sculpture proved to create an interesting spectacle but was hard for players to interpret. This concept was revised, inspired by “flocking” where people move through a space following a leader.

The Playful Chalkscape

Play Testing – Second Round

The second round of testing took place on the final day of the installation. Families from Home Start Dundee came to play and tried out all of the games.

The chalk garden and #oneplaything packs were particularly popular and many children spent a great deal of time drawing in the space.

Echo was also well received by the younger children in the group. The children also enjoyed running along the undulating lines of the installation, moving from one side of the V&A to the other, following along the lines.

The selfie was not of interest to this group and slow dance made for interesting shapes to colour with their chalk. This test inspired V&A Dundee to explore signage in the installation to help motivate play more directly, and considering potential accessibility issues around QR codes.

The Playful Chalkscape

Design process

Significant research was required to ensure that the installation could be semi-permanent. Rather than chalk, a key staple of #oneplaything, the installation was created with acrylic linemarker, a semi-permanent spray paint which is hard wearing and copes well in wet conditions. The paint lasts 2-3 months and thus would require updating over the lifespan of the installation.

A range of different paints were tested to achieve a balance between colour, semi-permanence whilst being removable, as the installation needs to be removed at the end of the exhibition. Acrylic linemarker offered the best balance of both and was applied using a wheeled applicator, allowing the installation to be created over two and a half days.

The Playful Chalkscape

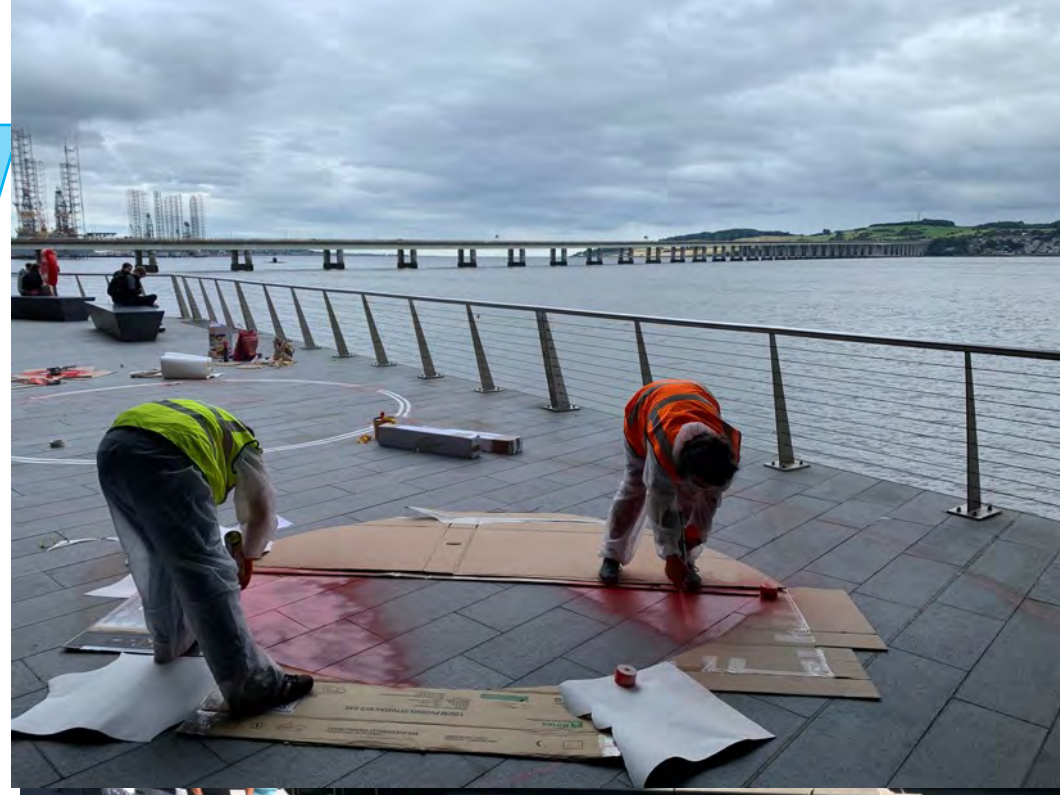
Install

Installation took place over 2.5 days in early August 2020.

The entire design was drawn out in chalk and large shapes taped off prior to painting with the wheeled line applicator. A series of carboard templates were produced to mask out areas and control overspray due to using spray paint in an open and windy space. Overspray was an issue in the particularly exposed areas of the installation but after a week of being installed, these aspects had worn away, creating a clean line.

The line thickness was limited by the applicator, so each line was widened through multiple applications to increase the visual impact in the space.

Unpainted spaces were left for the installation of the QR code vinyl on the final day of install.



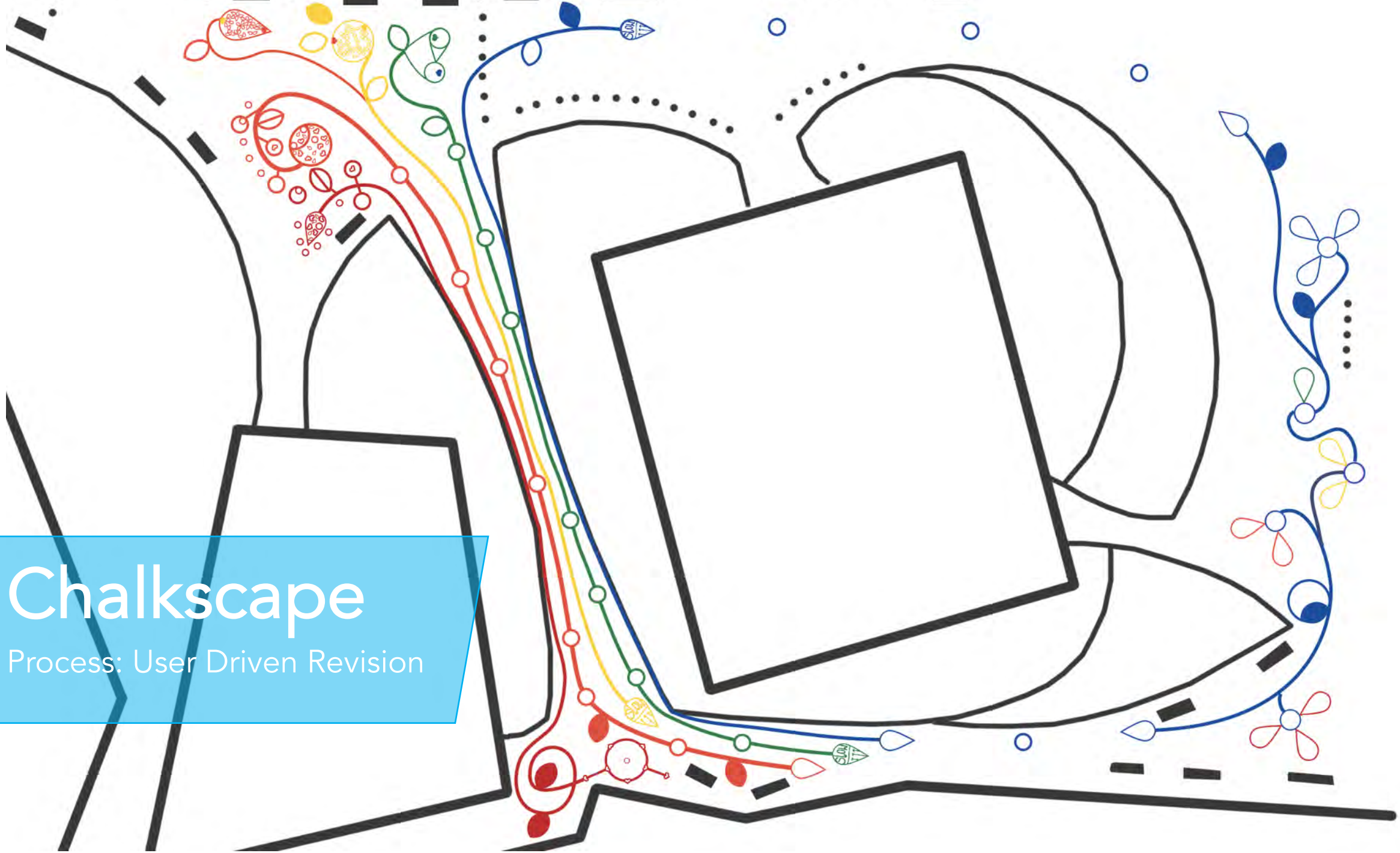
The Playful Chalkscape

User Driven Design Updates

The paint aged particularly well and did not need repainted as expected. Some colour fading occurred and repainting wasn't required until the installation had been onsite for six months.

The usage of the space was reviewed by the designers during early autumn. It was observed that some of the zones were not reaching their full potential – particularly the chalk garden and endless playground due to changes in facilitation.

It was observed that people enjoyed using chalk to draw, leave messages for one another, to fill in and colour the shapes of the installation and also to create drawings inspired by the Mary Quant exhibition in the museum. The endless playground was redesigned, with additional detail to invite messages and colour filling. The chalk garden was developed with the skater community in mind, as they made most use of the space to the back of the V&A where it was located.

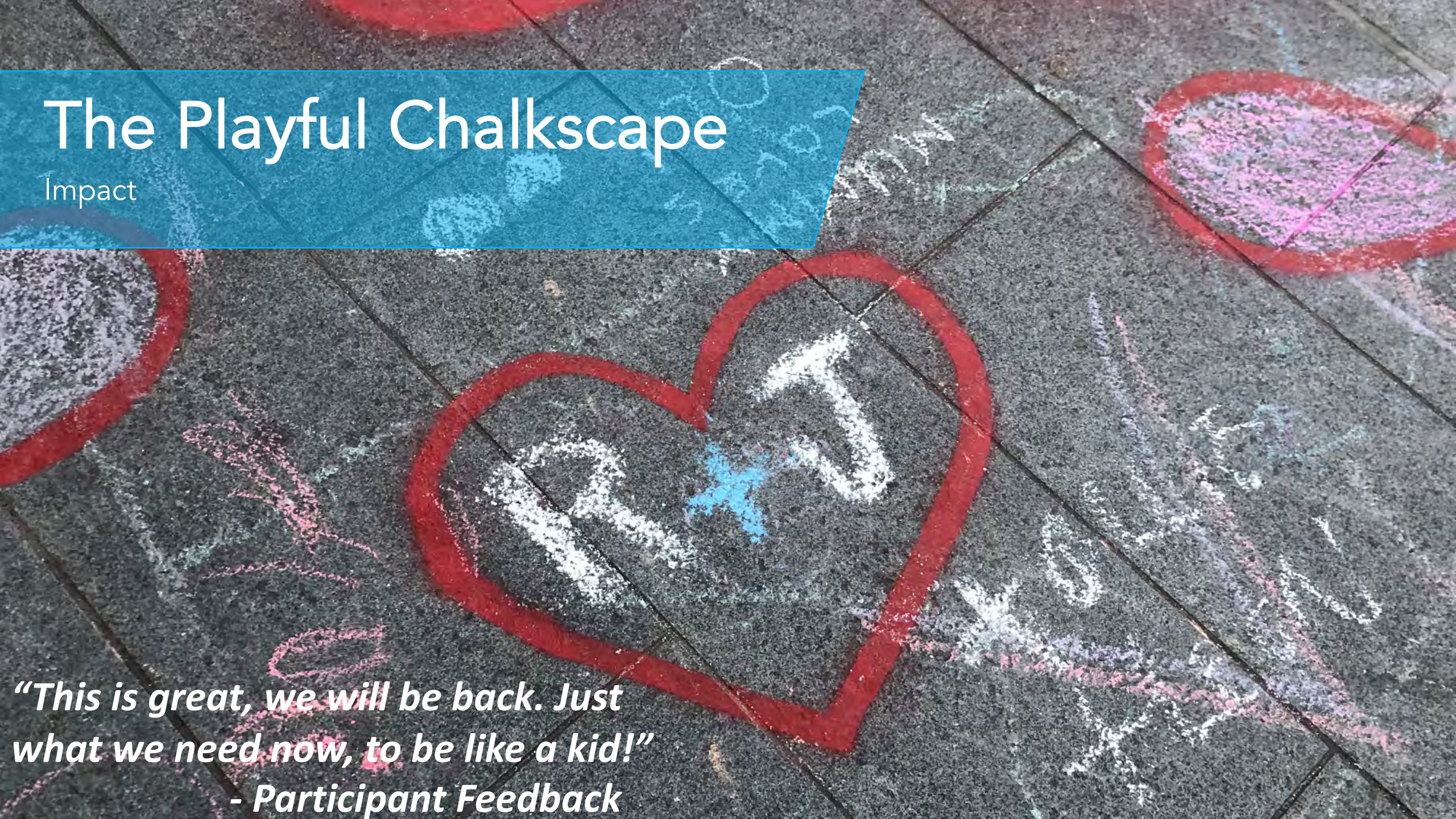


Chalkscape

Process: User Driven Revision

The Playful Chalkscape

Impact



“This is great, we will be back. Just what we need now, to be like a kid!”

- Participant Feedback

The Playful Chalkscape

Feedback

The chalkscape has been transformative for V&A Dundee:

“You’ve both completely transformed
the outside space of the museum, and how we’ll go on to use it in the future”

- Kirsty Hassard, curator, V&A

The chalkscape also aided with limited capacity caused by Covid-19 restrictions – feedback from the museum suggests that it was helpful having the chalkscape and associated outdoor activities for people to enjoy if they were unable to gain a ticket to access inside the museum.

The Playful Chalkscape

Feedback

Visitor comments (gathered by V&A Dundee) about the Chalkscape:

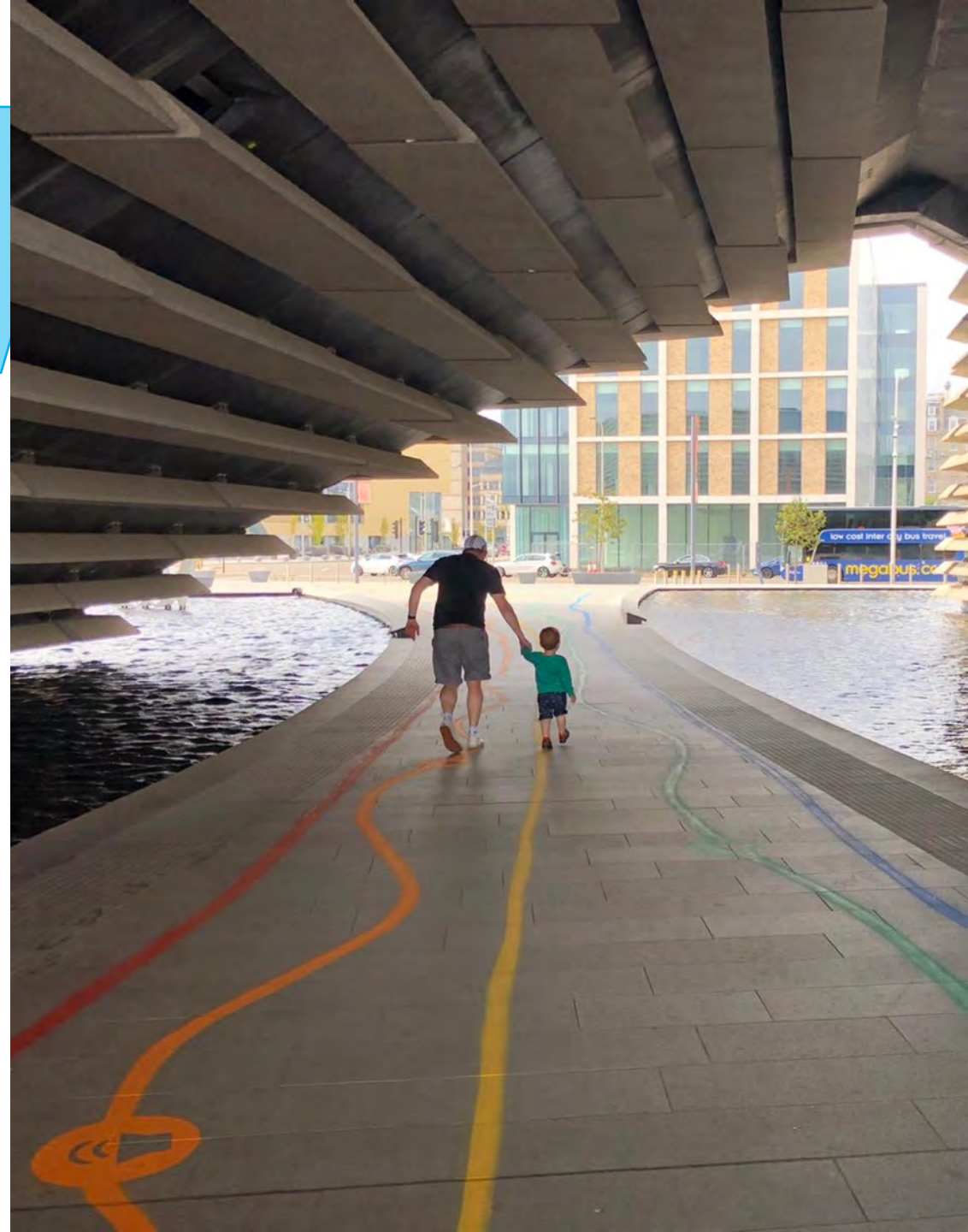
“This is great, I’m going use chalk with my class.”

“This has been fabulous, it's so lovely being outside and doing things together.”

“It was so good we had to come back.”

“The best thing about fun… when it’s messy it’s more fun!”

“We really appreciate the effort you are making – the children love it.”



The Playful Chalkscape

Site specific

The resulting chalkscape is a site-specific installation, taking advantage of the architecture of the V&A in the following ways:

- Playing with the echo in the tunnel to make a communal soundscape through play
- Framing play in the social sculpture area using the tunnel area to create silhouettes
- Using the V&A sign to tap into selfie culture in a Covid-19 safe way
- Playing with the geography of the landscape through the addition of undulating lines which map to and disrupt normal movements through the space

The Playful Chalkscape

Evaluation

Observations of players in the space and anecdotal feedback suggests that the play zones have varying levels of success:

- Free play and chalk based play are the most prevalent forms of behaviour in the space. V&A Dundee ran a number of mark making workshops in the chalkscape which has added to the prevalence of chalk play in the space.
- QR codes have varying success for instruction - Teens and adults will scan and read the content, but this does not always lead to play. Play is more prevalent when it is made up by the players in the space, particularly with young people and families.
- More structured play zones (the social sculpture and slow dance) are very visually appealing but may challenge the comfort of players too much as these areas are less used or see different play occurring being made up on the spot.
- Free play and chalk invite co-creation in the space, inviting visitors to add to, augment and create their own forms of play. Creative engagement with the chalkscape in this way is deemed a success by the creators.

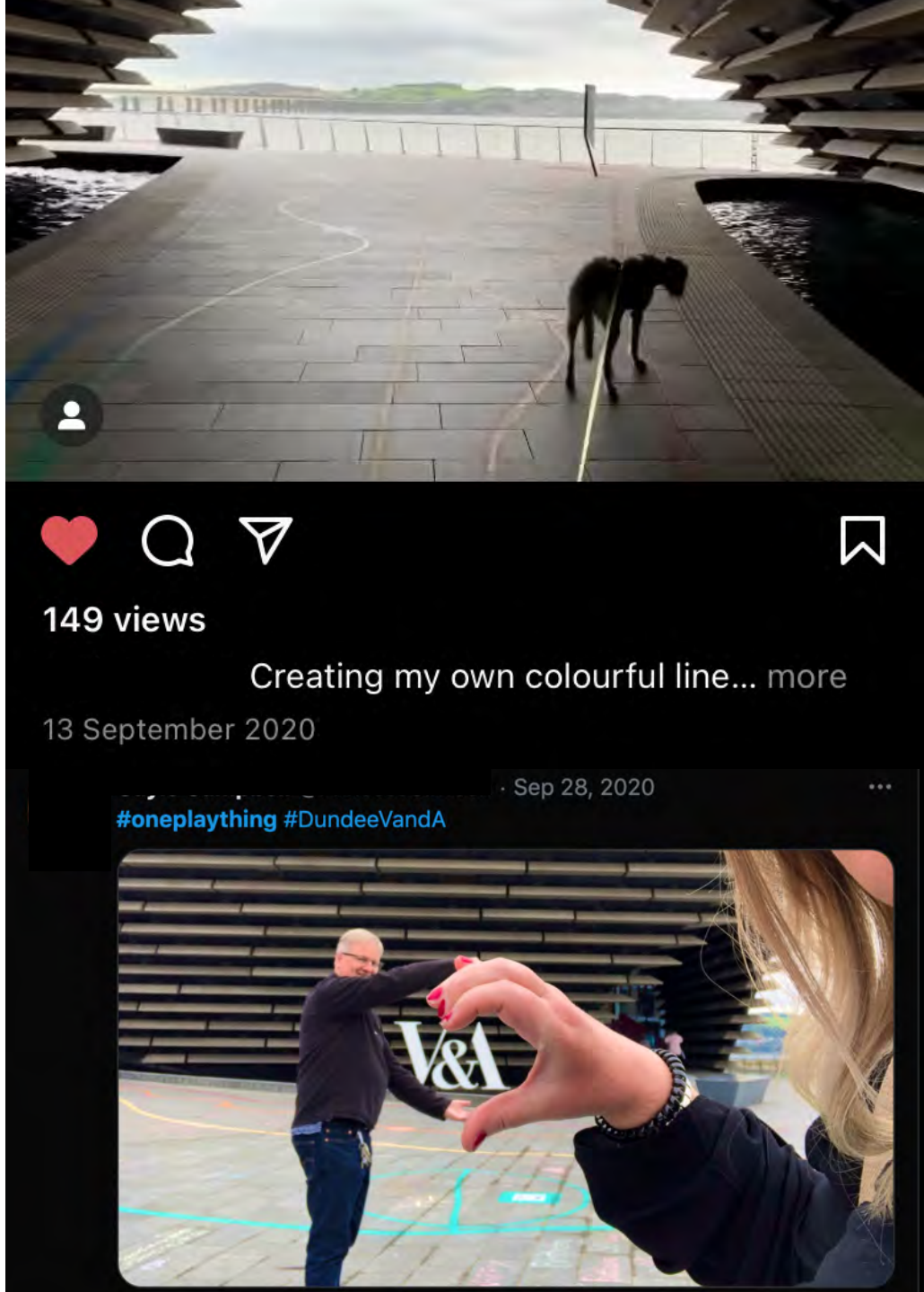
The Playful Chalkscape

Evaluation

Observations of players in the space and anecdotal feedback suggests that the play zones have varying levels of success:

Invitations to post experiences, online have seen little activity on #oneplaything (4 posts on twitter, 10 on Instagram at the time of writing). Like core #oneplaything activity, posting with the hashtag seems like a step too far for participants.

There is clearly engagement with the chalkscape and play zones (as can be seen by QR scans and chalk marks left in the spaces) but no thirst for documenting and sharing this online with the play community.



The Playful Chalkscape

Impact

Chalk Playscape installation 8 August 2020 – 6th May 2021 at V&A Dundee is publicly available 24 hours a day, however, engagement can also be measured by:

- 7,289 QR scans & website visit to oneplaything.co.uk (to date)
- 26 Wee Design Day workshops facilitated by the V&A using the Playscape, October 2020 with 1500+ attendees

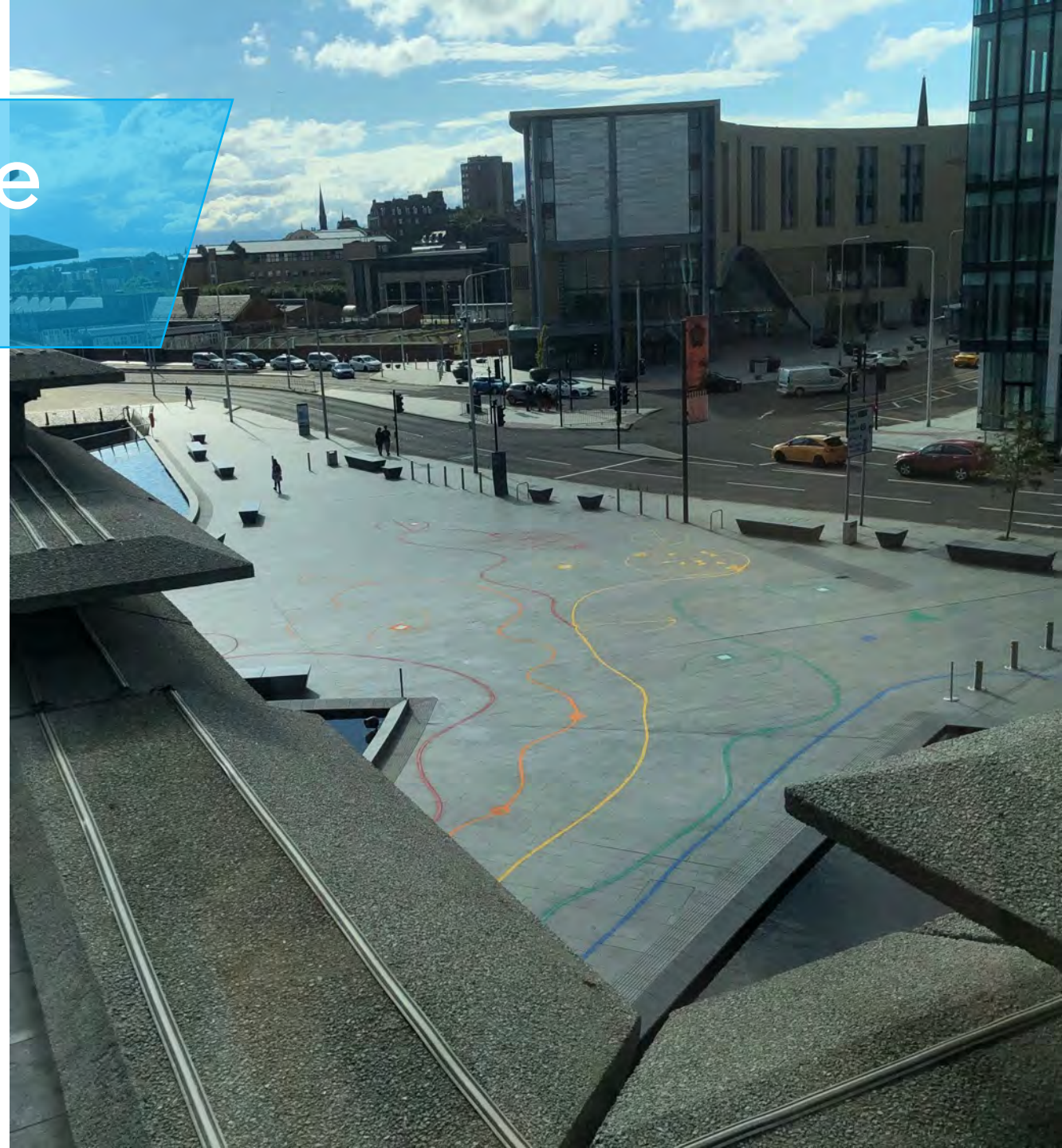
The Playful Chalkscape

External Links

#oneplaything website:
http://oneplaything.co.uk/index.html

Video walkthrough of installation:
https://youtu.be/IvG5F_yCCoo

Press:
V&A Dundee Press Release:
https://www.vam.ac.uk/dundee/info/socially-distanced-playscape-comes-to-va-dundee/
Dundee Courier Article: https://bit.ly/2NK0m0q
Evening Telegraph Article: https://bit.ly/3sbEcD9
Tay FM Article: https://bit.ly/3blZ5Vm
Herald Article: https://bit.ly/3bqyDdl



Tales of Monstrous InTent (2018)

Videogame Installation, showcased internationally (2018 – 2020)

Tales of Monstrous InTent

Mona Bozdog, Lynn Love, Danny Parker & Alex Pass

Tales of Monstrous InTent (ToMI) is a three-player co-operative video game played inside a tent installation. Players literally watch each other's back by looking for the shadow of a monster which is projected on the tent behind their co-players. Players must direct their co-players to move, duck or stay still to avoid the monster in order to make it to the end of the game and survive the night.

The game uses three projectors to animate the monster that haunts the players, three Wii balance boards which players sit upon as input devices and a thematic installation which aims to evoke childhood memories of camping in the woods.

The game was created by Mona Bozdog (worldbuilding), Lynn Love (animation and design), Danny Parker (programming and design) and Alex Pass (worldbuilding and design).

Tales of Monstrous InTent

Research Questions & Methodology

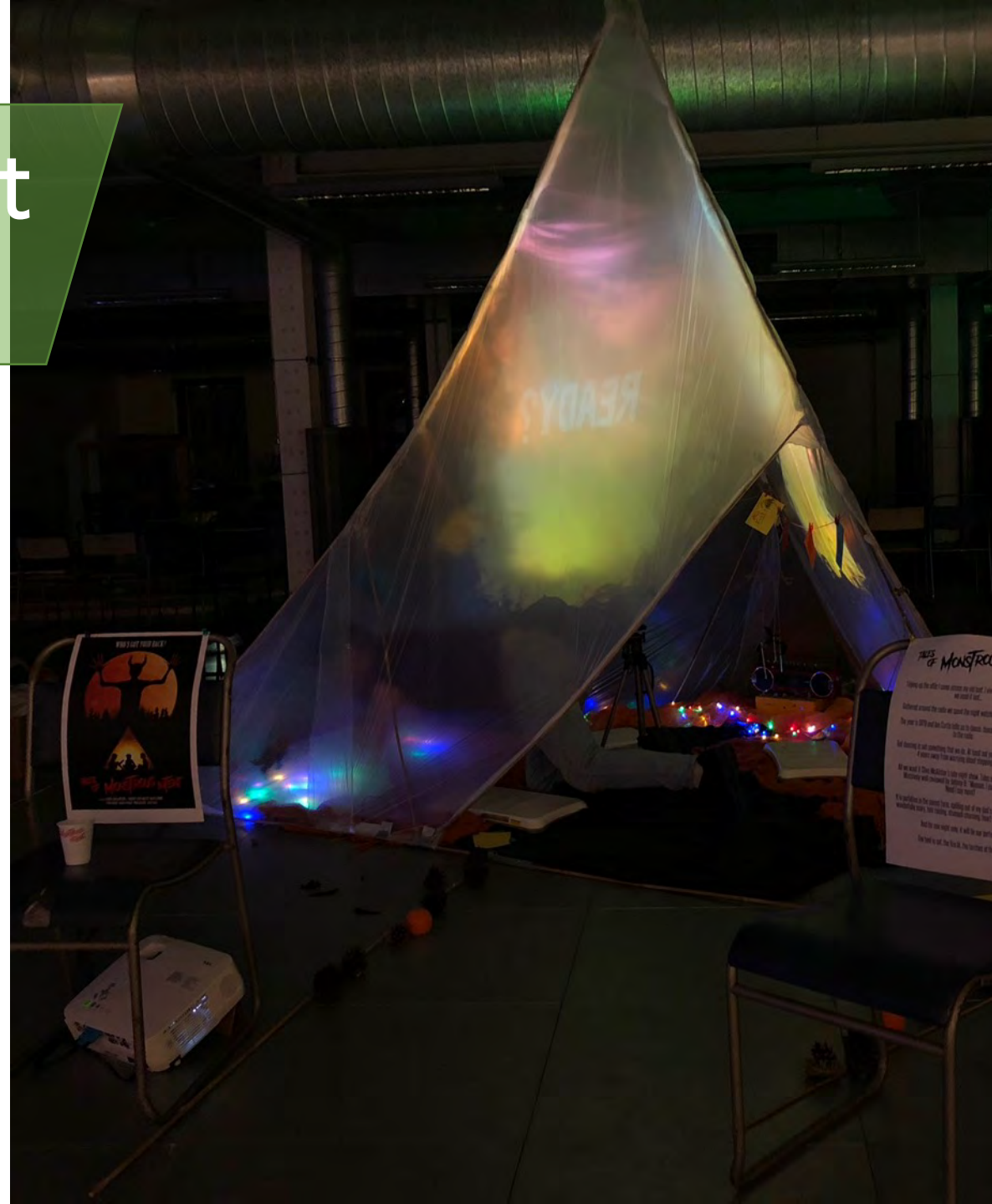
Research Questions

ToMI sought to address the following research questions:

- What impact does interdependence have upon player experience?
- How can interdependent multiplayer gameplay be harnessed in a social play experience?
- How can digital gameplay and physical space connect to create narrative world around a play experience?
- How can intimacy shape a multiplayer game play experience?

Methodology

The game was developed using iterative game development practices, examining user experience and game feel in the digital prototype and narrative world building in the physical setting. User testing was planned for early 2020 but has not been possible due to the Covid19 pandemic.



Tales of Monstrous InTent

Design Process

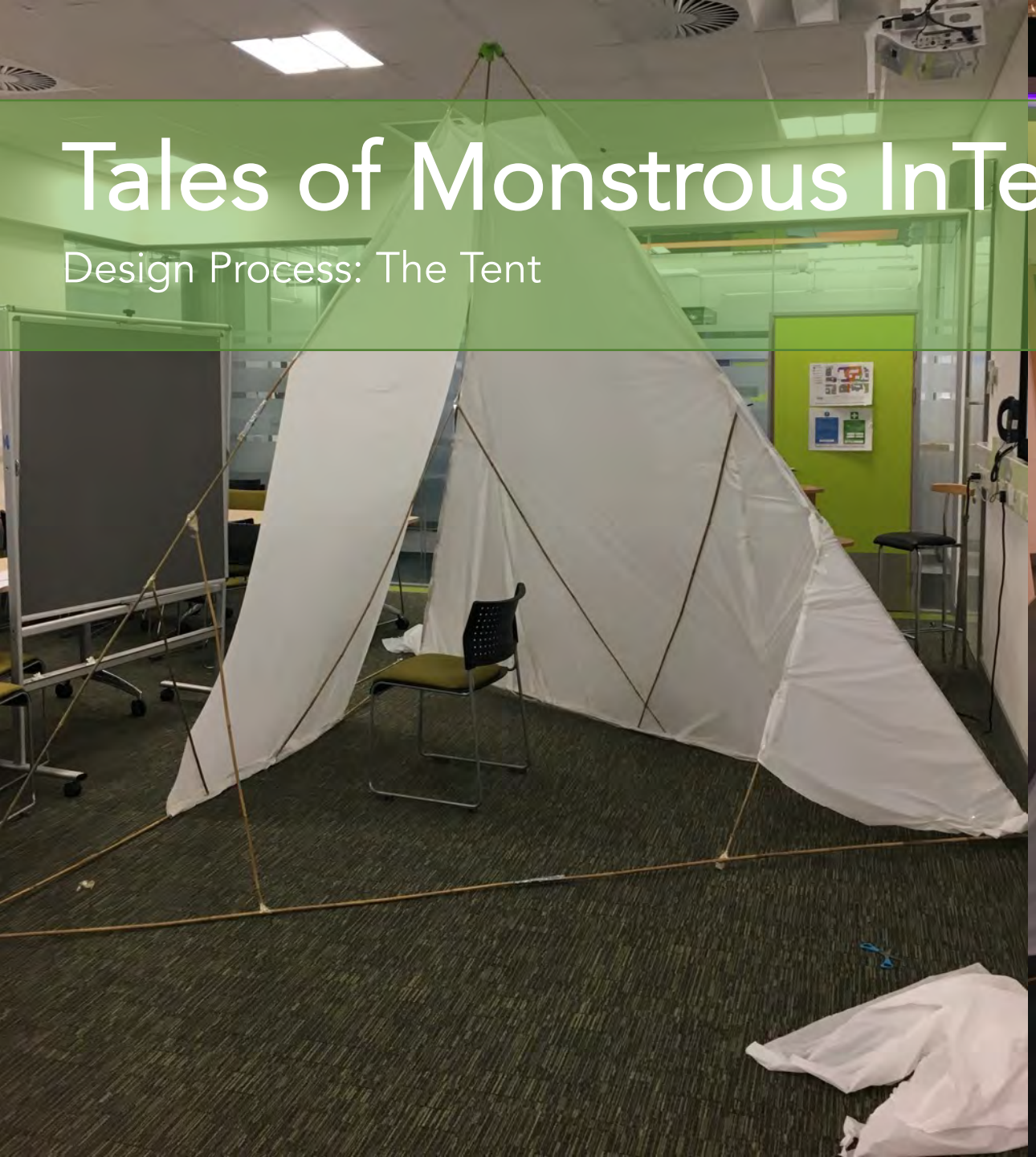
ToMI was developed during Global Game Jam in 2018 in reaction to the theme “transmission.” ToMI developed from a throwaway ideation suggestion by Love of making a game inside a tent. This provided rich ground for narrative exploration and inspired an 1980s theme of children camping in the woods telling ghost stories.

The team had previously used Wii Balance boards (ODLV) and thus examined the potential for these to be used as inputs when players sat upon them. Initial tests suggested that subtle shifts in weight to the left, right and front could be read by the boards, and thus these, with the addition of remaining completely still became the core gameplay mechanics for the game.

Whilst the digital game elements were being coded, design, production and animation of a 3D model for the monster in the woods was undertaken and implemented in game. The team also tested projection on a range of surfaces prior to constructing a simple tent that three people could sit within.

Tales of Monstrous InTent

Design Process: The Tent



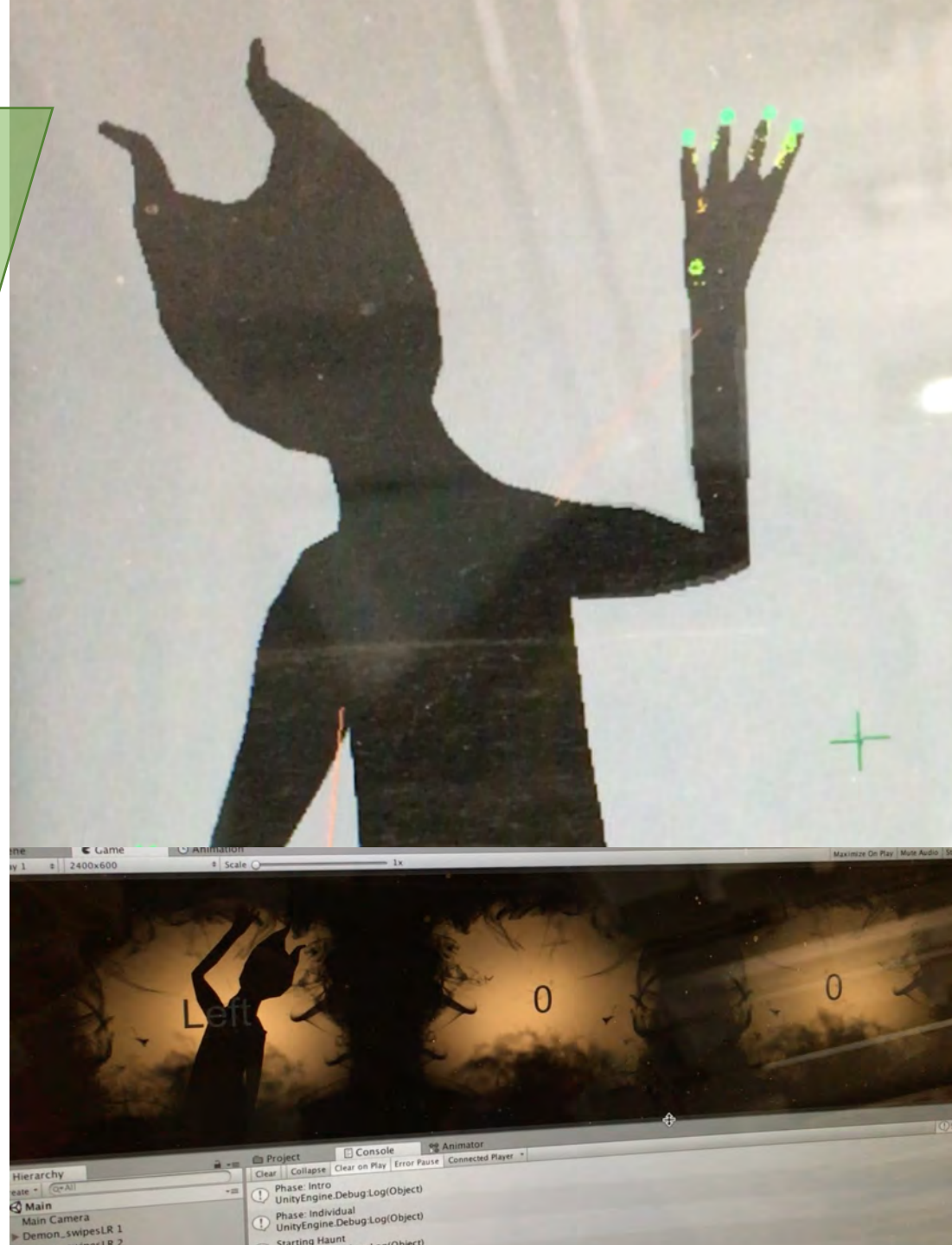
Tales of Monstrous InTent

Design Process: Animating the Monster

The monster was created with a clear and threatening silhouette to help players to read its presence and predict the actions that they need to perform to evade the monster. The monster was given swipe animations (both left and right), a grab animation (to motivate players to duck) and a ”searching” animation (to motivate players to stay still). For each animation, the monster enters the screen, performs the action and then retreats in order to make their actions unpredictable and to increase threat.

When implemented in-game, the animations proved to be too slow after each attack and thus were edited to have a longer build-up before the attack and a short outro.

Further environmental effects were added to the game, including swirling smoke at the edge of the screen (to add atmosphere and also soften the edge of the projection on the tent sides) and an eerie glow.



Tales of Monstrous InTent

Design Process: User Experience

During testing by the development team, the animations proved to be tricky to interpret and thus text was added to direct player action “dodge left”, “dodge right”, “duck”, and “don’t move”. “Phew!” text was also added to feedback that players had successfully completed the action. Feedback was also added for when players were not successful in avoiding the monster: a hit noise plays and the screen becomes pink. Each time the players are unsuccessful, the screen turns more and more red until a “game over” message is presented.

The team also developed an audio play (written by Bozdog) as a narrative introduction and tutorial for the game. The audio play is presented as a radio programme with an eerie radio host telling a ghost story of three children, who, when camping in the woods one night, encounter a scary monster. The audio play cuts out to static just as the game begins.

To enhance this narrative hook, the static noise was added anytime the monster is about to attack the players in game. This links gameplay to the narrative setting whilst also signposting threat for the players.

Tales of Monstrous InTent

Design Process: Balancing

The gameplay was developed through testing with the development team and players at the Global Game Jam. The game has three distinct phases:

- Tutorial Phase: The monster appears on only one screen at a time to allow players to learn how the game works and how to work together to evade the monster
- Flow Phase: The monster can appear on one or two screens at a time, but appears at regular (predictable) intervals so players must be more vigilant and also very clear in directing their instructions at specific co-players
- Challenge phase: The monster can appear on all three screens at the same time and appears within unpredictable windows of time. This phase is shorter and ramps up difficulty as players near the end of the game.

The game lasts 5 minutes and if players manage to evade the monster with 1 life still intact, the sky (projection) will turn blue and bird song begins to play as they receive feedback that they have “survived the night.”

Tales of Monstrous InTent

Design Process: Worldbuilding

The 1980s setting of the game inspired the addition of props and set-dressing to create a story world to draw the players into the tone of gameplay.

Natural elements including pine cones and leaves were mixed with wind chimes, action figures, recreation of children's drawings, role playing books and a 1980s stereo to draw players into the world of the game.

The installation developed iteratively, with (amongst other things) children's bikes, discarded shoes, fairy lights, carboard trees and bushes being added to create a woodland setting in larger installation spaces.

Tales of Monstrous InTent

Analysis: Interdependent Play

Early Observations of gameplay suggest that:

Players are working to a common goal and each play two roles (1) evading the monster by following instructions from their co-players and (2) helping their co-players to evade the monster by providing instructions. Semi-spectatorship is a core game mechanic where players are always in one of these two roles (Love & Bozdog, 2018).

Players utilise pointing, shouting and directional gestures to help their co-players to evade the monster. The more familiar that players are with one another, the greater the scale of exaggeration in how they communicate with one another physically.

Tales of Monstrous InTent

Analysis: Communication and Setting

Early Observations of gameplay suggest that:

Players can sometimes struggle with left and right directions, especially when directing players across from them, hence the supportive instructional text has remained in the game rather than just being for initial testing.

“I don’t know the difference between left and right, so it was a challenge…I kind of like that when we were screaming left and right we were like, “Who?!” we were all shouting and hitting each other to try to work it out”

- Player Feedback

Tales of Monstrous InTent

Analysis: Balancing

Early Observations of gameplay suggest that:

The gameplay difficulty is quite high and many players do not succeed in making it to the end of the game.

“I was kind of surprised because I didn’t realise I thought it was going to be one person at a time that had to be instructed but when you had multiple people at the same time and it ups the intensity of it so you really have to work together.”

- Player Feedback

Players were also not clear on how many lives they had so they could not anticipate how at risk they were of the game ending. The red feedback on screen helped them to interpret damage but not how close to a game over state they were.

Tales of Monstrous InTent

Analysis: Communication and Setting

Early Observations of gameplay suggest that:

The setting is broadly appealing to players.

“The atmosphere was probably the most engaging part, being in the big tee pee, the little pictures and the little models.”

- Player Feedback

The narrative setting adds to the eeriness of the game. Some children who attended the Halloween event at the V&A were scared by the installation and monster.

The V&A public showcase allowed the game to reach audiences who are not familiar with videogames that are presented unconventionally and evoked interesting conversations around the purpose of the setting.

Tales of Monstrous InTent

Player Feedback

Early Observations of gameplay suggest that:

The game is quite intuitive to learn and promotes bonds between players.

“I like that although we had no idea what was going on, we taught each other the game naturally, without instructing each other, just socially, we all figured out the rules. It went from being “ooh what’s going on” to being super fun really quickly…we began to be a team really quickly. There was lots to look at, lots of hidden things, toys…that was awesome, it’s a nice installation.”

“I like that the rules aren’t explained to you, they are just on the screen and that you have to react to them”

Tales of Monstrous InTent

Player Feedback

Early Observations of gameplay suggest that:

The game promotes bonds between players through intensity of game play and intimacy of plays pace.

“Its quite interesting because, you’re pretty much involved. So you have players actually interacting and talking with one another and building social interactions even though they might not know each other, there is a lot of potential where they actually talk to one another and bond…I went in with two people who didn’t know each other…after a round or two we actually became friends.”

“I probably wasn’t that scared, but it was certainly intense and I really wanted to work together to win. I loved all the kind of nostalgic trinkets all around that set the scene…and it was nice to be in a wee immersive space.”

Tales of Monstrous InTent

Social Play Setting Observations

The game was submitted for consideration at several national exhibitions of experimental video games but was not successful feedback suggesting that this was due to the large scale of the installation.

The tent draws intrigue in a social play setting and benefits from spectacle strategies in inviting players to participate. The game can be observed from the outside, but is intimate due to the three players being housed in the tent together, making a very private play experience. The tent also helps to buffer environmental noise, allowing the narrative introduction and player communication to work well in a busy play space.

“Fantastic fun, liked all the set dressing, that was good, much like a piece of interactive theatre, like Punchdrunk-y quality to it”

-Player feedback

Tales of Monstrous InTent

Showcase & Awards

Showcase
International Game Developer's Association Dundee Play Party, Vision Building Dundee 20 February 2018 Press Play
Tay Late at V&A Dundee, 18th May 2019
V&A Family Design Day, V&A Dundee 19th October 2019
BBC Click Live, V&A Dundee, 19th November 2019

ToMI won the audience choice award at the International Game Developers Association Dundee Play Party in January 2018.

Invited Presentations
RES|FEST Courtauld Institute, 29th November 2019, V&A Dundee
Space Invaders, Pint of Science, 22nd May 2019, Clarks, Dundee

Tales of Monstrous InTent

External Links

Game Trailer link: https://bit.ly/3bXVD3v

360-Degree video of gameplay:
https://bit.ly/3075ajc

Game website:
https://bit.ly/2MPVwP6

Video of Arcadia narrative installation:
https://bit.ly/3c0nZtP

Link to Social Play Invited Presentation at RES|FEST hosted by Courtauld Institute at V&A Dundee
https://www.youtube.com/watch?v=AHQy8ikbh9M

Islands (2019)

Analogue social game, showcased internationally (2019)

Islands (2019)

Lynn Love & Jim Thompson

Islands is part game, part conversation, part visualisation of the web of interconnections between strangers. The game asks players to find things in common with other players privileging obscurity in those commonalities as a central game mechanic. Through conversation, play and reflection the game examines the friendships and boundaries we create within our societies.

Research Questions

- In what way can commonalities between players be used as a gameplay mechanic?
- Can exploration of commonalities in play help to promote social interaction and connectedness?
- How can the magic circle of play be captured and exposed for others?

Islands (2019)

Gameplay

To play islands:

- a game master sets a topic or theme for a group of players (e.g. what is your favourite toast topping).
- Players are given chalk and must create ‘islands’ where everyone with a common answer collect together and draw their island on the ground, noting their commonality and number.
- Once everyone has found an island, the game master draws a circle around all of the islands
- Outside this circle, the game master introduces a new theme and challenges everyone to find commonalities across the player cohort. They can enter the new space and draw a new island when they have found someone that shares their answer to the theme.
- The themes become more challenging as the game continues. It plays until time runs out or interest wanes.

Islands (2019)

Gameplay

Islands (2019)

Design Process

Islands was developed over a series of video calls which explored an interest in using things we have in common with one another as a game mechanic.

Chalk was introduced as a way to document commonalities during play, (driven by work with chalk in other creative research projects) thus leading to the development of a game which documented itself as it was played.

The focus on exploring commonalities was driven by an interest in promoting social interaction and helping people to get to know one another. The game was pitched as an ice breaker activity for the Counterplay festival and thus commonalities seemed like an ideal way to break down social barriers and facilitate interaction.

Islands (2019)

Player Observations

The first few rounds presented some unease as players got the hang of the rules and found ways to broaden their answers to be more inclusive.

Conversations flowed well from the second theme and once the rules were known people relaxed into getting to know one another. At times, to move the game on to the next set of islands, the game masters had to intervene and break up conversations which seemed counter-intuitive to the purpose of the play.

Some players took each new theme as an opportunity to meet new people and have different conversations, meaning that they switched groups often and had high “social coverage” getting to know the majority of the group.

Islands (2019)

Player Observations

Other players seemed to meet people early in the play that they clicked with and thus they continued through each island together, finding more that they had in common.

The introduction of one theme inspired a mini ceilidh (Scottish folk-dance) with 4-5 players dancing a jig together to celebrate their shared love of traditional dance before they created their island dedicated to the ceilidh.

Drawings also became more prevalent as the themes went on, as people started to illustrate and decorate their islands together.

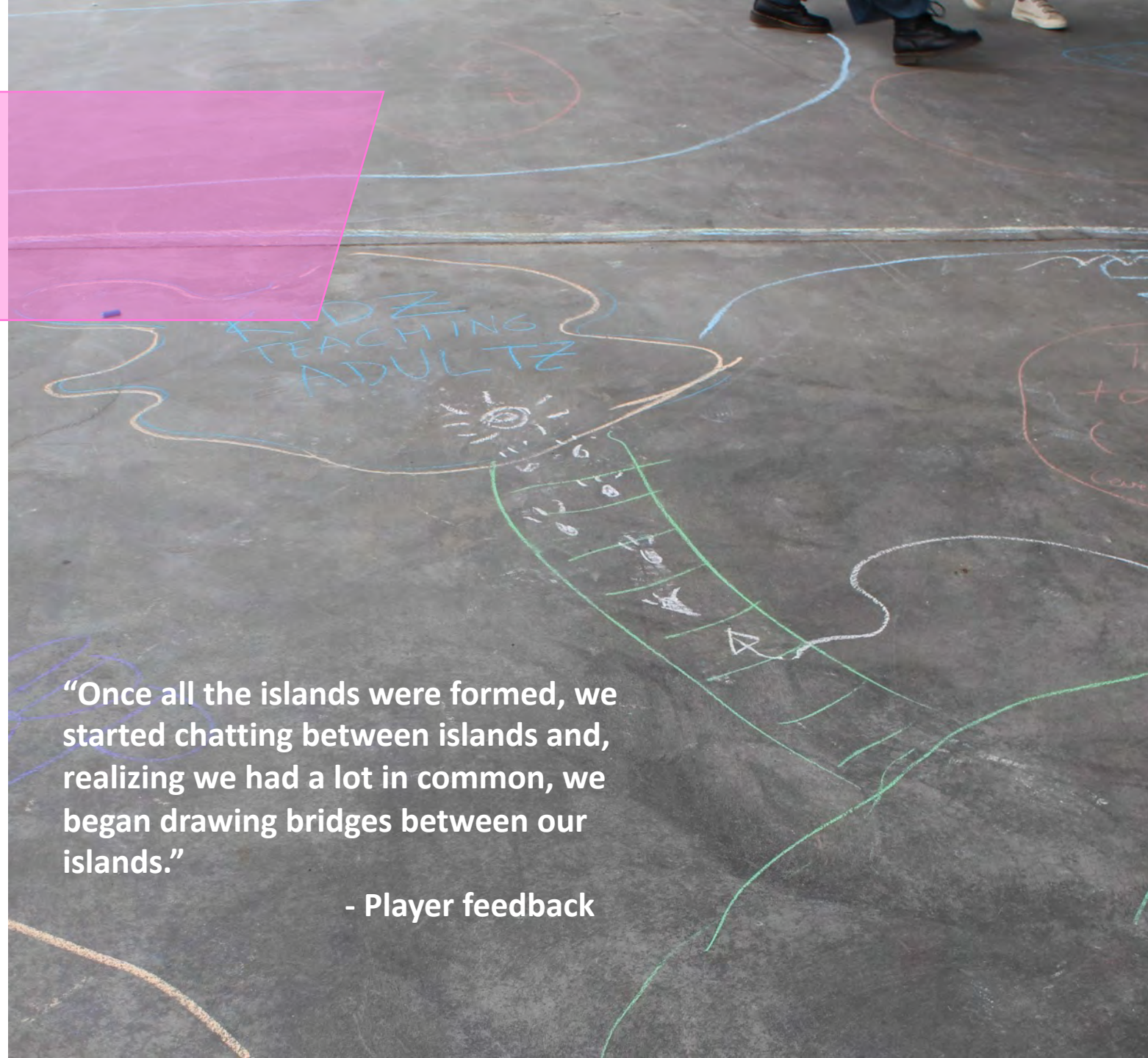
Islands (2019)

Observations

The final theme was “how can play change the world”

Several different islands were created including giving children the ability to teach adults, “make school more playful” and “public play interventions for adults.”

As play wound down, players started to review each other's answers and found common themes across the different islands, so they began to build bridges, rope bridges and swings to connect the different islands making a community of islands from the individual groups.



“Once all the islands were formed, we started chatting between islands and, realizing we had a lot in common, we began drawing bridges between our islands.”

- Player feedback

Islands (2019)

Player Feedback

“That session was one of my favourites. I had fun, which was very much needed to reassure me (remember, I still felt like this whole thing could be a waste of my time). It challenged my assumptions about the festival, and got me thinking that maybe the best sessions weren't the "workshoppy" or "lecturey” ones”

- Participant feedback

Based on feedback and demand from participants at Counterplay 2019, the game was made publicly available as a ruleset and posted on social media for people to use as ice breakers in their own work.

Thompson has gone on to use this game in other contexts including in two online ice breaker sessions at the University of Central Lancashire. No other participants to the workshop have reported using the game to date.

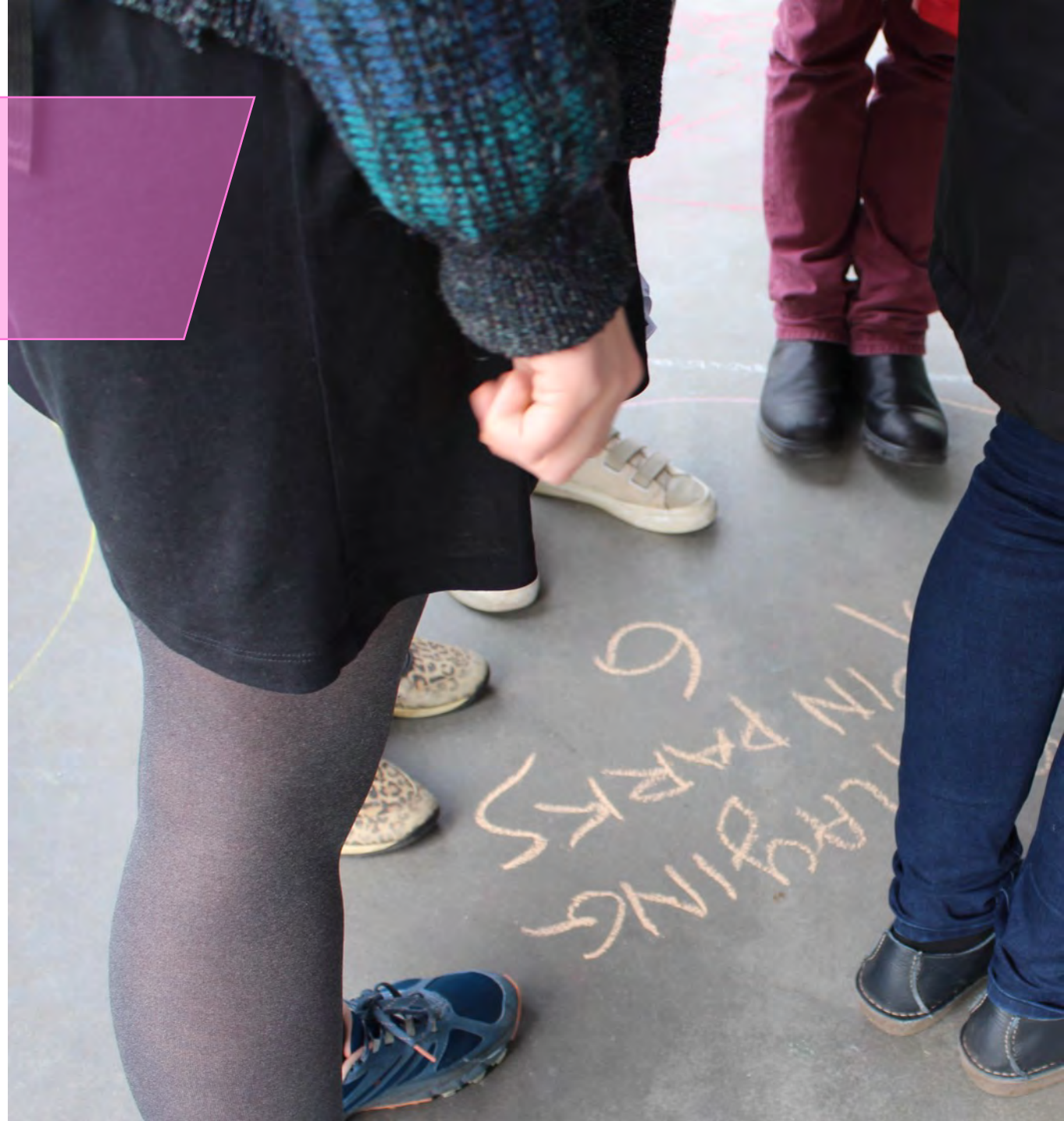
Islands (2019)

Impact and External Links

Islands was accepted to Counterplay 2019 and was delivered to a group of approximately 40 players in Aarhus, Denmark.

The chalk web left behind by the game remained on site for 4 days after its initial play and was augmented by other players over the course of this time. These players added drawings and notes to the web.

Link to the public rule set:
https://bit.ly/3aOfy5O



Overeactor (2020)

Videogame Installation, showcased nationally (2020)

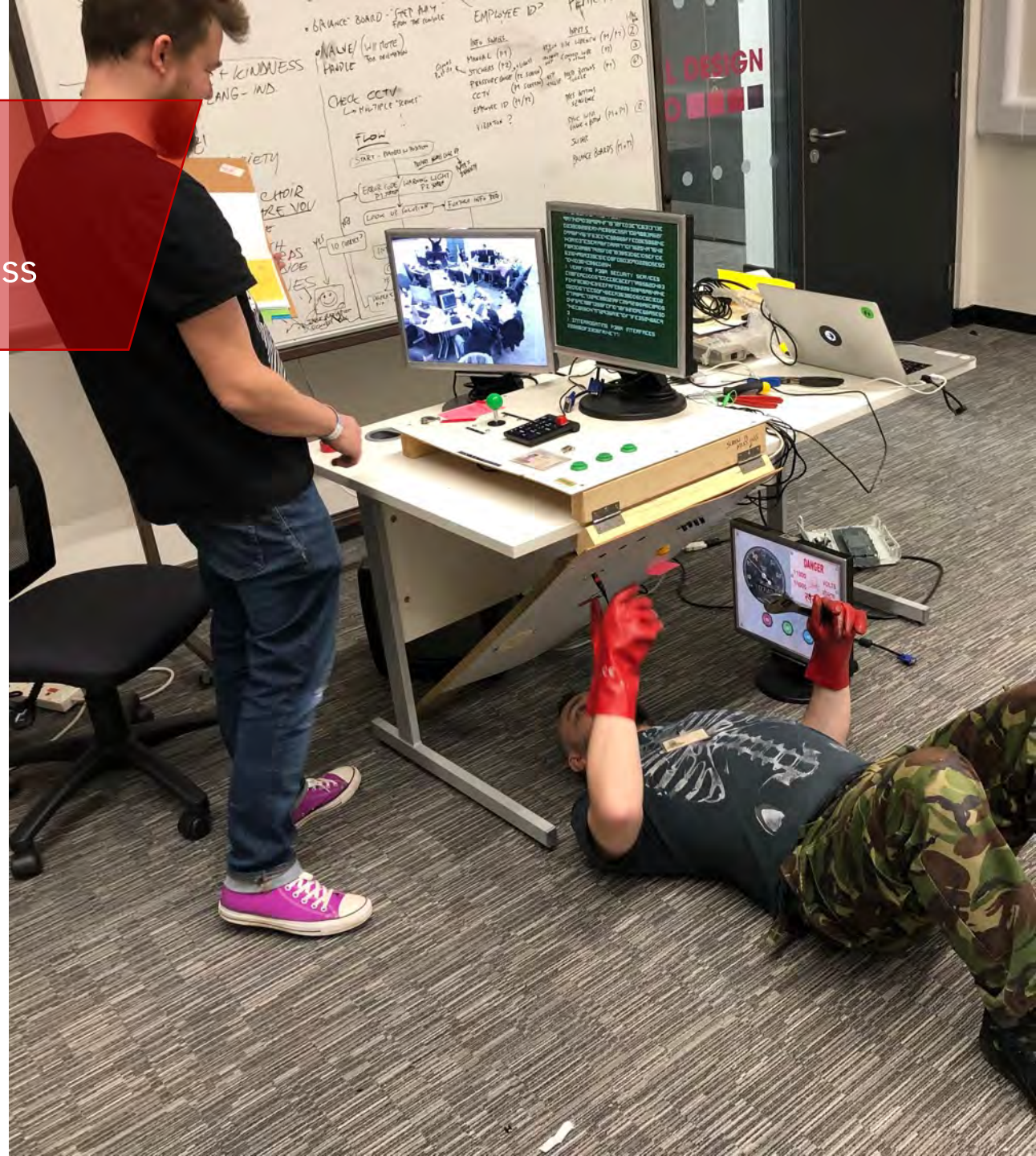
Overeactor (2020)

Mona Bozdog, Lynn Love, Danny Parker & Alex Pass

Overeactor is a two-player asymmetric video game which asks players to work together to solve problems with a nuclear reactor.

It is made up of a custom controller which is a desk-based console where one player stands at the desk and another lies beneath. The controller has a series of input devices including toggle buttons, joystick, number pad, plugs and a wrench. The game uses three screens and a series of paper-based guides and narrative props.

Play lasts up to 10 minutes and will end sooner if players cannot solve the errors presented by the computer quickly enough.



Overeactor (2020)

Research Questions

Overeactor was created during Global Game Jam 2020 in response to the theme “repair.” The game was developed by Mona Bozdog (narrative design), Lynn Love (game design), Daniel Parker (programming) and Alex Pass (design and controller construction). The game seeks to explore the use of asymmetric social play to create connections through play.

The research questions tackled by this project are:

- How can asymmetric interdependent gameplay motivate social interaction?
- How can workload distribution shape player interaction in an asymmetric video game?
- In what ways can a controller become a narrative gameplay device?

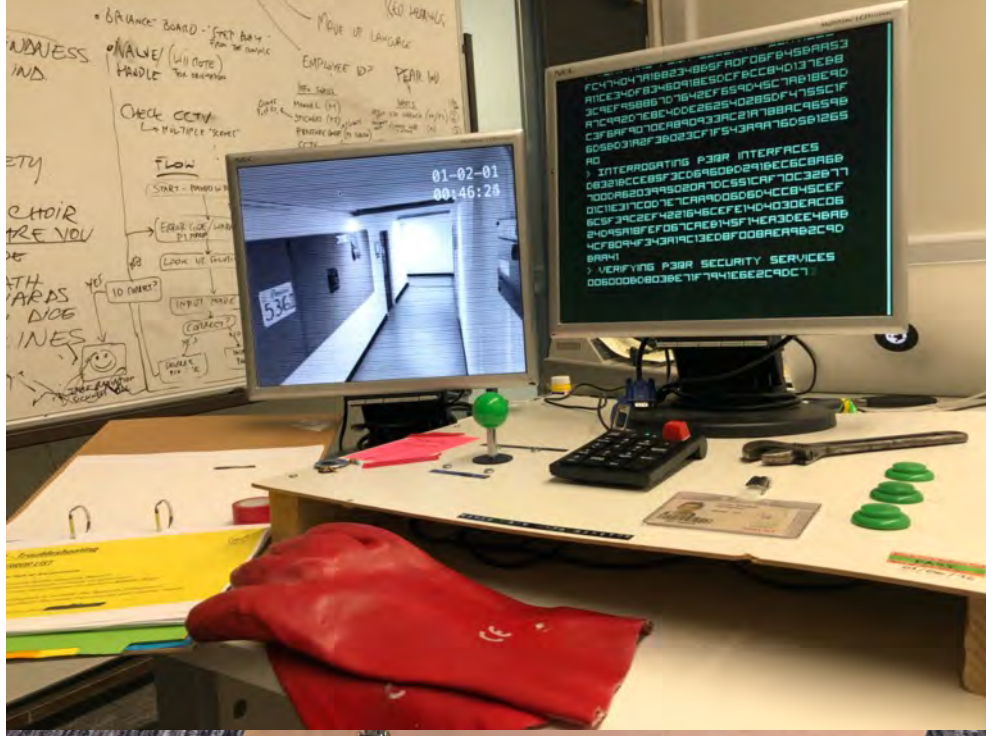
Overeactor (2020)

Gameplay

The game is made up of digital and physical elements, all of which hold the answers to fixing each error presented to the players.

The technician player stands at the console and is fed error numbers by the computer screen, they must work with the engineer player, who lies beneath the console with access to its wiring to solve the error number.

Players have clues which help to answer the error issues including a user manual (for the technician), a CCTV camera, a pressure dial, series of warning lights and notes scattered across the console and wiring. The solution to each error number involves inputting a value on the number pad. Upon solving an error, the system will present a new error code for the players to solve.

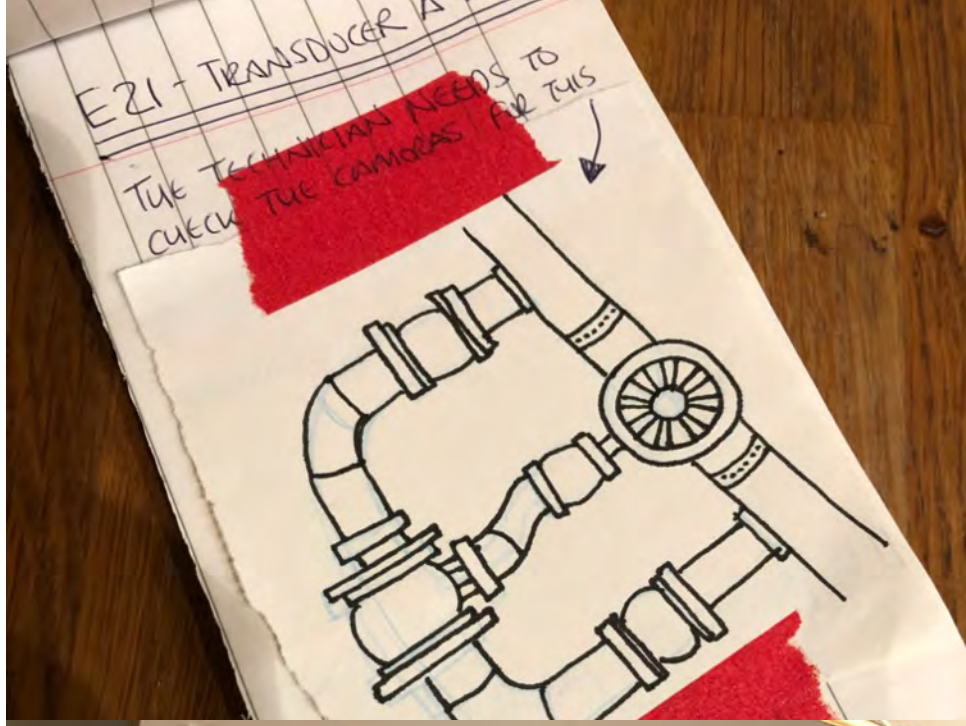


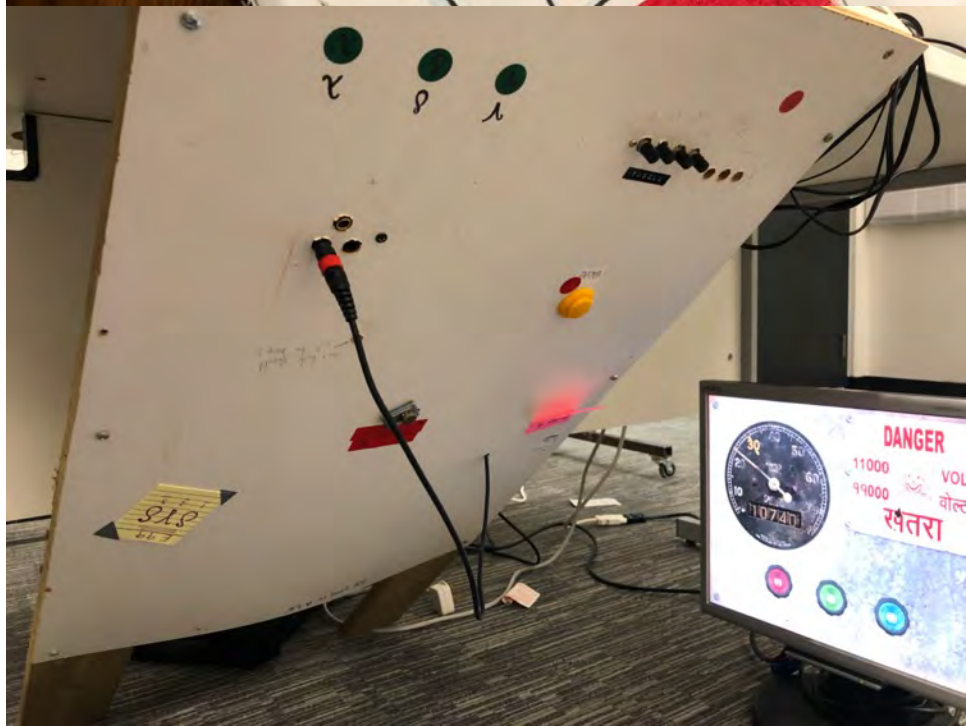
Overeactor (2020)

Social Play Design Concepts

The game aims to promote social play by:
1. Creating interdependent play – each error code requires both players to review the gameplay materials in front of them (both physical and digital) to solve the issue
2. Tapping into spectacle strategies through player placement to draw intrigue and spectatorship
3. Drawing the players into the game setting through narrative strategies to create a shared experience for discussion. These strategies include: allocating the players roles with name tags, providing costumes, adding narrative elements into the console to encourage discussion between players and rewarding players with a "radiation tablet" to celebrate their successes.

"Loved the glasses, badge, hard hat and binder, really helps to get in character" - Player Feedback



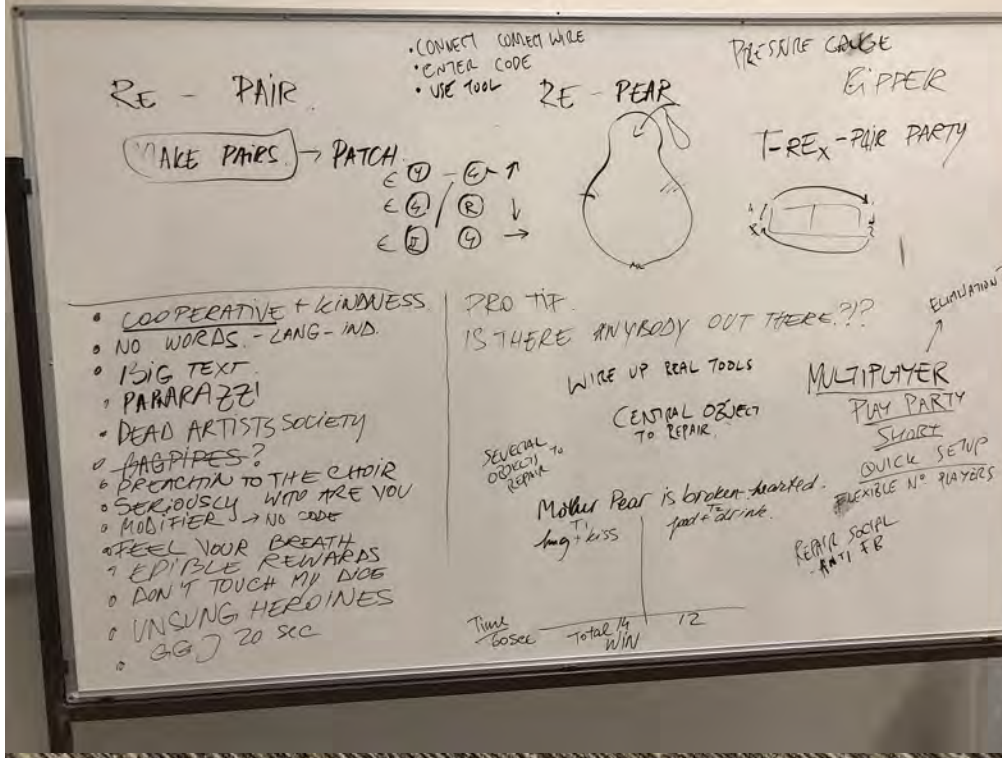


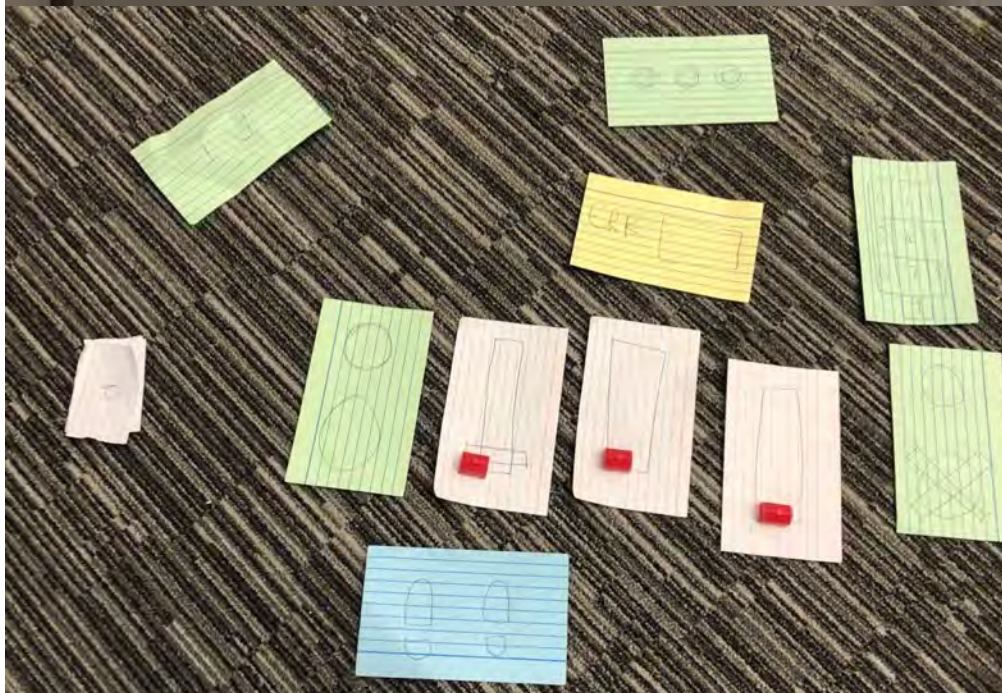
Overeactor (2020)

Design Process: Prototyping

The design of asymmetric gameplay required iterative design and testing in order to balance the workload and challenge evenly between two players. It was necessary to ensure that one play wasn't always asking questions of the other, but rather they were both equipped with their own specialist knowledge that contributed equally to a partnership to complete the game.

Initial mechanics and game loop was explored on paper prior to the creation of a paper prototype. The prototype was tested by the team and iterated to ensure there were enough challenges, diverse engagement with the planned console inputs and to assess the workload and power hierarchy between the two players. When a load between players which promoted on-going interaction and balance of workload was found, programming of the system could begin.





Overeactor (2020)

Design Process: Inputs and Console

Construction of the console, the input device for the game, was undertaken on completion of successful paper prototype playthroughs. A series of different inputs were sought to provide variety and challenge. Keypads, push buttons, cable input and removal, and a wrench controller were produced to complement paper material.

The game makes use of three monitors – two for the technician: one to see error codes and to feedback whether their inputs were successful or not in fixing the error and another for browsing the CCTV cameras of an imaginary facility to see if issues can be found which may solve error codes presented by the main computer.

The engineer has a digital screen which showcases a pressure gauge and three error lights which provide valuable information for addressing error codes.

Overeactor (2020)

Design Process: Asset Production

All art assets were made from edited photographs as the team chose to engage with the Global Game Jam diversifier which set this as a constraint. The game has a CCTV screen that players can control. These images were still photographs taken on-site at Abertay University, working with participants in the game jam and using home made props and costumes.

UI assets were created by editing images of lights, pressure valves and metal textures to create an industrial interface for below the console, whilst a text-based UI was created for above the console, inspired by MS DOS.

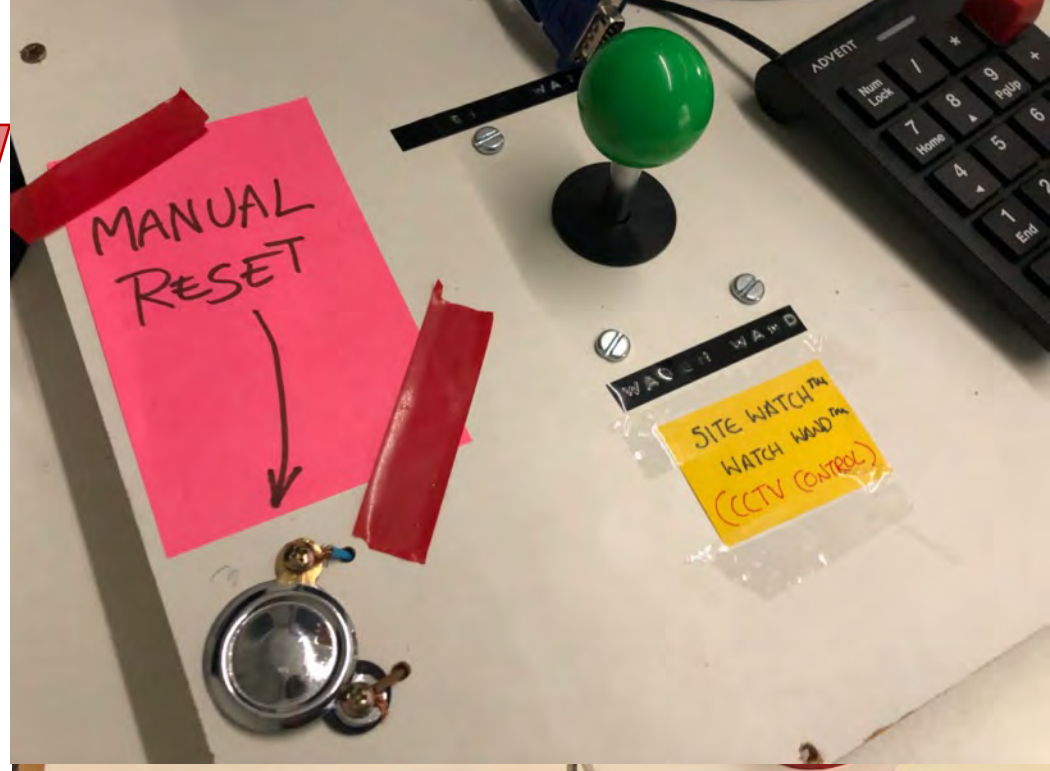
Overeactor (2020)

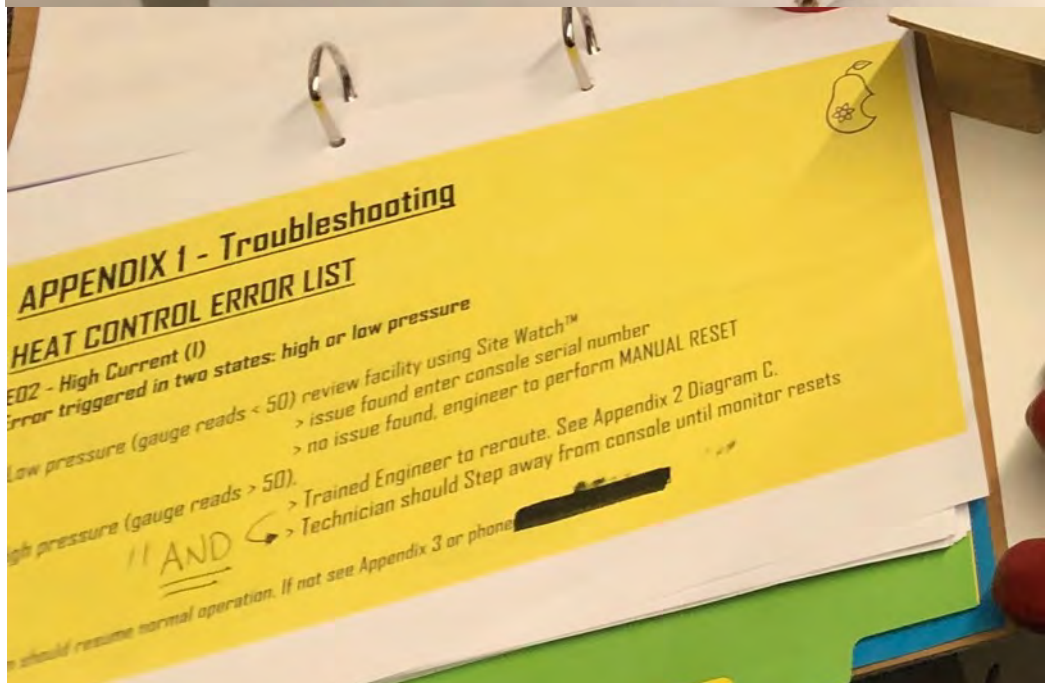
Embedded Narrative Design

Across the console and paper content for the game, a number of augmentations were made in order to enhance storytelling and a sense of the story world.

The paper handbook was created digitally and augmented physically by tearing, folding and scoring out information to suggest it was aged and incorrect in places. The paperwork was inspired by poorly translated handbooks which often come with cheap digital technology and white goods manuals.

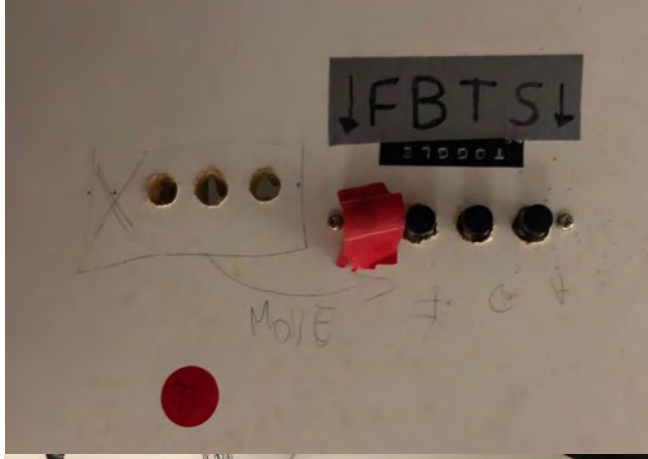
Post-it notes were taped to the console with handwritten messages which override instructions in the handbook. These aim to suggest that the people working with the system have devised hacks to make the system work. The placement of these notes are balanced between the engineer and technician to encourage discussion between the two players and enhance social play.

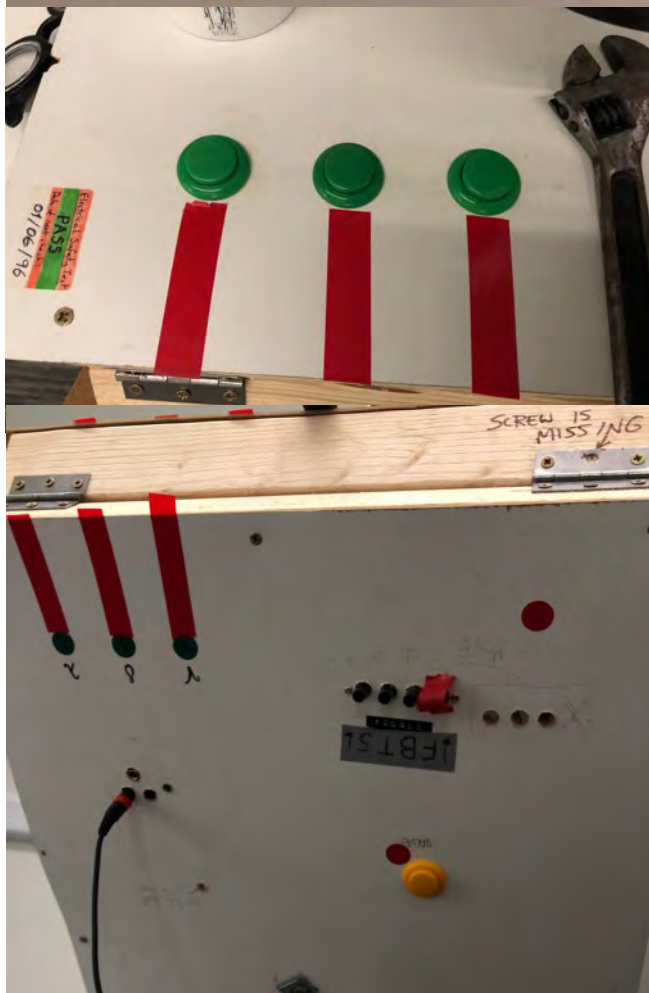




Overeactor (2020)

Embedded Narrative Design



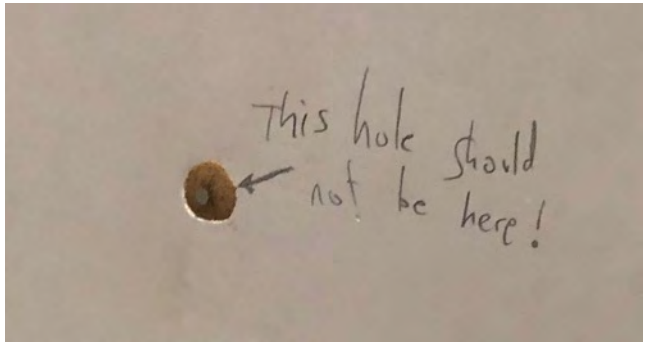


There are also some notes on the console which do not relate to gameplay but are instead to suggest narrative elements about the quality of the console. Such elements include mis-drilled holes, taped over broken buttons, missing screws and scrubbed out contact information.

Narratively appropriate signposting is also used to help players make connections between the top and underside of the console. For example, red electrical tape links unmarked buttons on the top of the console to signposting underneath the console. The signposting underneath allows the engineer to tell the technician above, which button to press in order to solve a particular error code.

“loved the style, co-operation and ‘physical’ style of it”

- Player Feedback



Overeactor (2020)

Embedded Narrative Design

Each player is given a name tag and costume elements before playing to embed them into the narrative. Upon completion, players are also invited to consume an anti-radiation table (a candy) to round off the experience. These aspects aim to promote post-play discussion between players who have shared a play experience together. Novelty but also through providing elements of narrative/story world intrigue are two key devices which aim to motivate post-play discussions.

Overeactor (2020)

Showcase and Player Reception

Overeactor was created in January 2020 but due to the Covid19 pandemic has had limited opportunity for showcase.

To date it has been showcased at the Scottish Game Developer's Association Play Party in Dundee, February 19th to an audience of 60 attendees.

Players were invited to complete feedback forms after playing Overeactor. They were asked to detail their role in the game and their experience. 12 players responded. Further testing and iteration is planned.

Initial player feedback suggests that the game is not suited to a loud social play environment because it relies upon verbal communication and it is hard to hear each other in such spaces.

Overeactor (2020)

Player Reception

Player feedback also suggest that:

- The game needs to more clearly signpost time pressure to add to threat and raise the stakes
- The engineer player position can be uncomfortable for extended periods on the arms and neck
- Some of the error codes lack clarity and signposting on the console could be clearer (using pen rather than pencil for example).

“absolutely amazing, wish I had had the time to play as both roles, multiple times to see all of the different scenarios”

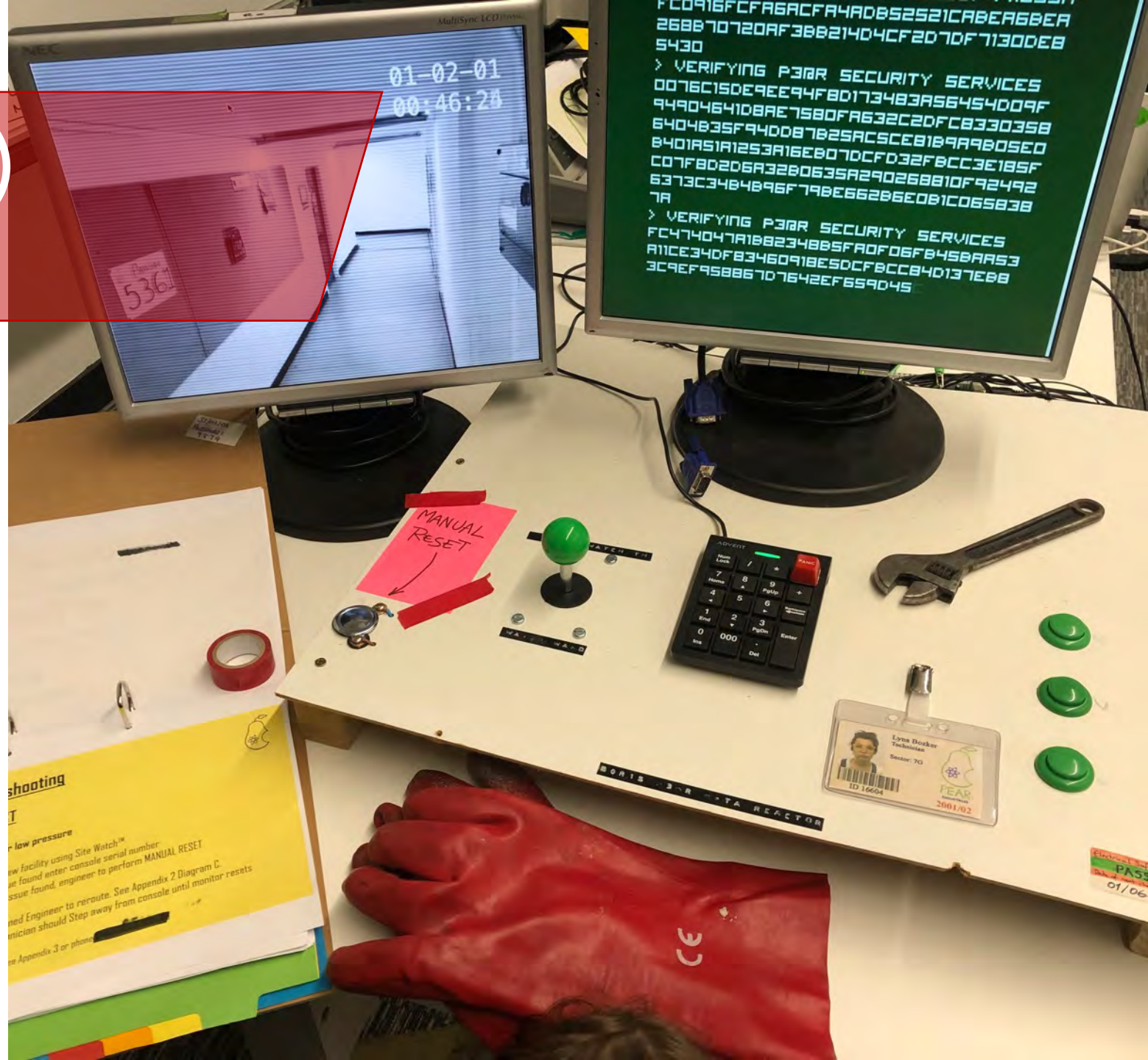
- Player Feedback

Overeactor (2020)

External Links

Gameplay video:
https://vimeo.com/388875540

Overeactor on Global Game Jam website:
https://globalgamejam.org/2020/games/overeactor-7



House on Fire (2019)

Videogame Installation, showcased nationally (2019)

House on Fire (2019)

Mona Bozdog, Lynn Love, Danny Parker & Alex Pass

House on Fire is a screenless video game where players must listen to audio clues, via a telephone, to interpret and solve issues within a game board made up of a Duplo house.

The game makes use of a wrist band, connected to a Makey Makey, hidden within the house. Within the house, objects and people have tinfoil “buttons” which players must touch and hold in order to solve puzzles. Touching these buttons, when wearing the wrist band completes a circuit, allowing the game to read player action through the Makey Makey.

The game was created for Global Game Jam in 2019 by Mona Bozdog (narrative), Lynn Love (Design), Danny Parker (programming) and Alex Pass (design and controller construction).

House on Fire (2019)

Mona Bozdog, Lynn Love, Danny Parker & Alex Pass

The game has a mobile phone which rings during gameplay. When answered, the player hears audio from one of the people who live in the house and must decipher the clues in this audio to work out what the player should press and hold in the house to fix the problem. When the problem is fixed, the phone rings again to let the player know that they can let go of the button.

The player can have multiple issues to solve at once and thus needs to be able to stretch their fingers (or recruit a friend and thus extend their reach) in order to complete all of the puzzles.

Game play lasts a set time (this can be changed to suit the showcase setting but varies between 2 – 4 minutes) and the player receives a final call providing them feedback on their performance, rating it as good, satisfactory or poor, in a contextually appropriate manner.

House on Fire (2019)

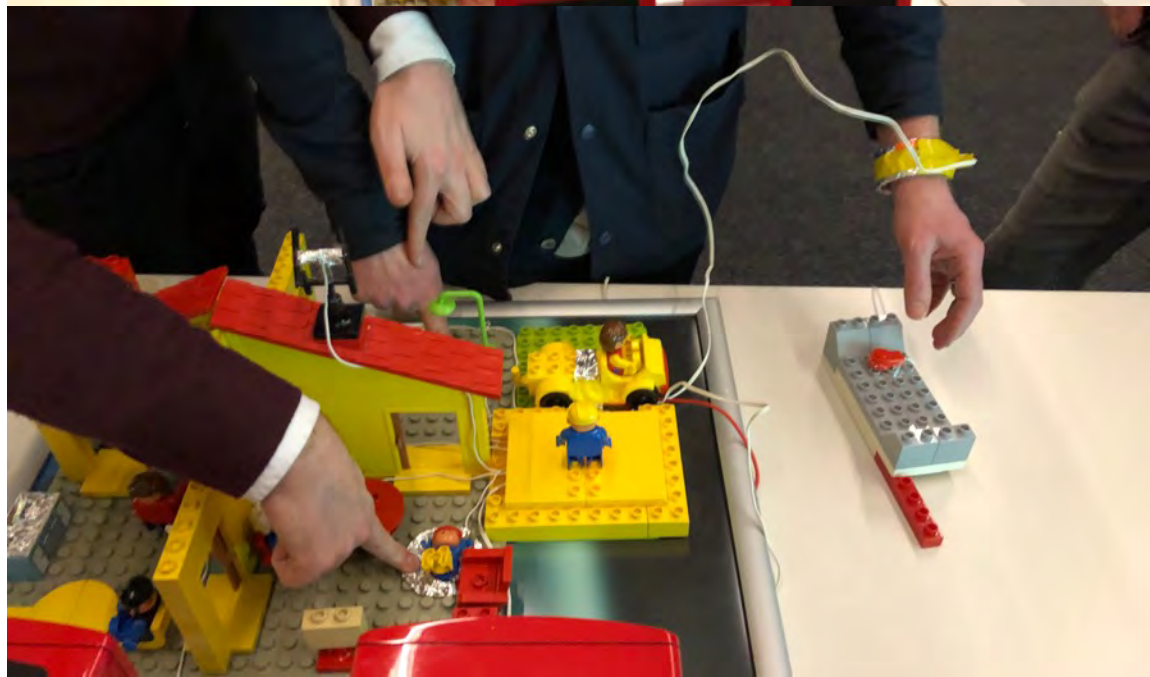
Research Questions & Methodology

House on Fire explores the following research questions:

- What is the social play potential of a screenless videogame?
- In what ways can a physical controller motivate collaborative play between players?

The interest in screenless play was motivated by observations of play and player attention during social play in ODLV and ToMI previously.

The game was developed over 48 hours using rapid prototyping techniques. The game has since been developed to enhance the on-boarding of players through a tutorial, based upon anecdotal player feedback and observations of play.



House on Fire (2019)

Development Process

The game uses the house as the basis of a narrative where the player is a householder who has to balance all of the demands of a family and household which can be seen to be “on fire.”

The game was created in response to the theme “What home means to you?” and was inspired by the physicality of the Duplo House and the designer’s own experiences of balancing the demands of a busy household, work and life.

The house was constructed to create four indoor living spaces: kitchen, front room, bedroom and bathroom. A car was placed outside, hiding the housing for the Makey Makey and wiring. The placement of objects and characters across the five key play spaces determined the potential narrative hooks for puzzles and also considered ”finger reach” – how far the player could stretch between objects.

House on Fire (2019)

Development Process

Key play objects were placed out with comfortable finger reach in order to create difficulty and promote co-operation/collaboration with other players.

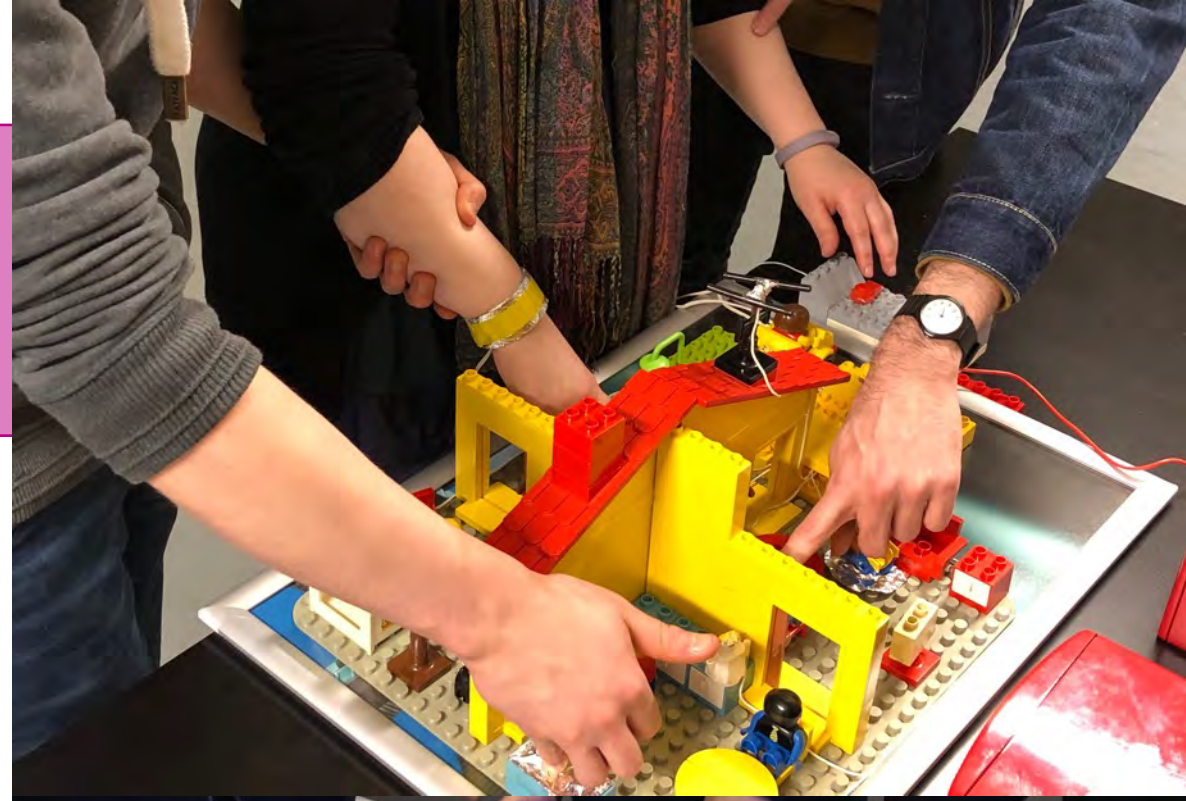
When the key objects were decided, wiring was undertaken by Pass, whilst Parker created an underlying code system to deliver puzzles to the player, track puzzles and read inputs from the Makey Makey. Bozdog and Love developed scripts for 7 puzzles and 3 distraction calls. These were recorded by recruiting participants in the jam to play characters in the game. The audio was implemented by Parker before a range of iterative testing was undertaken to ensure that puzzles could be clearly interpreted, the number of puzzles occurring at one time presented a manageable challenge and that the game flowed. A tutorial and end game state were added to enhance usability and player reward after the first round of testing.

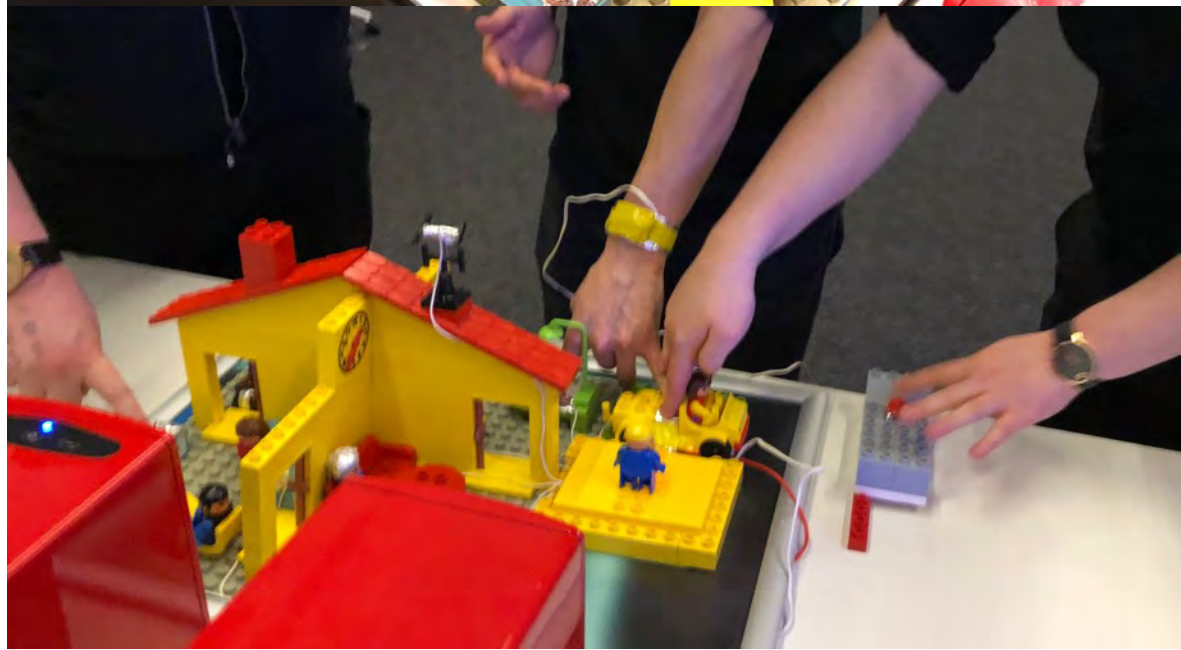
House on Fire (2019)

Social Play Observations

Observations of players at showcases of House on Fire suggest:

- On the first play, players do not realise the game can be played by more than one person. Returning players or players who are prompted realise that the game relies upon a circuit which they can extend.
- The game is fun to watch and observers are willing to jump in and help players once they understand that they are able to participate (thus the concept of semi-spectator (Love and Bozdog, 2018) applies to this work).
- Rather than a screen, players' attention is directed towards the mobile phone and resulting puzzles. Familiarisation with the game board is necessary to ensure players are able to decipher puzzles. The game board and phone replace the screen and become the focus of player attention.



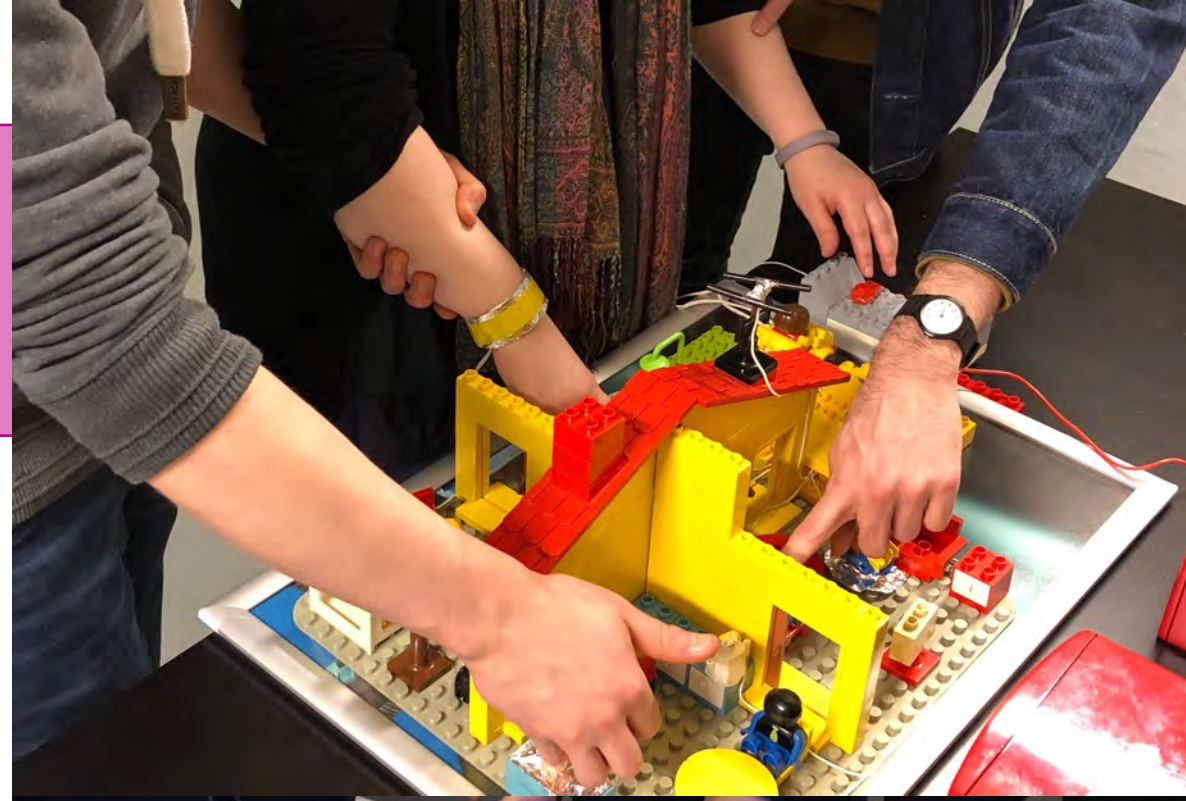


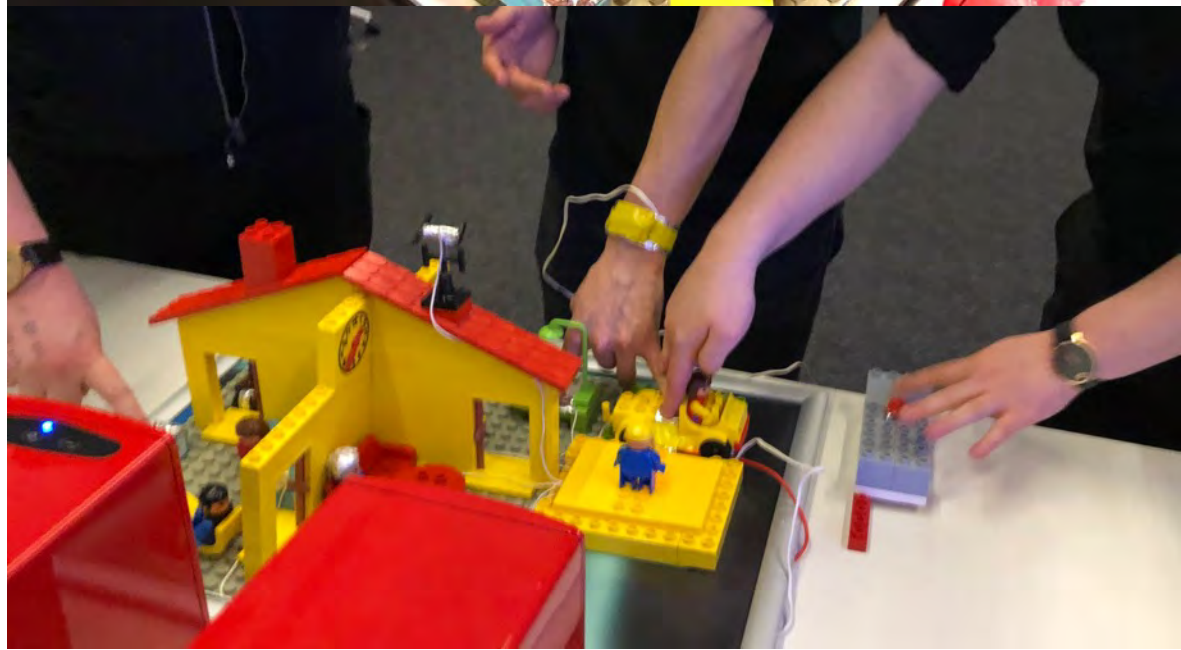
House on Fire (2019)

Social Play Observations

Observations of players at showcases of House on Fire suggest:

- The sound from the game does not come out of the phone, yet players still hold this to their ear during play. This adds to game difficulty by taking up a hand, as does the need to press the pick-up and hang up button to interact with the phone.
- The reliance on audio makes the game difficult to follow in a loud social play space without headphones. Headphones affect the haptic connection to interacting with the phone, an important contextual aspect of the game.
- The novelty of the alternative controller makes the game appealing and stand out in a social play space. The ringing of the mobile phone also draws attention, but this is both a positive and a negative for people in the space.





House on Fire (2019)

Showcases & Invited Presentations

Showcases

- International Game Developers Association Dundee Game Jam Play Party, Vision Building, Dundee, 21st February 2019.
- Guru Live: Play Party, The Lighthouse, Glasgow, 30th March 2019.
- Young People's Design Day: Videogames, V&A Dundee, 22nd June 2019.

Awards

Audience Choice Award, International Game Developer's Association Dundee Game Jam Play Party.

Invited Presentations

Space Invaders, Pint of Science, Clarks, Dundee, 22nd May 2019.

House on Fire (2019)

External Links

House on Fire on Global Game Jam Site:
https://globalgamejam.org/2019/games/house-fire

Gameplay Video:
https://bit.ly/3bb90hF

Phoenix Down (2014)

Videogame Installation, showcased nationally (2014 - 2018)

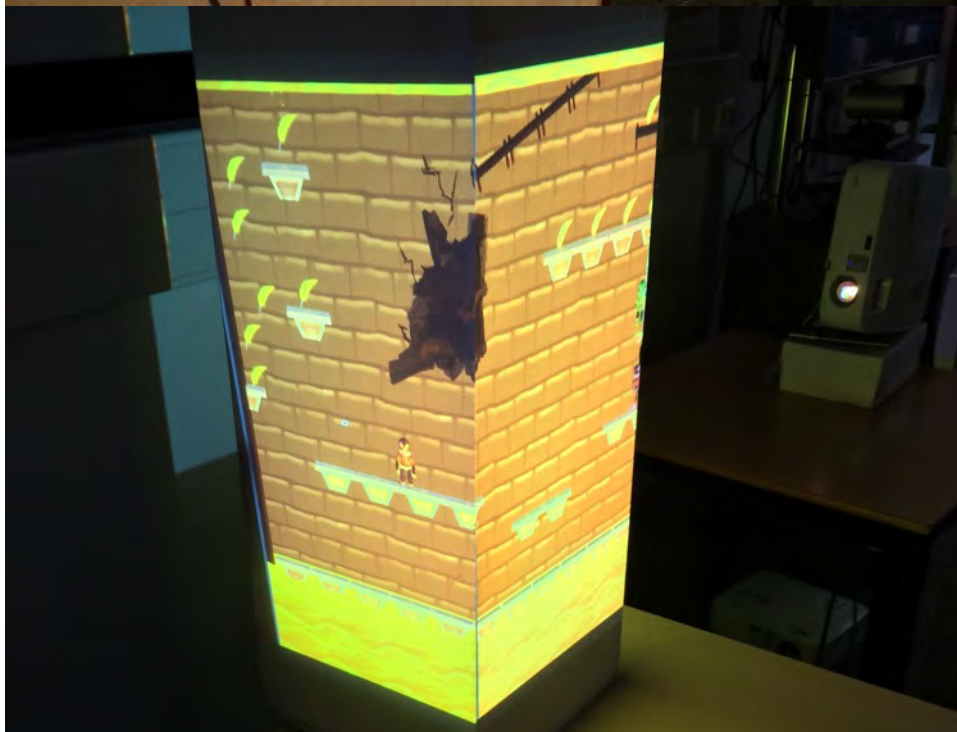
Phoenix Down (2014)

Michael Doig, Lynn Love, Danny Parker & Will Wright

Phoenix Down is a three-player video game that makes use of projection onto a podium, creating a “three-sided” game where players must move in real world space in order to be able to see and help their digital characters to navigate the virtual space of the three-sided tower.

The game uses three projectors, placed around a podium to create three sides of a digital tower. Players use Wii-Mote controllers to control their characters.

The game was created at the 12-hour Jump Jam as part of the Development Cultures Project hosted by Abertay University. The game was made by Michael Doig (art), Lynn Love (technological concept design and art), Danny Parker (programming) and Will Wright (level design).



Phoenix Down (2014)

Research Questions & Methodology

Phoenix Down addresses the following research questions:

- How can games be designed to make use of three-dimensional gameplay, including the screen and real-world spaces?
- What effect does real-world play space as a game mechanic have on the sociability of play?

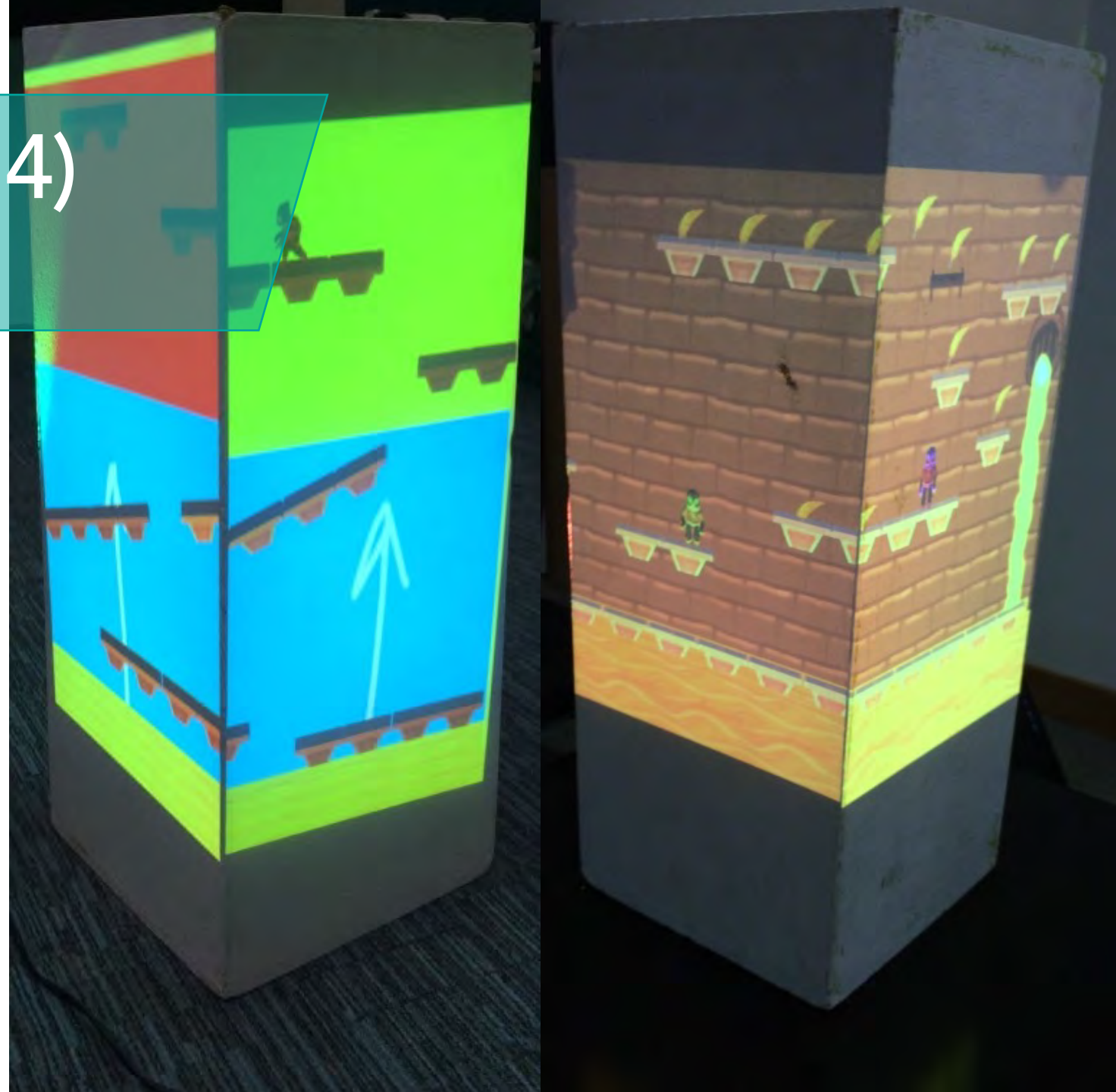
The game was produced using industry standard iterative development practices. Since the initial jam it has been further iterated upon by Love and Parker (with permission from Doig and Wright) based upon observations of players interacting with the game. Focus on development aimed to develop gameplay to make the most of the three-sided technology, enhance polish and provide greater user feedback through UI.

Phoenix Down (2014)

Development Process

The game was developed in 12 hours across two days. The initial concept was inspired by a device that allowed the extension of a screen across three monitors or projectors. In ideation, Love suggested the concept of creating a multi-sided game which ignited development of Phoenix Down where players would compete to climb a tower.

A proof-of-concept was created at first, using placeholder art to navigate the manipulation of the one-screen Unity scene to the three-screen projection set-up and to prove that platforming on three sides was a fun proposition for players.



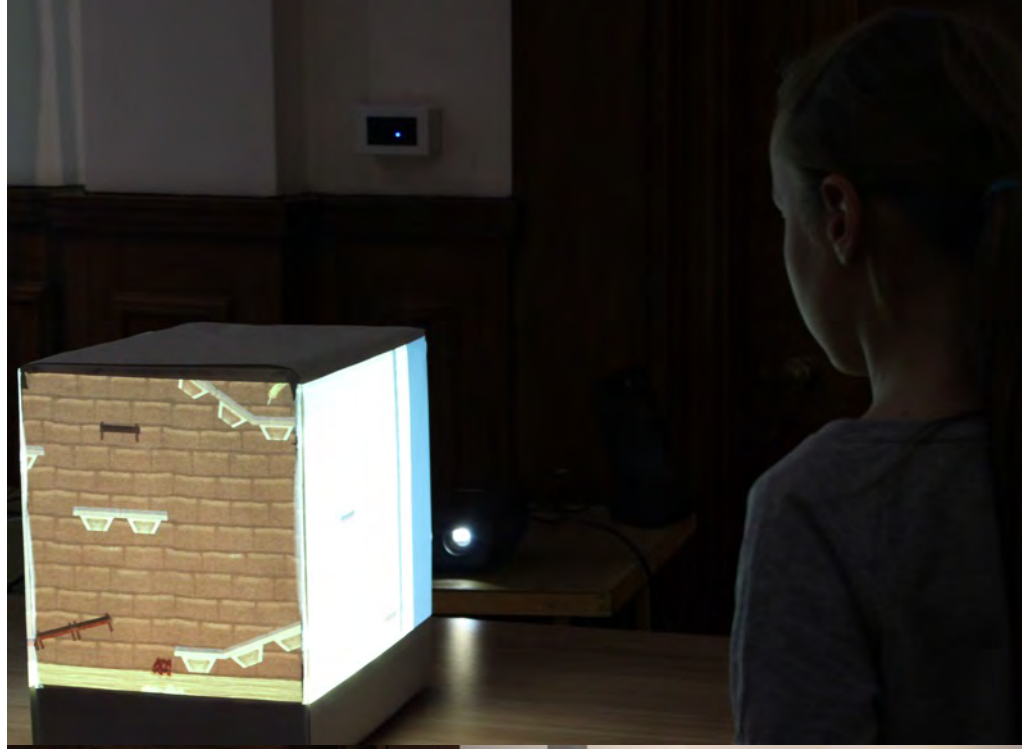
Phoenix Down (2014)

Development Process

Upon confirmation that the concept would work, production began. Coding focused upon implementation of player systems, platforming mechanics, a dynamic camera system and user feedback

Art production drew from an art style that was already in development by Doig for another project. Art production focused upon creating platforms, a tile set for the world, UI and player animations.

Game design focused on creating a level which required players to use all three sides of the game in order to climb up to the top of the tower. It also explored mechanics for managing players being left behind, inspired by Micro Machines (1991). If left behind, players would respawn at the “bottom” of the screen. The bottom would be dynamic, always in relation to the position of the other two players ensuring that all three players remained on the same screen throughout play.



Phoenix Down (2014)

Gameplay Observations

Observation of players suggests that the game design does encourage use of three-dimensional space both on screen and in the real world. These two aspects are inherently linked in Phoenix Down as to navigate the tower, the gameplay requires players to reposition themselves in the real-world.

Players require good spatial awareness to play the game and the competitive nature of the game (there is one winner) creates a different kind of gameplay than the other games within this portfolio with every player focusing on winning and hence their own performance most of the time.

The need for three players to move in real-world space showcases interpersonal dynamics with players who are more familiar (and of a similar status level) tending to physically block and tussle with one another (see image to the right), whilst others (e.g. families with young children and parents/grandparents) or groups made up of strangers tend to be more restrained.

Phoenix Down (2014)

Showcase & Impact

Public Showcases

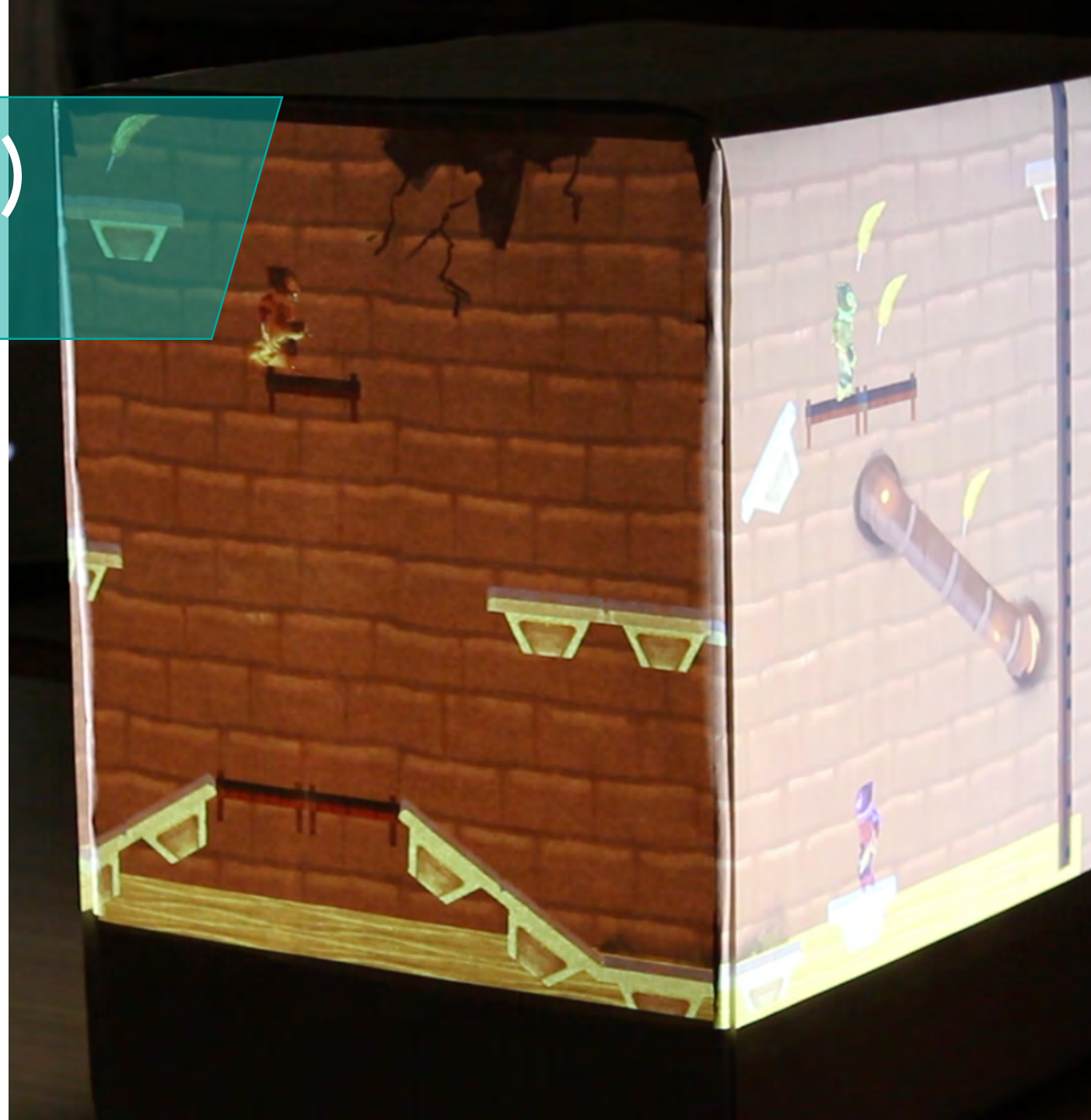
Development Cultures Jump Jam Play Party, Abertay University, July 2014. (60 attendees).

AHRC, Abertay University and V&A Event: Videogames in the Museum: Spawn, Hannah Maclure Centre, Dundee, UK 8th August, 2014 (40 attendees).

Game Jam 2 Perth Museum Game Jam 2. 20th May 2017. Perth Museum,. Perth. (60 Attendees).

Impact

The technological concept of playing a game on a solid structure around 3-4 sides is currently being developed in partnership with InGAME, Dundee City Council and Sculptor Lee Simmons to be part of a million-pound digital play park at Dundee's Waterfront which will open in Summer 2021.



Phoenix Down (2014)

External Links

Gameplay video:
https://bit.ly/3870TAN

Development Cultures Academic Papers:
(please note, L. Love has also previously published under L Parker)

- Parker, L & Galloway, D 2017, 'Creative communities: shaping process through performance and play', *Transactions of the Digital Games Research Association*, vol. 3, no. 2, 3, pp. 57-87. http://todigra.org/index.php/todigra/article/view/69
- Locke, R, Parker, L, Galloway, D & Sloan, RJS 2015, The game jam movement: disruption, performance and artwork. in *Proceedings of the 2015 Workshop on Game Jams, Hackathons and Game Creation Events.* 2015 Workshop on Game Jams, Hackathons and Game Creation Events (Co-located with FDG-2015), Pacific Grove, United States, 22/06/15 http://ggj.s3.amazonaws.com/GJ2015_submission_5.pdf

Quandary (2015)

Videogame Installation

Quandary (2015)

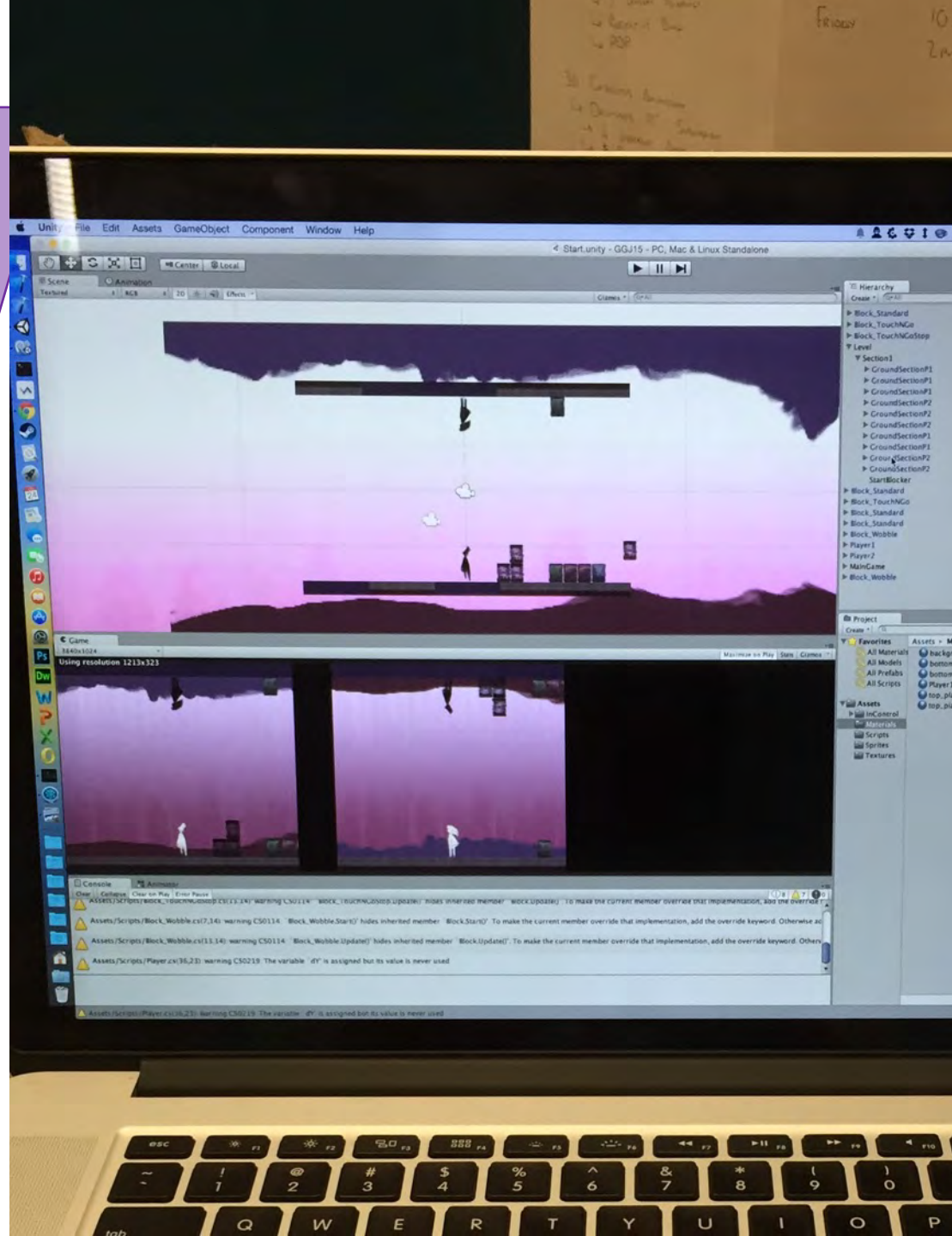
Laurie Bell, Lynn Love, & Danny Parker

Quandary: A game of two halves, is a two-player platform video game where players' actions can help or hinder their co-players in their progress through a barren landscape. The game explores the use of player perspective and co-dependent competitive gameplay in a co-located social play space.

Quandary was created by Laurie Bell (audio), Lynn Love (art and design) and Danny Parker (coding and Design) using Unity.

The research questions were:

- How can viewpoints alter player interpretation of gameplay and meaning?
- How can players interdependent gameplay shape player behavior in a competitive gameplay setting?



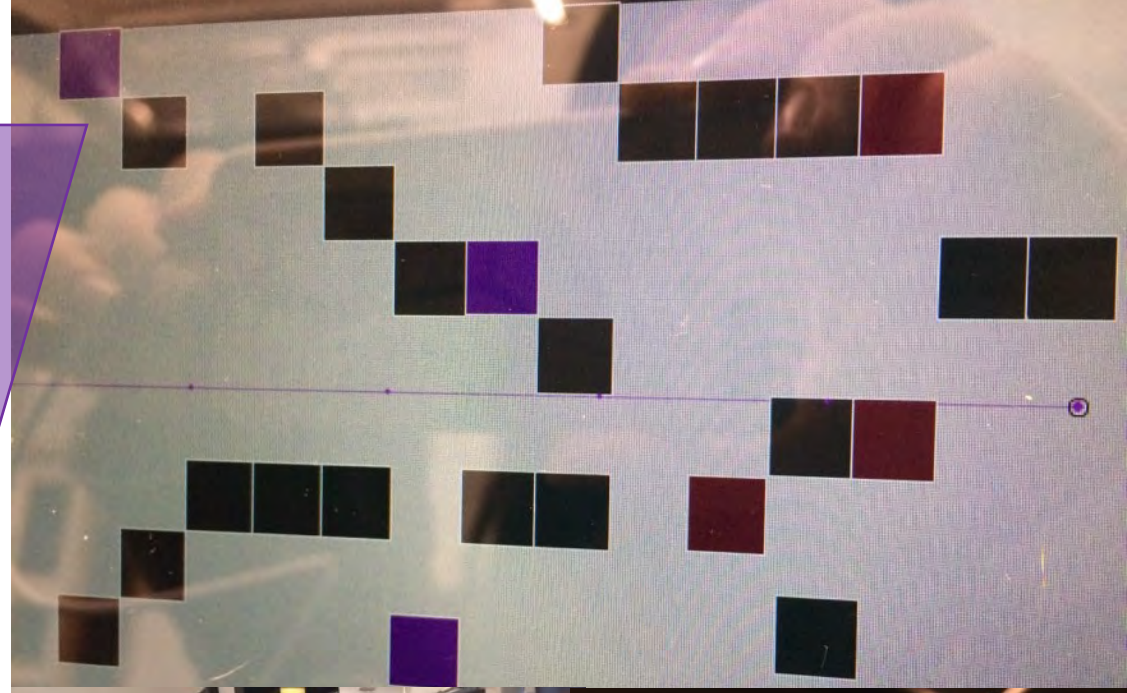
Quandary (2015)

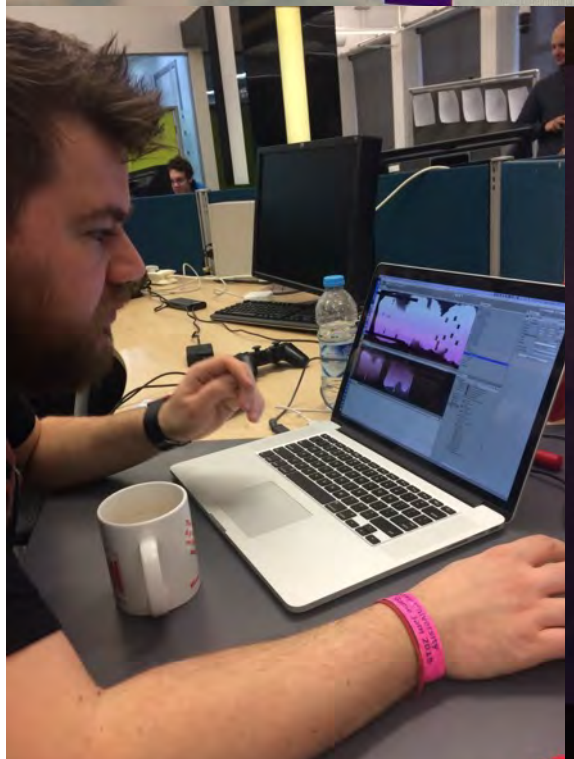
Concept

The game is presented as a large-scale projected installation where each player can only see their own play space. The two views are projected on either side of the same screen meaning to view game-play, the audience must move from one side of the screen to the other (see image on next page)

The play space for each player looks the same – they play as a figure cloaked in white, moving along the bottom of the screen. Above them is a roof where another figure, cloaked in black, is also moving across the screen (upside down).

The game manipulates colour and perspective for both players, meaning that each player thinks that they are the player on the bottom of the screen in white, whilst they believe the other player is the player at the top, cloaked in black.






(Player 1 View)
Concept Installation set-up
(Player 2 View)

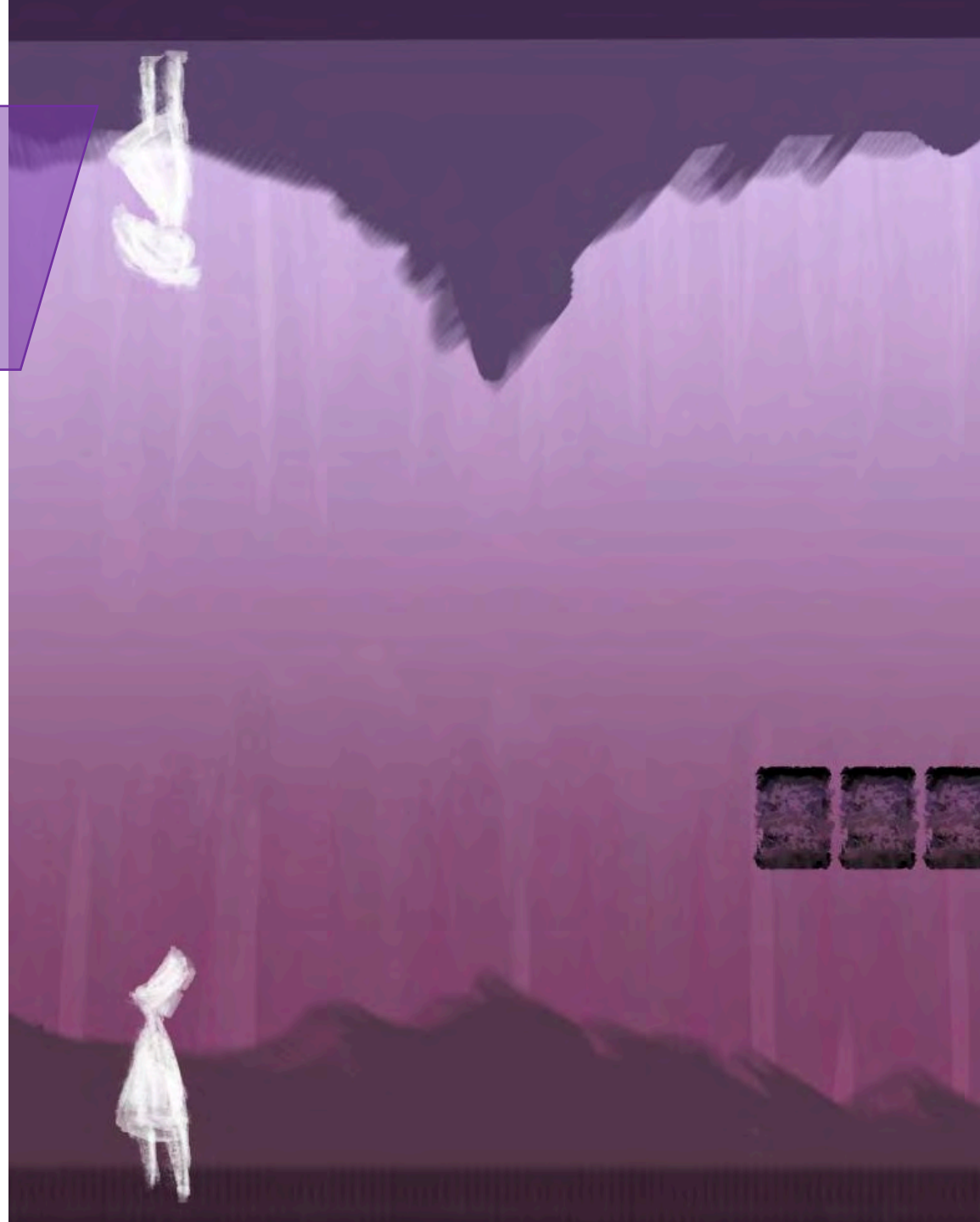
Quandary (2015)

Social Play Aims and Showcase

The game has had limited showcase, being only publicly showcased at the Global Game Jam play Party at Abertay University on 25th January 2015 to an audience of approximately 150 attendees.

Observation of players suggests that:

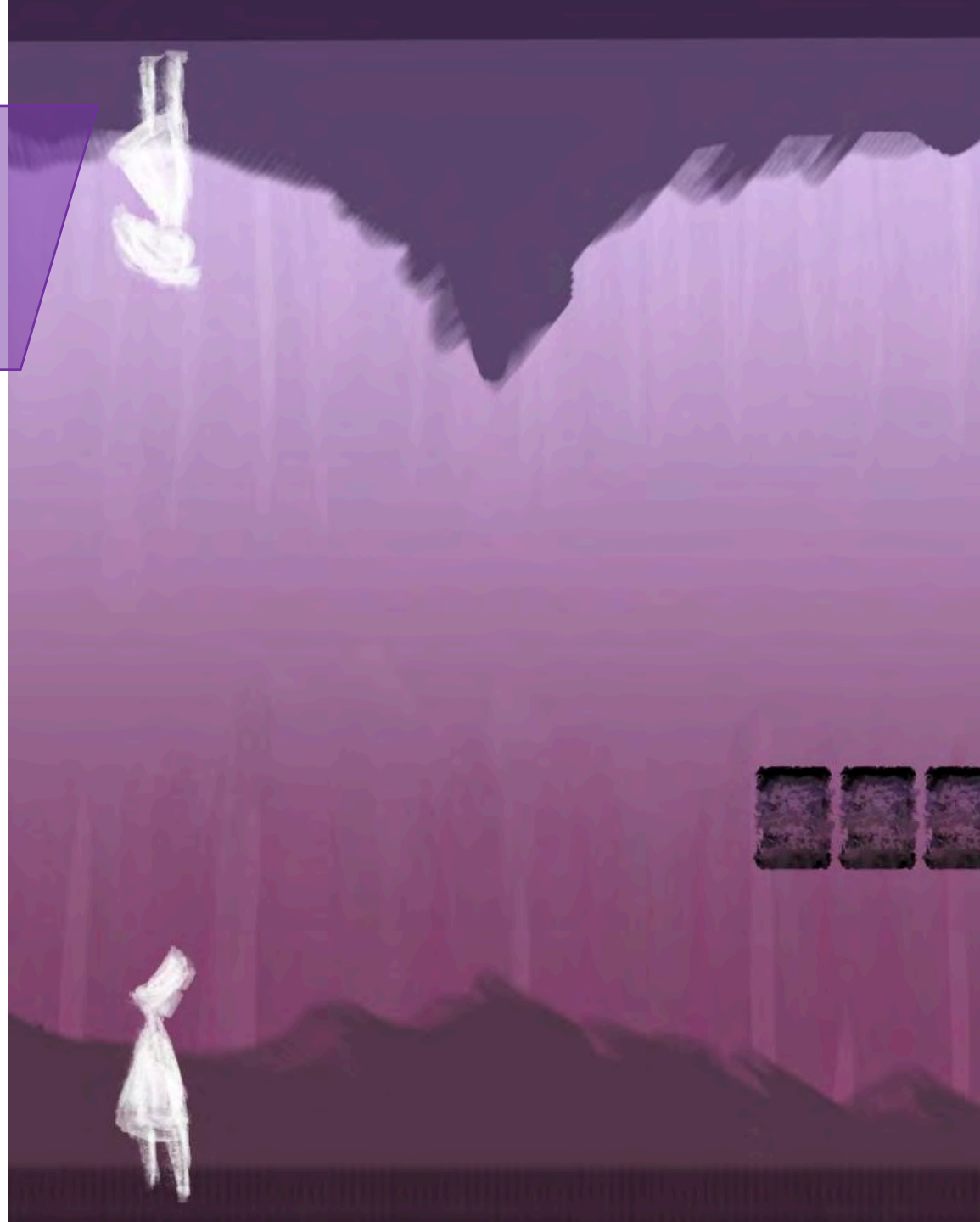
- They are aware of the other player and their ability to hinder and help their progress
- They are not aware how their actions may affect the other player (this is not signposted clearly enough and hence is not a deliberate action by players)
- It is only when watching play that players become aware that both players think they are the character in white – meaning is interpreted on this aspect of the game through observation not active play.



Quandary (2015)

External Links

Installation overview with snippet of gameplay:
https://bit.ly/388XiSD



Social Play Design

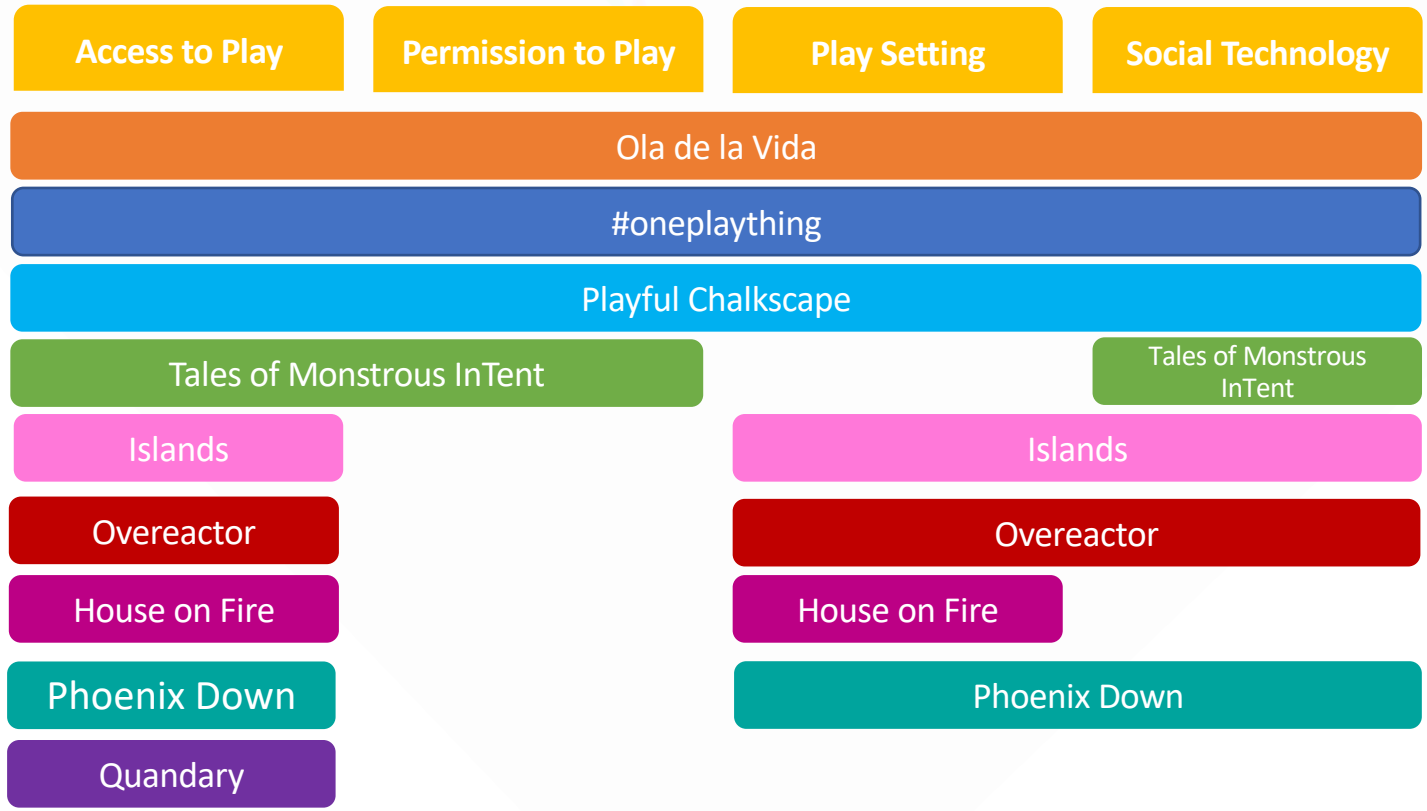
Summary

Social Play

Summary

Themes that run throughout the work in relation to the four-design constraints include:

- For digital work across the portfolio, custom technology and presentation modes limits access to play and aims to promote participation in play through novelty and ephemerality. Analogue work typically taps into ephemerality and the playfulness it can evoke.
- Designing for levels of participation acknowledges that people have an ideal comfort level for play and allows them to participate and gain from social play no matter their comfort level. Social play thus can be broadly interpreted. It may involve direct social interaction e.g. holding hands and sharing a play experience in ODLV or may be more indirect or one-sided e.g. enjoying an artwork asymmetrically from the person who made it in #oneplaything.



Designing for Social Play

Summary

Themes that run throughout the work in relation to the four-design constraints include:

- Spectacle strategies are effective in drawing attention to play but can also affect participation if players do not feel empowered by the spectacle that the play creates. Careful curation of the magic circle is required to balance participant comfort levels with promoting further participation.
- Spectatorship is a key aspect to promoting participation (as discussed above in relation to spectacle strategies). Semi-spectatorship in game design can promote social play greatly through in-game social interaction, coaching and promotes after game discussions between players. Interdependent play is also a key design strategy (discussed later in this section)

Designing for Social Play

Summary

Themes that run throughout the work in relation to the four-design constraints include:

- Objects, screens and tasks are effective ways to ease social interaction by distracting players from the interaction itself and providing another thing to focus on, which in turns facilitates interaction. This is present throughout the digital projects in this portfolio, Islands, the non-digital work, perhaps showcases this best as it showcases how simple the distraction can be in order to ease anxieties and promote deep interaction and conversations.
- Play setting across the portfolio tends to be a range of real-world spaces (which in themselves have significant impact on play). #oneplaything is different as it aims to blur boundaries between the digital and real-world. Findings suggest that social play in one space is possible, but interaction across both is more difficult to instigate.

Designing for Social Play

Summary

Themes that run throughout the work in relation to the four-design constraints include:

- Play setting can affect permission to play in terms of comfort level. Play in a gallery setting, for example, is more challenging, as is a high level of participation in a public space. Social play games with a high level of participation tend to be more successful in social spaces such as the indie game night, which normalises gameplay in a social setting. Social play interventions (such as #oneplaything) tend to be more successful when facilitated and permission is given to play as can be seen with Islands, workshops ran by V&A Dundee around the playful chalkscape and the #oneplaything workshops run by Malcolm Hamilton.

Designing for Social Play

Summary

Themes that run throughout the work in relation to the four-design constraints include:

- Almost all of the works utilise co-operative, interdependent or collaborative design strategies to encourage inter-player social interactions. Interdependence in play is a theme that runs throughout the most recent works, beginning in OLDV and carrying through to the chalk playscape. Competitive gameplay was utilised in Phoenix Down and Quandary (although there are aspects of co-opetition where the competition encourages some collaboration). The reliance on working together is a key design tool in promoting social play as it provides players with a shared goal, promoting interaction and camaraderie by having something in common. This has proved successful in ODLV, ToMI and Islands in particular.

Designing for Social Play

Video games design for social contexts

The portfolio of work also offers insight into design strategies for work to be shown in social play settings. These findings may be helpful to developers who seek to showcase work in informal and in commercial settings where large audiences come to play games:

- Scale can be an issue as floorspace is a premium and one game can take up the space of many exhibitors if not scaled appropriately.
- Audio based games struggle in a social play space without the use of headphones. Headphones limit inter-player communication and hence, social play whilst also making it harder for observers to interpret what is happening in the game.
- Games which can be learned by watching enhance participation and social discussion.
- Games which have longer playtimes can be effective in these spaces but will have a lower turnover of players.

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