

You + Pea

Playing the
Picturesque



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1 (previous) A single-player videogame exploring a proposal for re-purposing empty churches as data centres. The player explores a series of game worlds that relate to different types of data stored on servers, from social media folksonomies to online role-playing.

2 *Playing the Picturesque*, RIBA, London.

Project Details

Author	Luke Pearson
Title	Playing the Picturesque
Output Type	Design and exhibition
Co-Designer	Sandra Youkhana
Venues and Dates	RIBA, London (4 June to 7 September 2019); The Edge, Bath (1 October to 14 December 2019)
Commissioning Bodies	RIBA, The Edge
Partners	London Festival of Architecture, RIBA Education, The RIBA Library
RIBA Selection Committee	Marie Bak Mortensen (Head of Exhibitions, RIBA); Shumi Bose (Curator Exhibitions, RIBA); Max Dewdney (Principal, Max Dewdney Architects); Tom Ravenscroft (Deputy Editor, Dezeen); Christopher Turner (Keeper of Design, Architecture and Digital, V&A)
The Edge Selection Committee	Jamie Eastman (Director, The Edge and Andrew Brownsword Gallery)
Funding	£27,000 The Edge; £25,000 RIBA
Curators	Marie Bak Mortensen (Head of Exhibitions, RIBA); Priscila Buschinelli (Programme and Exhibitions Manager, The Edge and Andrew Brownsword Gallery); Jamie Eastman (Director, The Edge and Andrew Brownsword Gallery)
Research Assistants	Johanna Lust, Ness Lafoy
Folly Fabrication	Jon Lloyd Constructions



3

3 The Blaise Hamlet game is built around a village green. Layers of 2D trees enclose the game world allowing its finite borders to be hidden.

Statement about the Research Content and Process

Description

The project is an interactive installation arising from research examining the relationship between architectural and videogame design. Comprised of five folly structures and six digital videogames, the installation uses interactive game environments to expose visitors to historical architectural design principles by presenting a hybrid architecture that exists within both the physical and the virtual.

Questions

1. How might a hybridised practice be developed that operates between physical and virtual environments?
2. How can interactive virtual spaces be used to reveal new insights about historical design approaches?
3. Can comparisons be made between Picturesque design principles and the way contemporary game spaces are constructed and experienced?
4. Can game aesthetics and systems engage new audiences with architectural design, particularly children?

Methodology

1. Examine games through 'virtual fieldwork' using 'screenshot' photography, critical drawing and data mining;

2. Archival research and translation of knowledge into digital assets for game design, such as transcriptive digital drawings and 3D digital reconstructions of buildings;
3. Develop projects that integrate both architectural and game design methods in the realisation of hybrid virtual/physical spaces;
4. Build and test digital game prototypes, including scripting/coding, interactive interfaces, animation and environmental design;
5. Design of physical interface systems, site-specific structures and artefacts combined with a virtual counterpart.

Dissemination

This research was disseminated through two solo exhibitions at RIBA, London, and The Edge, Bath. RIBA recorded 6,943 visitors to the exhibition, including 22 school trips and two community groups. The Edge recorded 2,080 visitors in total. The project has been published in a printed edition by RIBA, as well as other publications and marketing strategies, including a bus livery for a major route in Bath. Research from the project and wider principles behind the design have featured in an authored chapter in the book *Architectonics of Game Spaces: The Spatial Logic of the Virtual and Its Meaning for the Real* and five authored articles, including a 9,000-word refereed article for *Design Studies*.

Project Highlights

The project represents one of the first examples of a hybrid practice combining the fields of architectural and videogame design. *Playing the Picturesque* was a prestigious commission by the RIBA, won through an international open competition with 80 entries. The selection panel included the V&A's Keeper of Design, Architecture and Digital. The success of the commission led to it being optioned as a RIBA travelling exhibition, resulting in an expanded solo show at The Edge in Bath. A drawing of this project is now part of the RIBA's permanent collection and one of its videogames is due to be installed as a permanent exhibit at The Edge.

Introduction

The project is comprised of five ‘folly’ structures and six digital videogames shown on integrated projection screens. Game worlds are projected at a 1:1 scale onto the surfaces of the follies, which gallery visitors then interact with through a series of pressure pads.

Each folly and game are designed in response to historical drawings from the RIBA archive, using game mechanisms to investigate hybridised physical and virtual spaces by translating Picturesque architectural and landscape design principles, such as carefully composed viewpoints, meandering journeys and organisational asymmetry into a digital domain. Each game requires two participants in order to fully experience the virtual world, challenging both the Picturesque ideal of a singular viewer and the notion of gaming as a solitary activity.

The first and second games are built around one folly, inspired by George Stanley Repton’s drawing of a Neolithic structure at Blaise Castle for John Nash (4). The second folly interprets Nash’s cottage designs for Blaise Hamlet (5), using a window as a game screen and recreating seating designed for viewing the village green. The third folly is derived from an unrealised design by Nash for a bridge across The Long Walk in Windsor Park (6). It includes Nash’s other unrealised designs for the site, including a Chinese-style villa. The final folly takes its form from the sham colonnade on the elevation of Nash’s Park Crescent (7), connecting to a game world where it is completed as a circus, as in the original design.

The project combines research into architectural representation, historical design principles and contemporary game design methods. It represents a realisation of a body of architectural research into the unique arena of game spaces.

The digital part of the work was produced on Unity, which is a type of software called a ‘game engine’ commonly used for the construction of videogames and real-time computation. The installation involved six different game applications that were built in conjunction with the folly structures. Construction of these games included both programming and visual coding – using finite-state machine logic where objects have different behavioural states triggered by in-game events. The games rely on both 3D modelling and 2D graphics – commonly known as ‘sprites’ – in the building of their worlds.



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4 George Stanley Repton for John Nash. Illustrating the design of a Neolithic folly, 1800.

5 J. Herner. Drawings of Blaise Hamlet cottages, 1811.

6 Drawing of a design for a bridge in the castle style located in Windsor Park, from the office of John Nash, 1818.

7 Thomas Hosmer Shepherd. Etching of east side of Park Crescent as seen from Regent's Park, 1829.

8-9 (overleaf) *Playing the Picturesque*, RIBA, London.



INTRODUCTION





INTRODUCTION



9

Aims and Objectives

Videogames are the largest global entertainment industry. They are tied to architecture through designed, synthetic worlds that are built around some form of user, viewer or avatar. Some games such as *Minecraft* have become spatial design software in their own right; others, such as *Fortnite*, include building tools and have become cultural phenomena; and those such as *Grand Theft Auto V* have been noted for their lifelike depictions of ostensibly real cities. Despite this clear relationship, there is relatively little scholarly research that directly combines architectural and videogame design, and that which does exist is mainly confined to a subset of games studies literature. The amount of research that moves beyond the textual into design operating at the intersection of the two fields is even smaller still. The project investigates and exploits the architectural properties of videogame spaces, hybridising physical and virtual environments that reinterpret architectural history.

Although architecture is one of the most enthusiastic adopters of game engine software, this has mainly been confined to virtual reality representations of buildings. These applications do not fully take advantage of the interactive properties of game engines or the non-normative spatial experiences in commercial games.

In response, this research aims to use games to experiment with how the meaning of architecture can be revealed and reshaped by actively embracing the improbable, dreamlike and often bizarre nature of game worlds. By not only designing the world but also the systems that regulate it, this research attempts to show how games can

change what it means to represent and indeed inhabit architecture. Pearson argues that game environments can be used to uncover new insights into how historical projects were synthesised. By using game engines to expose spatial rules, principles and procedures of historical designs, new audiences can be invited to participate and understand these insights through play.

Questions

1. How might a hybridised practice be developed that operates between physical and virtual environments?

This project relies on a hybridised practice between architecture and game design, combining physical structures and videogame applications. This type of work contends that virtual environments can be considered as a valid means of 'realising' architecture. Projects that were once only conceptual in nature, delivered through drawings or models, can now become inhabitable interactive virtual worlds.

2. How can interactive virtual spaces be used to reveal new insights about historical design approaches?

Because the design of game spaces foregrounds the interplay between spatial representation and interaction, they are well suited to uncovering design insights, particularly historical design approaches and projects. *Playing the Picturesque* recreates historical Picturesque sites but does not replicate their geography or size. Instead, the design of the game worlds evokes and intensifies the Picturesque design principles at work in each location to reveal new insights. The game systems used in the project create a virtual world that stretches far beyond the gallery, giving visitors a sense of Picturesque design that would not normally be possible in a confined space.

3. Can comparisons be made between Picturesque design principles and the way contemporary game spaces are constructed and experienced?

While videogame worlds are entirely synthetic and virtual constructions, the principles of their design often resonate with the approaches of the Picturesque. This includes principles such as 'the foot should never travel... the same path which the eye had travelled over before' (Shenstone 1764, p. 98), while follies, sham façades without interiors and landscape manipulations are common methods for suggesting an expansive world beyond. In turn, while Picturesque designs were realised in the real world, they cultivated nature into a synthetic, 'virtual' version of reality. *Playing the Picturesque* sought to generate new knowledge on these principles by embodying this connection.

4. Can game aesthetics and systems engage new audiences with architectural design, particularly children?

The design of architectural projects through games promotes interaction and engagement. Games intrinsically require player participation to formalise their worlds. Most contemporary games are spatial, either in their thematic setting or mechanisms of play. This can be leveraged against the ubiquity of games where many audiences, particularly younger visitors, are highly attuned to their aesthetics – the visuals and interfaces. *Playing the Picturesque* was developed in conversation with the RIBA's education team and was visited by over 500 school students through organised group tours.

Context

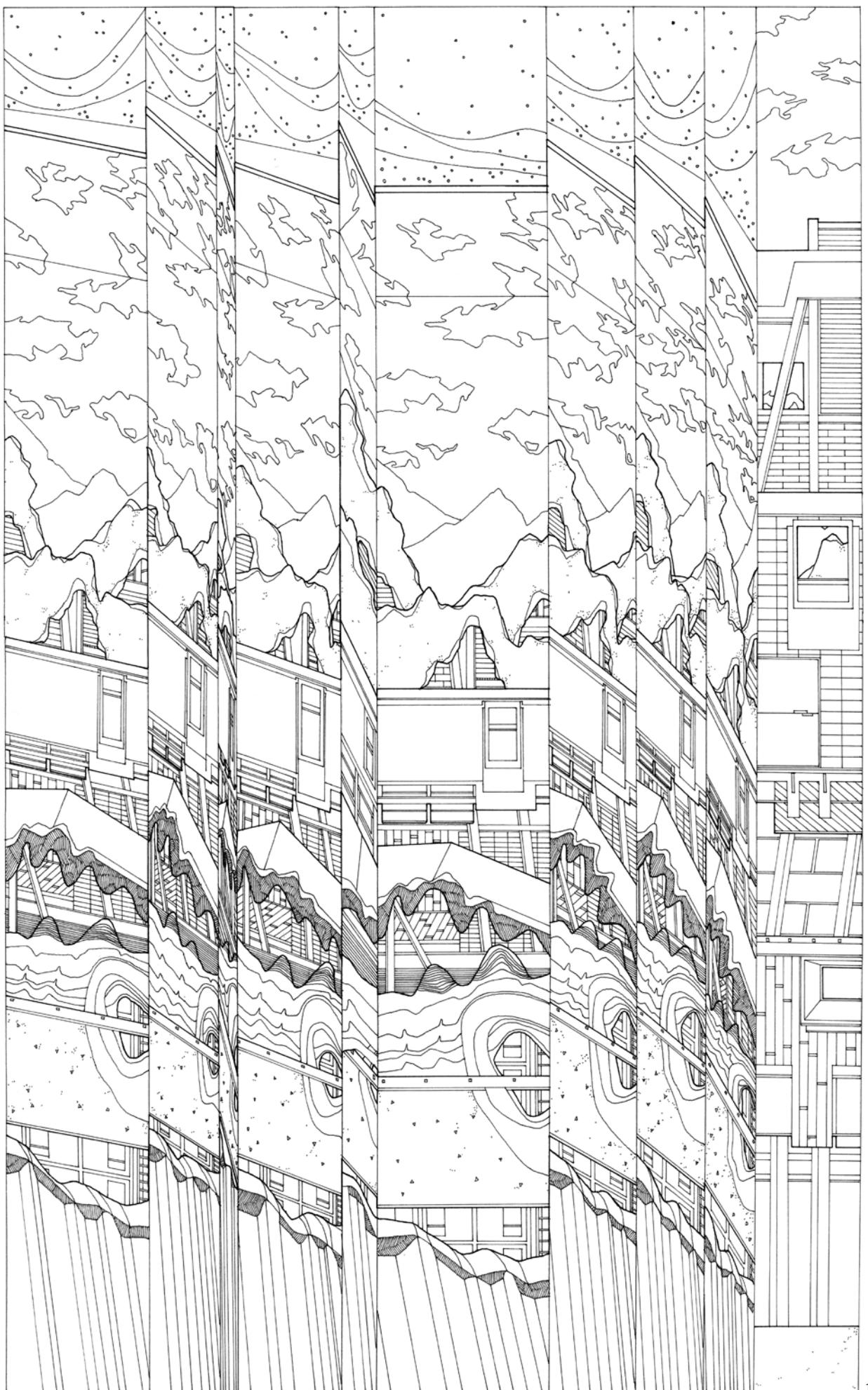
The wider context for this research is one that encompasses architectural design research, contemporary games studies and media theory. Studies into the relationship between architecture and game spaces have generally come from a narrow subset of games studies literature, particularly the work of Steffen P. Walz and Michael Nitsche. Walz's book *Space Time Play: Computer Games, Architecture and Urbanism: The Next Level* (2007) represents one of the first publications to explore this connection through a series of short essays covering various different architectural topics in relation to games. In *Toward a Ludic Architecture: The Space of Play and Games* (2010), Walz develops a more detailed reading of these relationships, positing questions about how architectural design might reflect the properties of games in its approach and intended effect. Nitsche's work in *Video Game Spaces: Image, Play and Structure in 3D Worlds* (2008) is a thorough examination of game environments, where he argues for a critical analysis that reflects the 'layered' nature of game spaces, including the computational hardware running the game, the interface design and the social space in which it is played. Walz and Nitsche's engagements are, however, predominantly textual, leaving open the question of how game worlds relate to architectural design practice.

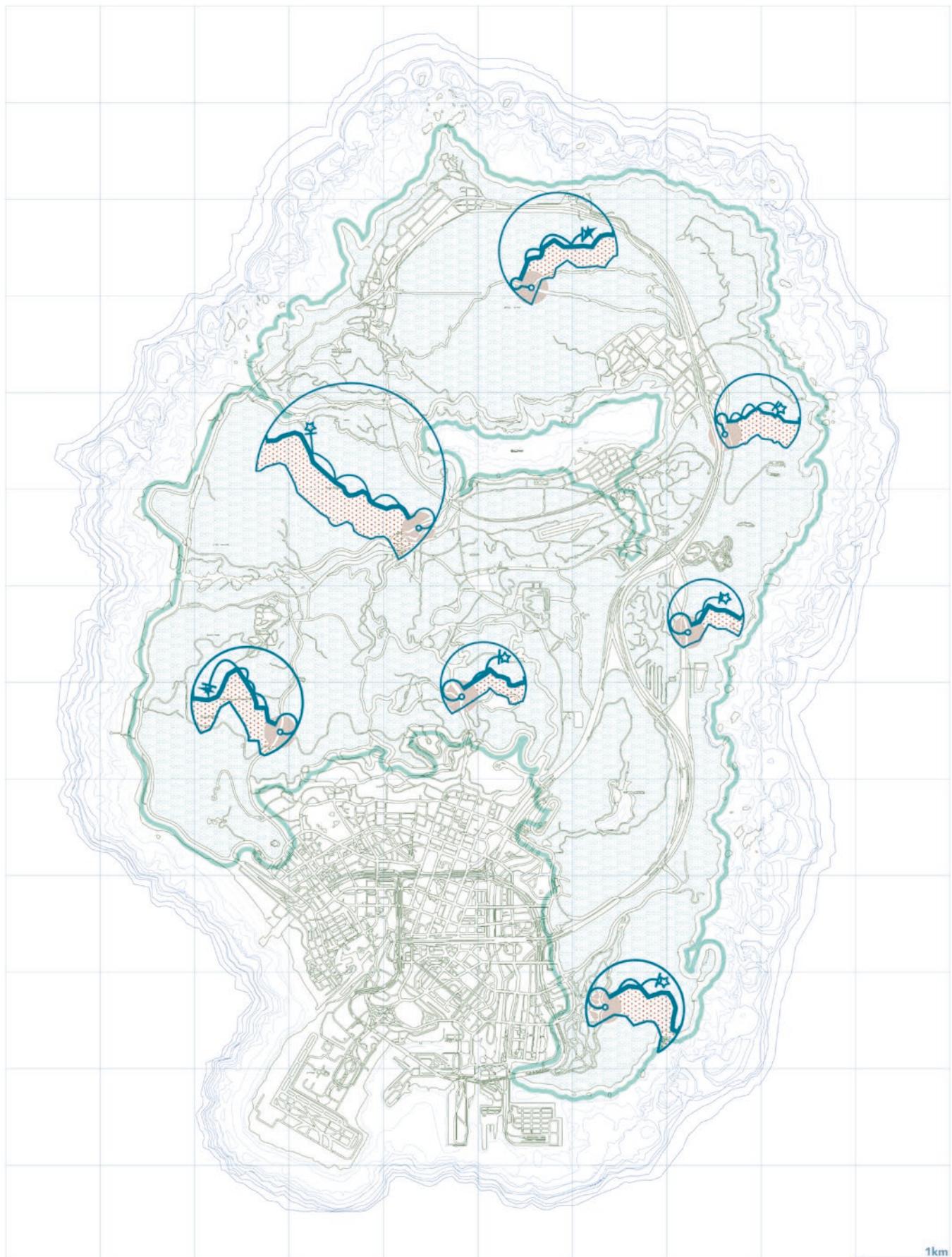
In contrast, the ideas and methods behind *Playing the Picturesque* emerge from research by Pearson that attempts to address the relationship between game worlds and architecture through design projects. In order to outline the formal properties of in-game architecture, Pearson has developed a series of 'virtual fieldwork' methods that produce knowledge through the analysis of commercially available videogames. These methods are mainly

predicated on structured play. For example, by using counterplay techniques – cheat codes to play against the rules of a game – Pearson developed a critical drawing project, *Noclip World* (2018), that analysed how many game worlds are built around the journey that a player's avatar may take (10). By writing about this analytical method in journals such as *Architectural Research Quarterly*, *Thresholds* and *Design Studies*, Pearson explains how games can be understood in the context of architectural approaches towards perspective, viewpoints and circulation, relating closely to historical movements such as the Picturesque. This practice-led approach might be compared to that of artists such as Harun Farocki (*Parallel I-IV*, 2012–4) and JODI (*Max Payne CHEATS ONLY*, 2005), who use recordings of games to create 'a space for exposing and questioning the peculiar trajectory of 3D videogames toward ever greater verisimilitude' (Sharp 2015, p. 48).

Pearson's research has developed into analytical design projects, such as *Learning from Los Santos* (2018), in which Pearson adopts methods including mapping, photographic recording, reconstructive modelling and data mining to reveal the architectural logic of game worlds (11–2).

10 *Noclip World*, drawings derived from screenshot photography, using cheat codes to break the game and reveal its environmental composition.





The title of this project is a reference to Robert Venturi, Denise Scott Brown and Steven Izenour's book *Learning from Las Vegas* (1972). Their approach of 'form analysis as design research' has proven influential on Pearson's research who also involves 'screenshot' photography to make typological studies of game worlds. Learning from Los Santos draws heavily on artist Ed Ruscha's seminal series of small books on Los Angeles, and uses his 'no-style' photographic approach to emphasise situations such as cars in physically impossible positions that evidence the unreal nature of the game world. Pearson also uses community generated tools for game modification, 'modding', to data-mine the file structure of the game.

The analytical methods used in this research provide the basis for the development of projects that integrate both architectural and game design methods into the realisation of hybrid virtual/physical spaces. This type of work is more visible in art practice than architectural design, with two of the most influential approaches being the alternate-world games of Lawrence Lek (*Nøtel* 2018) and the game engine-based simulation pieces of Ian Cheng (*Emissaries* 2015–7). Both Lek and Cheng use the game object as a medium for building worlds exhibited in the context of art galleries.

11-2 Learning from Los Santos, analytical mapping drawings produced from analysis of *Grand Theft Auto V*, demonstrating the layers and systems of the game environment.



CONTEXT



Pearson's prior experience in realising game-based projects has attempted to push this type of work towards architectural design practices. The Church of Colocation (2019) explores the re-purposing of empty religious buildings for housing digital infrastructure, while Projectives (2018) was a game designed to show players the principles behind Hans Vredeman de Vries' historical studies into perspective by using multiple virtual cameras that converge together through player interaction (15). You+Pea's Architecture (After Games) introduced a series of game-inspired structures into the V&A's Medieval & Renaissance Galleries as a way of comparing how game spaces compress and distort architecture (13).

Using games studies theory as context allows Pearson to develop a nuanced position towards the interactivity and agency of games in an architectural setting. In the article 'A Machine for Playing In: Exploring the Videogame as a Medium for Architectural Design' (2020), published in *Design Studies*, Pearson stresses how virtual environments used in, for example, virtual reality representations of buildings are far more spatially normative than many interactive game worlds, despite both being built using the same software. This underlies the push to generate new hybridised forms of architectural design that incorporate the methods rather than only images generated from game development, resulting in architectural work designed to be realised through and in virtual game spaces.

The context for *Playing the Picturesque* came from studying a specific period of architectural history, the Picturesque ideal of design that emerged in the late eighteenth century. While the project is themed around notable Picturesque sites, such as Blaise Castle in Bristol and Prior Park in Bath, a key context for the work is the ideals and techniques of the aesthetic itself. Writings

such as John Macarthur's *The Picturesque: Architecture, Disgust and Other Irregularities* (2007) provided context for how Picturesque designers approached landscape, while the RIBA's archives of drawings and photographs were used to source materials from which the follies and game worlds were built.

13 Architectural fragments taken from videogame worlds were placed into the V&A's Medieval & Renaissance Galleries. These elements used existing exhibits as context to explore how game environments compress and extend space.





14 Screenshots of data-mined research showing in-game structures from *Grand Theft Auto V*, used to understand the logic of virtual architecture built for game worlds.



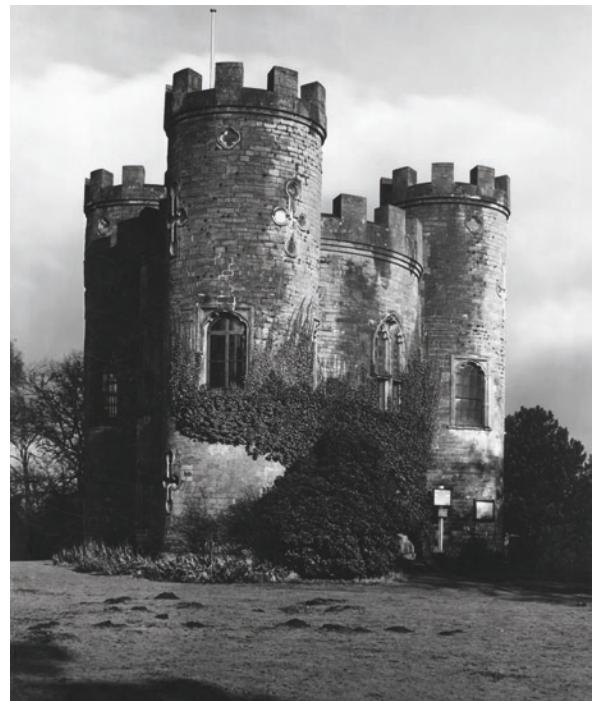
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15 A four-player game where players must work together to recompose some of Vredeman de Vries' perspectival studies through four different camera views operating independently.

Methodology

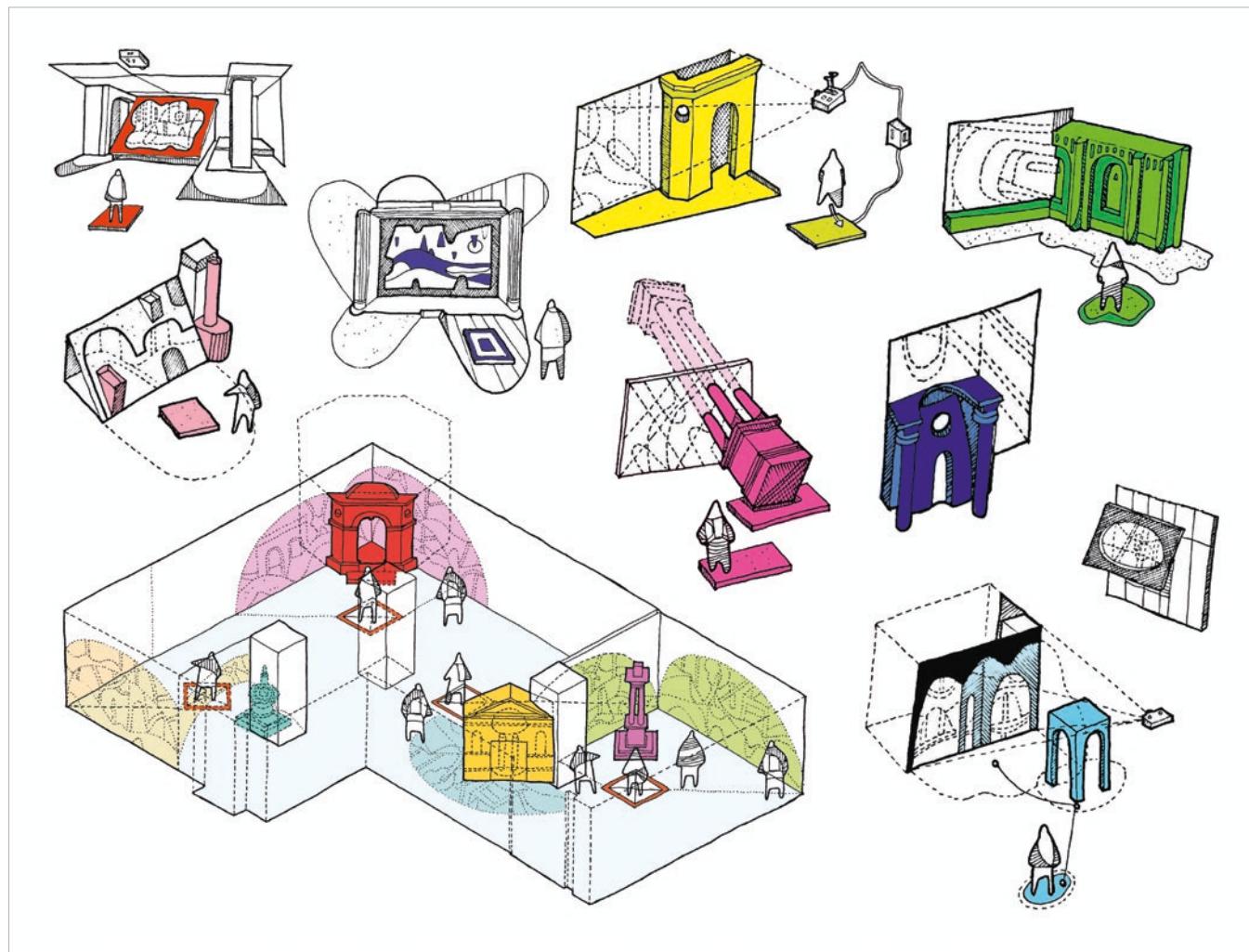
1. Archival research and translation of knowledge into digital assets for game design, such as transcriptive digital drawings and 3D digital reconstructions of buildings

The project was predicated on examining the RIBA's drawing archives for evidence of John Nash's built and unrealised Picturesque works. Having identified five drawings, in conversation with the RIBA's curation team, a game scenario and system were developed. Each archival image was used in combination with readings of literature on the Picturesque to identify a unique design principle that was particularly evident in each scenario. For the Blaise Castle game, having chosen an archival image of the site (16), the apparent asymmetrical design of the castle and Humphrey Repton's reconfiguring of the drive towards the main house (Macarthur 2007, p. 192) was used as the basis for a game where players navigate a series of forking paths across the estate. These scenarios were first diagrammed and explored through sketches (17) and rough game-engine prototypes, and were included in design documents that were presented to the RIBA during consultations.



16

16 Archival image of Blaise Castle and the three towers, 1938.



17 Initial sketches of various follies, examining the relationship between a built structure in the gallery and that of the virtual environment.





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18 Early concept of a game level being projected onto a test screen made from Rosco White Twin, the projection film used in the final installation.

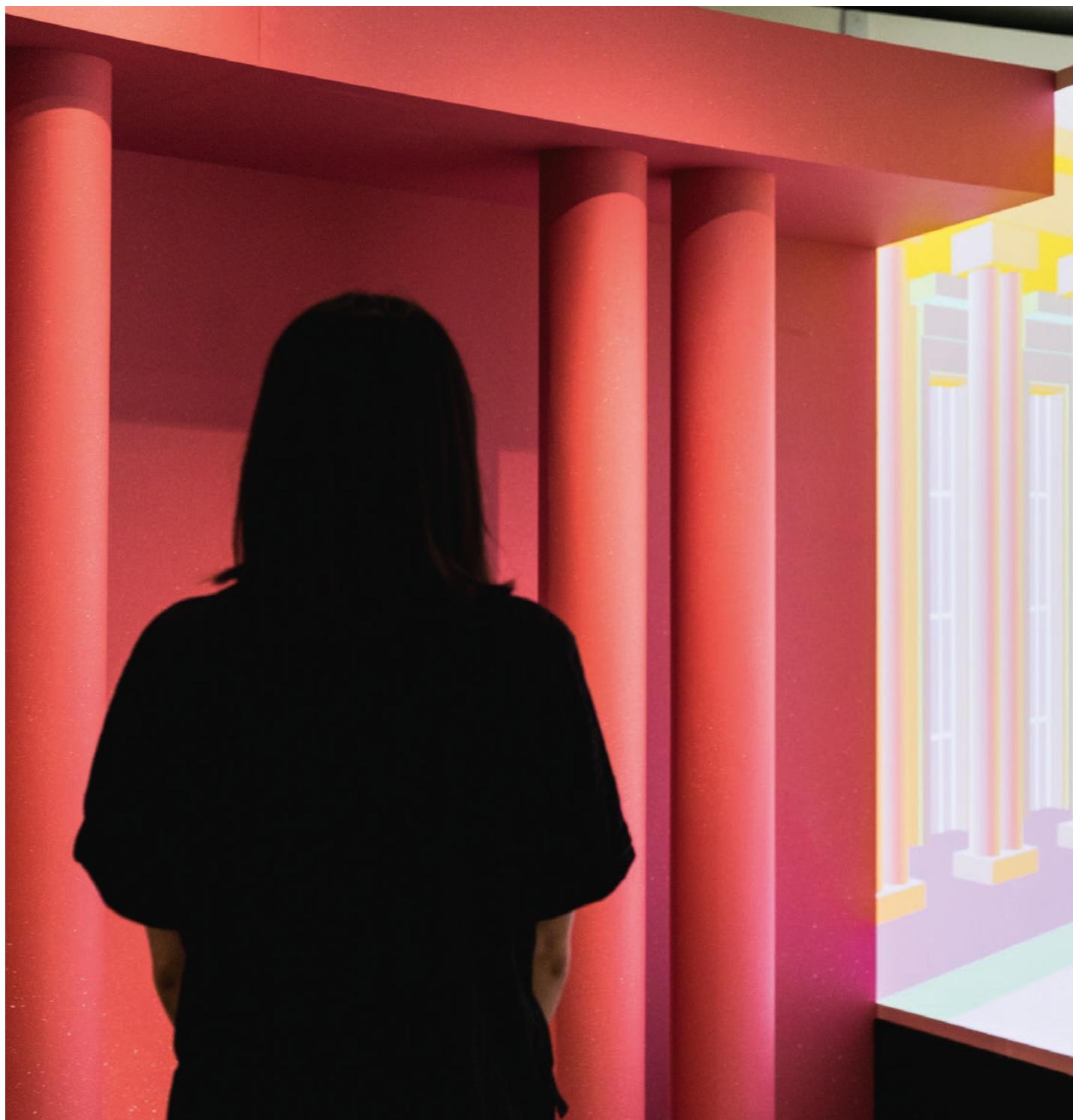
19 Screenshot from first projection test featuring a model of Blaise Castle and 3D trees subsequently replaced with flat sprites.

2. Develop projects that integrate both architectural and game design methods in the realisation of hybrid virtual/physical spaces

The physical components of the exhibition, a series of folly structures, were developed in response to an analysis of archival images and game scenarios. Each folly is designed to incorporate a surface upon which the game screen is projected at a 1:1 scale, matching the eye height of viewers and giving the impression of the game space unfolding far beyond the gallery (18). Follies were designed through sketching, 3D modelling and physical testing, and were also tested in relationship to the game screens, including rough interactive mock-ups of the gallery itself as a game environment. These follies were then developed for construction. The production involved collaboration with the fabricator, including the development of custom paint-flecked finishes to evoke virtual plasticity of the physical objects within the gallery.

20 Concept sketch outlining the virtual environment extending beyond the confines of the gallery, anchored to a built folly structure.







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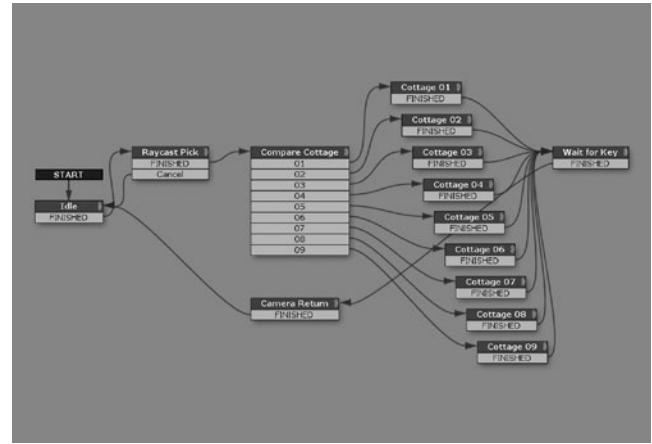
21 Installed Park Crescent game, showing how the virtual environment was designed to match the folly structure. This emphasised the extension of space into the game world.

3. Build and test digital game prototypes, including scripting/coding, interactive interfaces, animation and environmental design

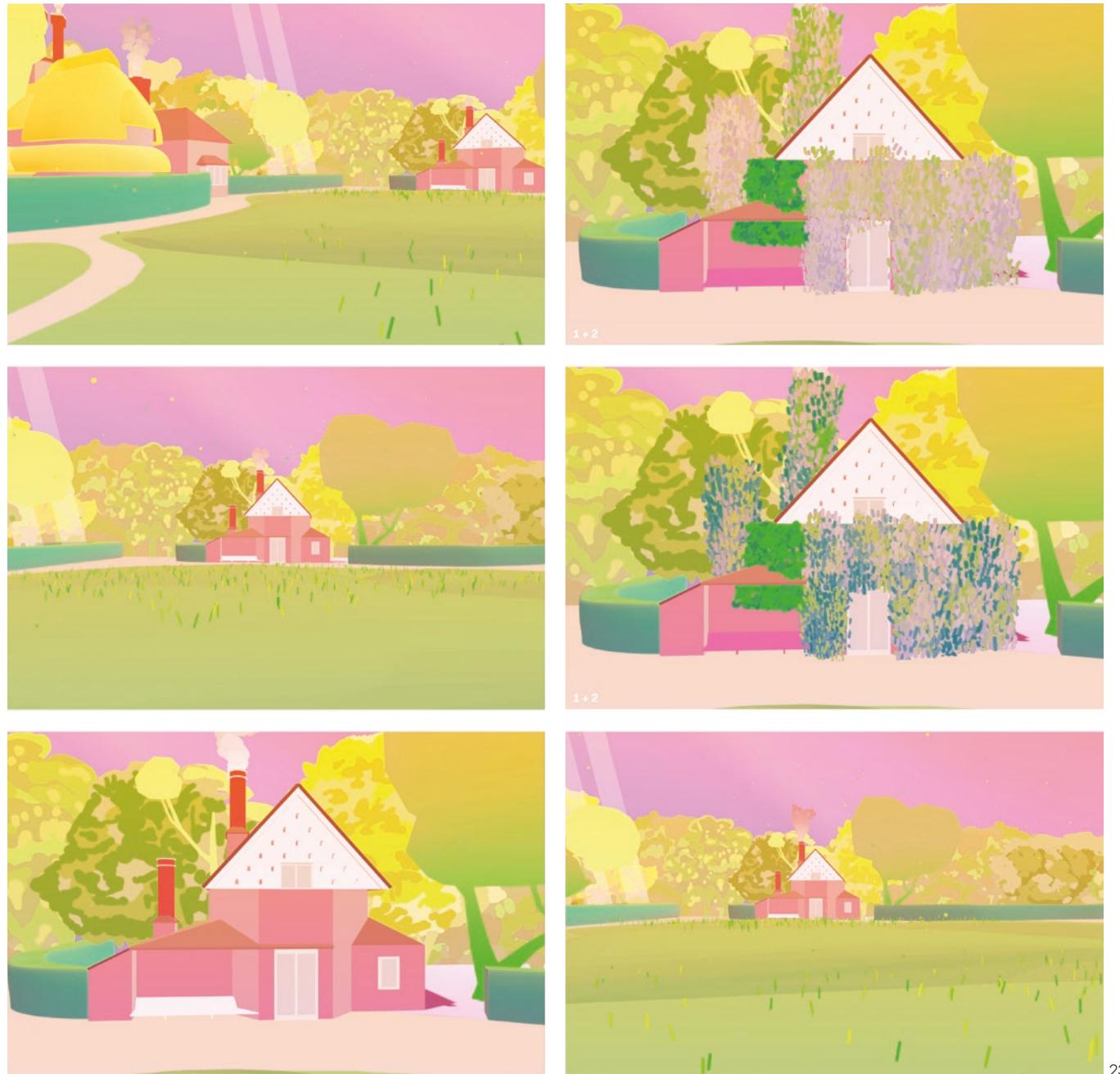
Methods used in the building and testing of the digital games included design using game engine software (Unity), the scripting and coding of game logics using both C# programming, visual coding using finite-state machine software and customisation of material shaders and colour lookup tables (code used to regulate how objects are rendered by the game camera) (22).

The Blaise Hamlet game, for instance, is built around Nash's careful design for a village green. The virtual green is the centre point of the game, which is played through a rotating camera. Windsor Long Walk (24) is designed as an elongated path, with the game world articulated around a forward movement along its axis, while Blaise Castle is built around a series of forking routes (25). For the Prior Park Palladian Bridge game in Bath, the in-game camera matches the projection to the physical folly, making the virtual counterpart appear to be a reflection in a pool of water on the ground. This view changes as players interact with the game, breaking the implied spatial connection between the structure and projection, and swinging round to reveal the virtual bridge in the context of the park (27-8). In each case, the spatial design of the game world is closely allied to its mechanics, which reveal Picturesque design principles.

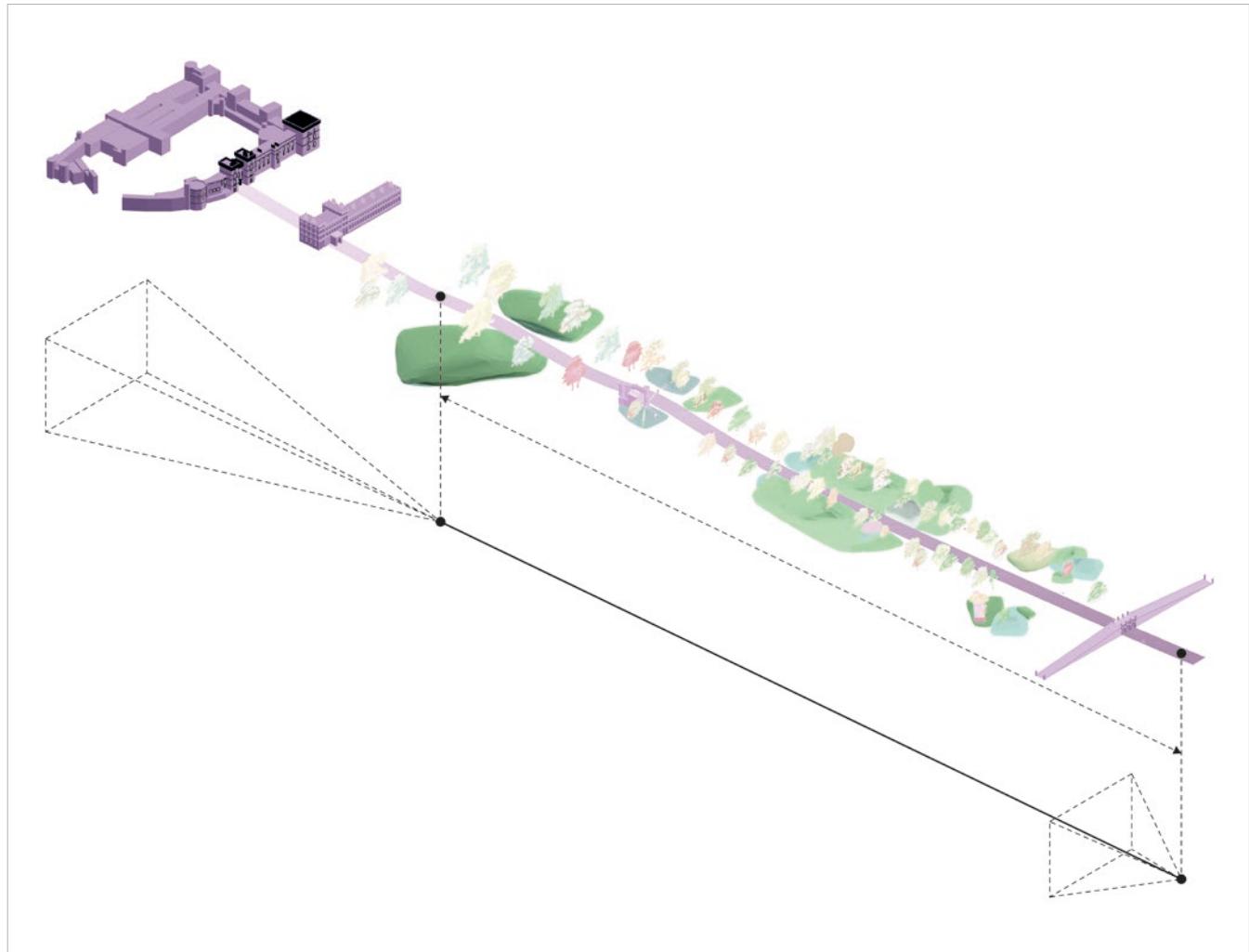
Animation design was produced within Unity, imposing constraints on how 3D-modelled reconstructions of sites would be composed. Several of the game environments were predicated on triggering animations to move through



22 Example of finite-state machine logic, controlling the camera-detection system in the Blaise Hamlet game. Depending on which cottage the camera is facing, when activated by a player it will animate in different ways to focus on that cottage.



23 Image sequence showing the camera animation and growth of planting, as controlled by each player.



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24 The Long Walk game environment was designed around a player controlling a continuous forward or backwards motion, while another reveals historic structures from the site that shaped its Picturesque vistas.

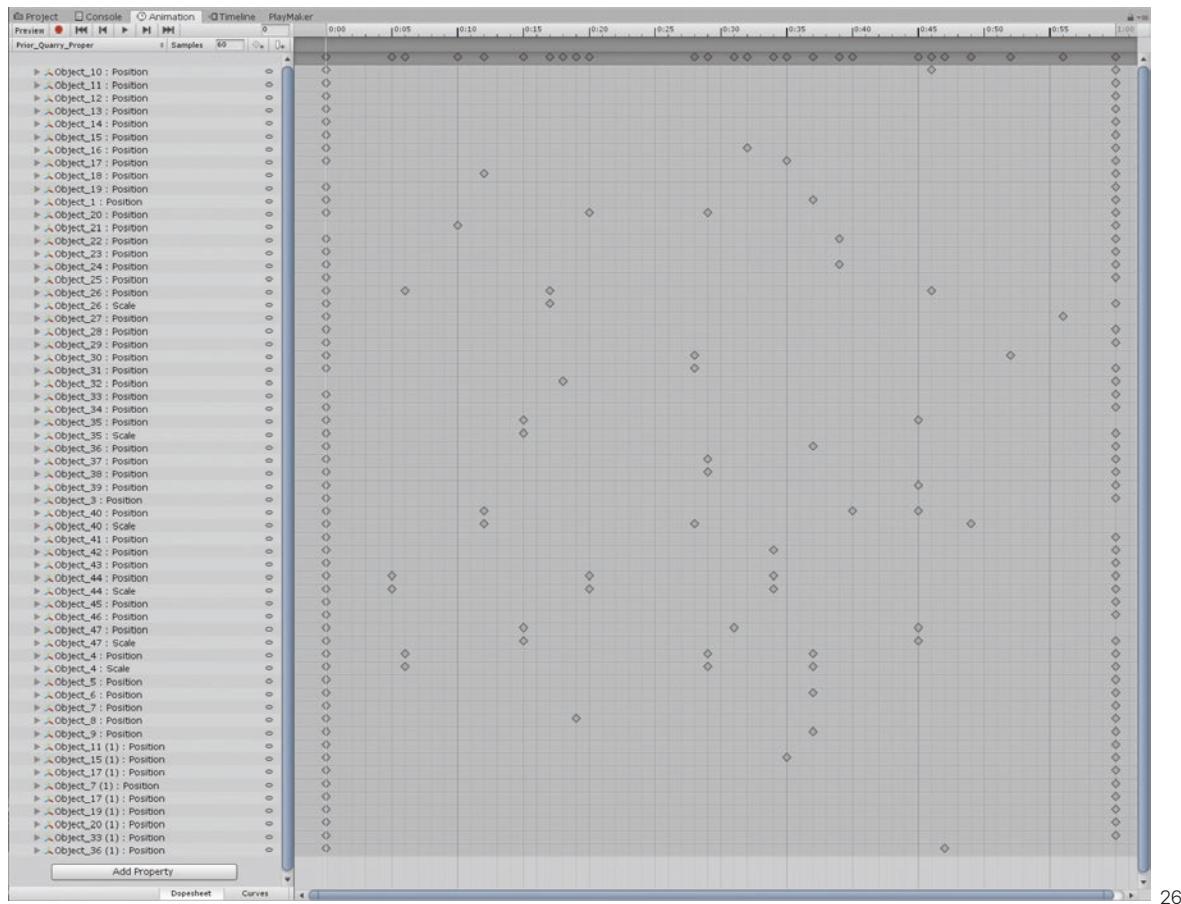


the world and these were constructed as Animator components, which also work on the finite-state machine principle, where an object has certain coded behaviours unique to each state of its being, requiring some form of event or user input to trigger a change to another state with different behaviours (26). This in turn would feed back into the construction of 3D models that would be built in such a way as to be properly animated, a type of modelling procedure quite different to conventional models for producing drawings or fabrication (29).

The environmental design of the game worlds was conducted using 3D-modelling software, such as Rhino, for importing into the game engine. Each site would be approached using contemporary maps, as well as archival drawings and writings, particularly those contained within the RIBA archives. Each game world was not designed as a geographically accurate reproduction of the site but instead was built around a specific mechanic based on Picturesque principles.

Particle systems – ‘fuzzy’ phenomena simulations using high numbers of small 2D sprite images – tree sprite images and other 2D imagery were produced as vector drawings directly derived from historical materials such as Humphrey Repton’s *Red Book for Blaise Castle* (30). Repton’s painterly style was translated into in-game plant-growth systems (31-2). It was a conscious decision to employ a ‘painterly’ style, but it is also a reflection of the fact that much of Pearson’s other research, such as Noclip World, uses 2D imagery as a way of extending a virtual world at a low computational cost (33).

METHODOLOGY



26 Example of animation keyframing from the Prior Park game, showing how each individual stone of Ralph Allen's Bath Stone quarry moves over time.



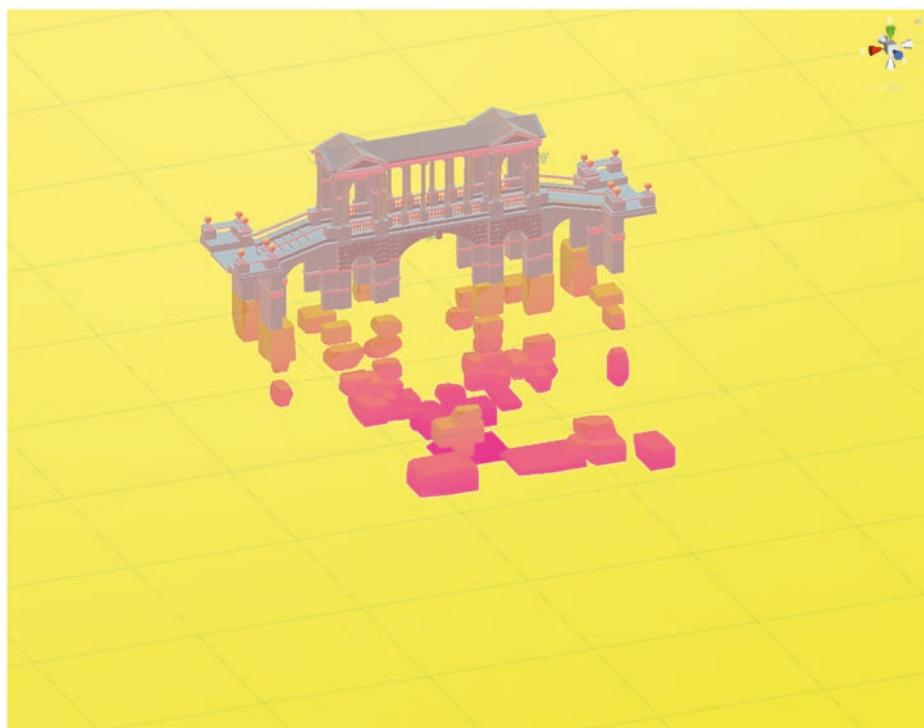
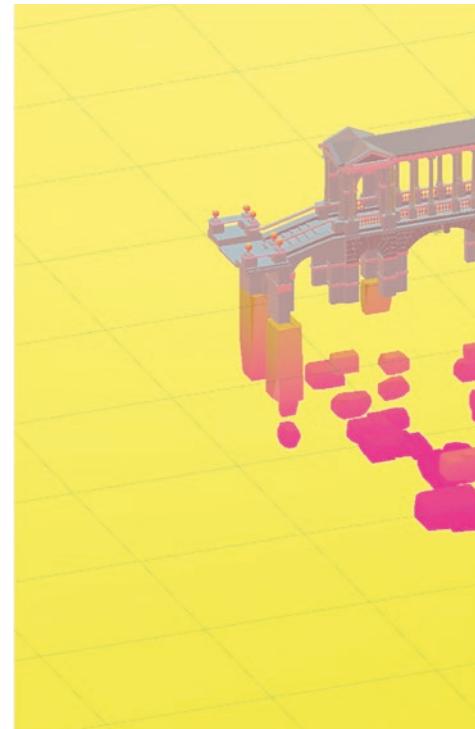
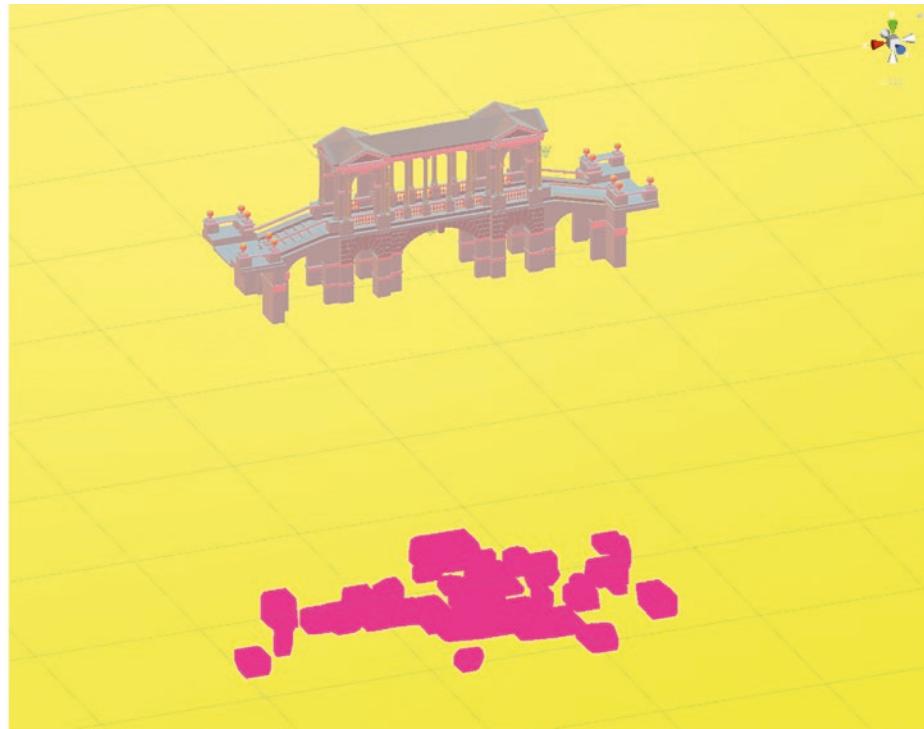
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27 The design of the game world uses scale shifts to amplify the spatial relationship between the Prior Park Bridge and the main house. Buildings, landscape features and trees all grow in scale to be flattened out in the player's eye view.

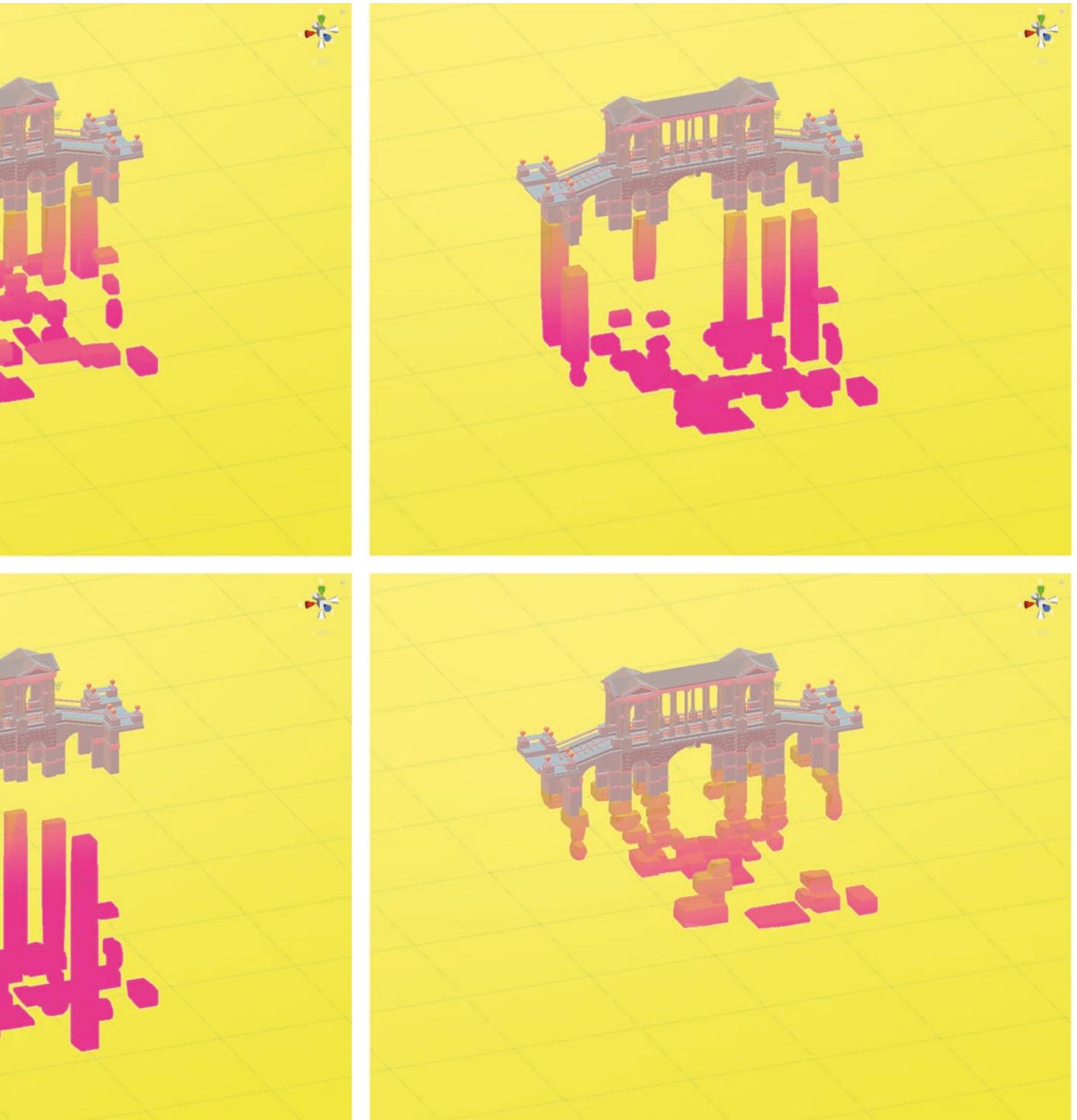
28 Screenshot from Prior Park Palladian Bridge, showing Ralph Allen's Bath Stone quarry reflected beneath the bridge.

29 (overleaf) Example of an animation showing the quarry appearing in the reflecting pool. This was controlled by the player interface manipulating the object's 'normalised time' parameter, a number between 0 and 1 that indicates how far through an animation the object is (1 being complete).





METHODOLOGY

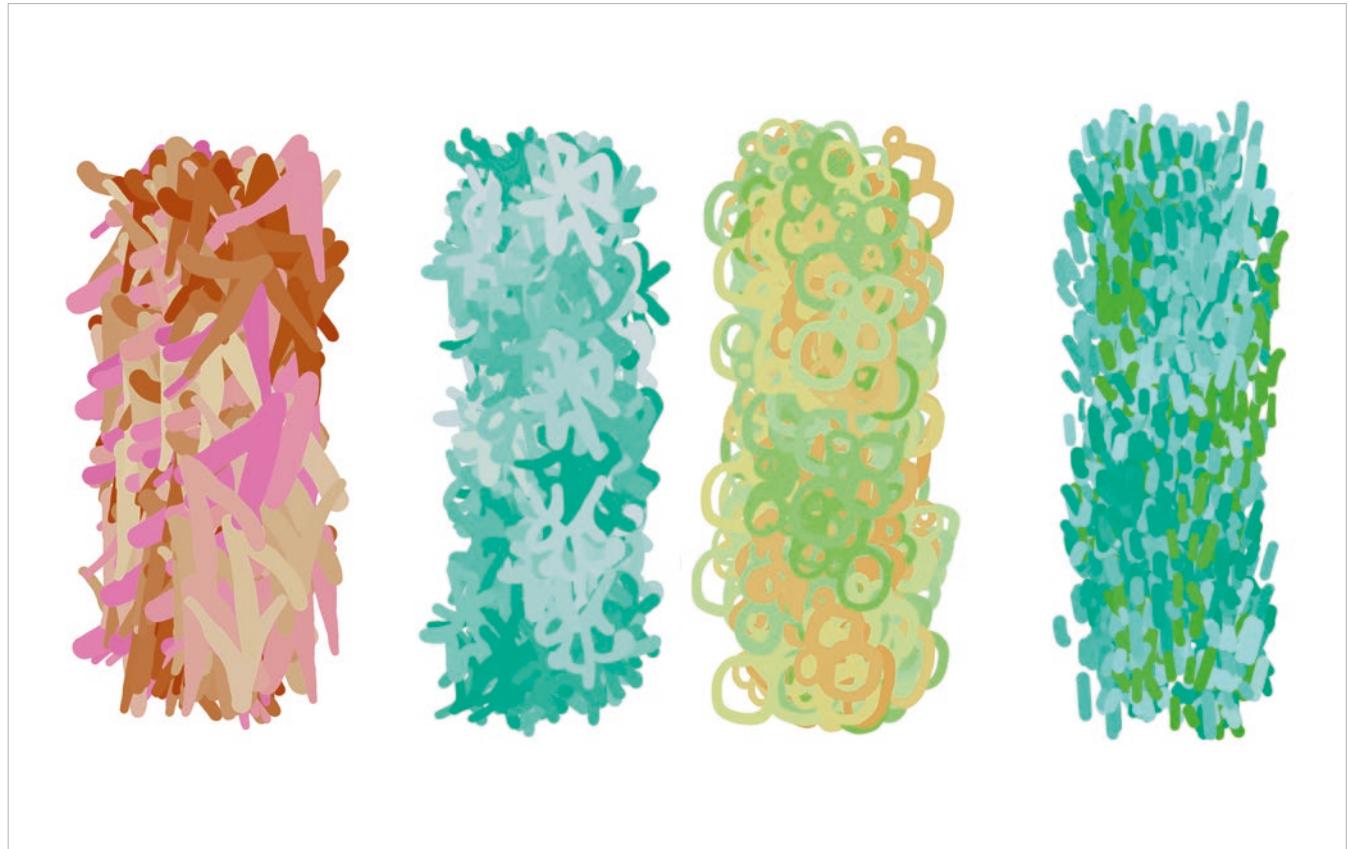




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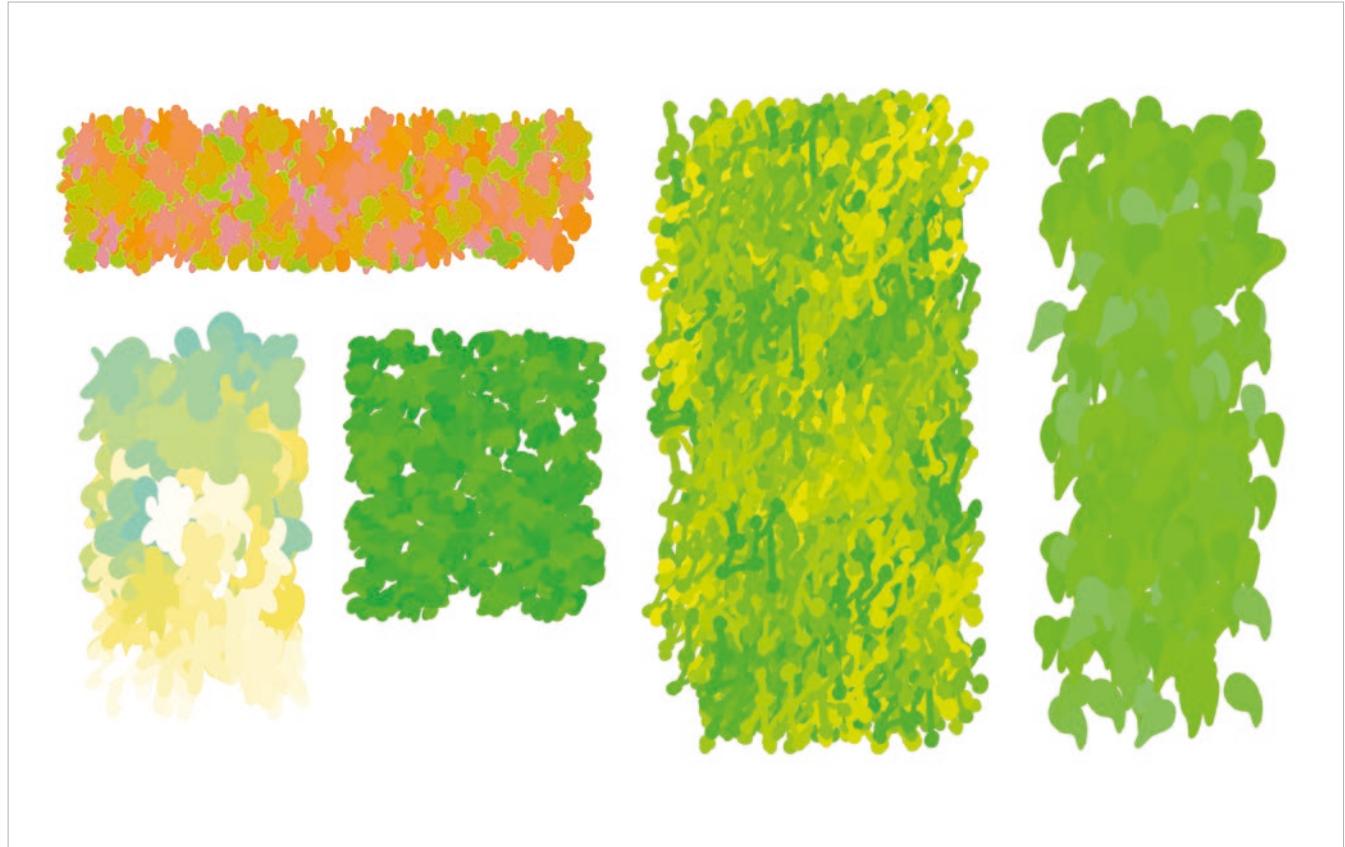
30 2D tree sprites that were used to populate the game spaces. These trees were derived from Humphrey Repton's drawings and were split into several different

colour channels that could be assigned different tones while building the levels. These six base trees appear in hundreds of different configurations.



31 Examples of plant growth systems. By using different 'brushstrokes' as individual particles, systems were created that would grow and change

colour over time to demonstrate the dynamic cycles of nature not present in static Picturesque depictions.



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32 Further examples of particle-based plant growth systems in the game. These systems were developed for the Blaise Hamlet game and were used in the other games as a common visual link.

33 Drawing from Noclip World, exposing the use of flat sprite graphics to construct environments in commercial game worlds.

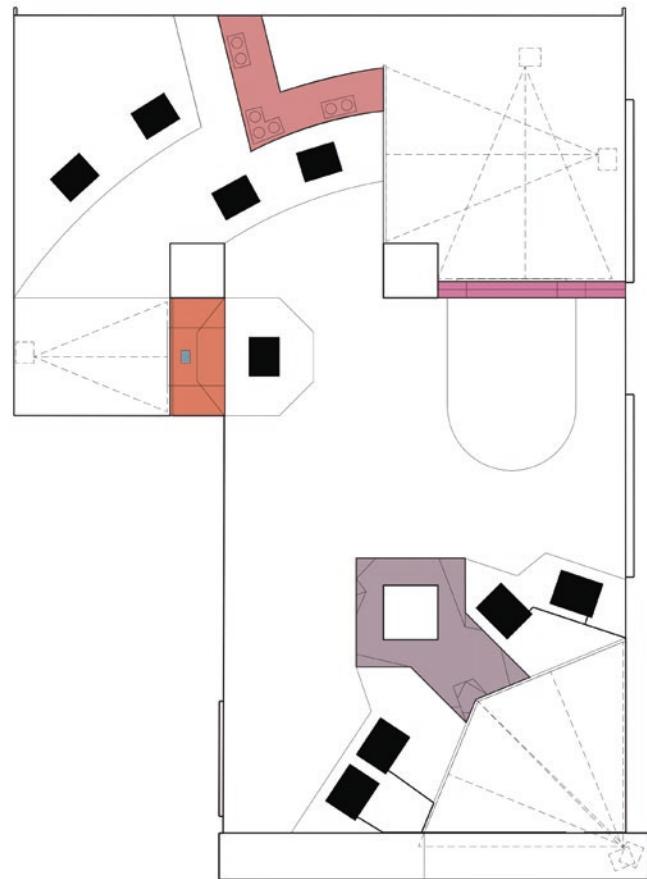


4. Design of physical interface systems, site-specific structures and artefacts combined with a virtual counterpart

Design methods using game engine software include the design of interactive interfaces, the coding of interfaces to in-game commands and the physical design and assembly of input systems, which in the case of *Playing the Picturesque* involved electrical pressure pads. The placement of these pads was developed as part of the planning of the gallery space, and their integration was connected via a USB interface and the programming of game commands that respond to button presses (34).

The work included analysis of drawings from the RIBA's archive for historical projects that were then reconstructed as 3D models for game design and fabrication. The gallery provided the context for a site-specific design, where the physical parts of the exhibition effectively extended into the virtual world using projections.

The project was then reworked for The Edge, which involved the production of a further site-specific folly design and the redesign of elements to fit into an alternative context in conversation with the fabrication and curatorial team. The *Prior Park* game was specifically designed to be projected onto the gallery floor as a virtual 'reflecting pool' (40).



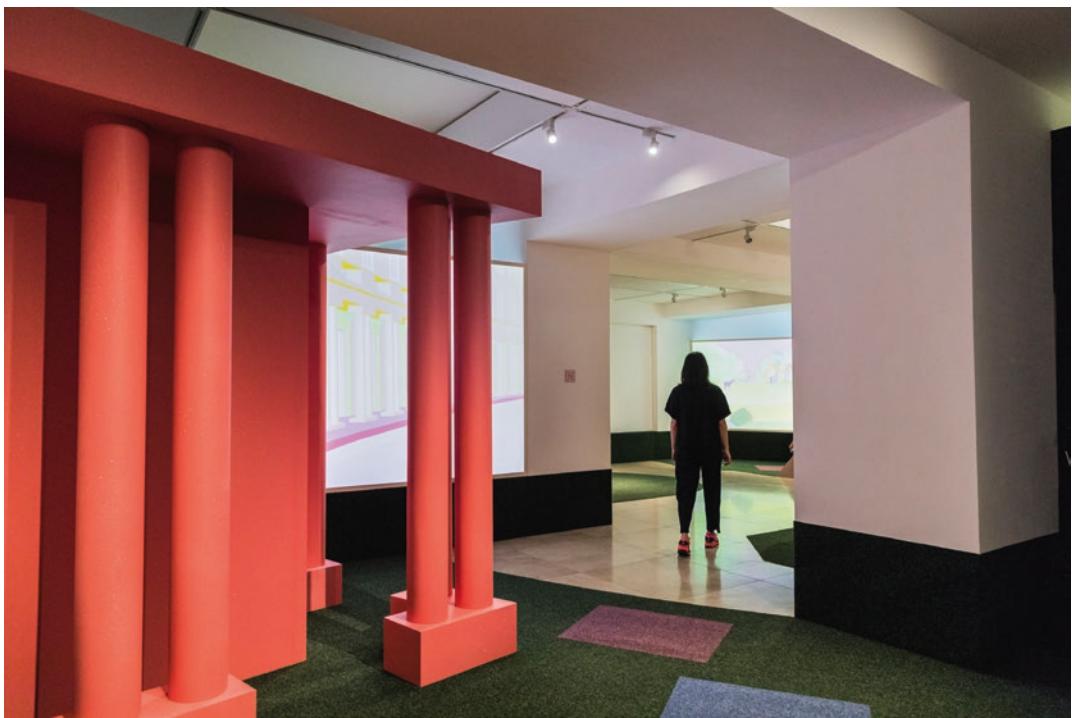
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34 Floorplan of the RIBA exhibition space, showing the positioning and connection of pressure pads in relation to the installed follies and projection screens.

35-9 (overleaf) *Playing the Picturesque*, RIBA, London, 2019.



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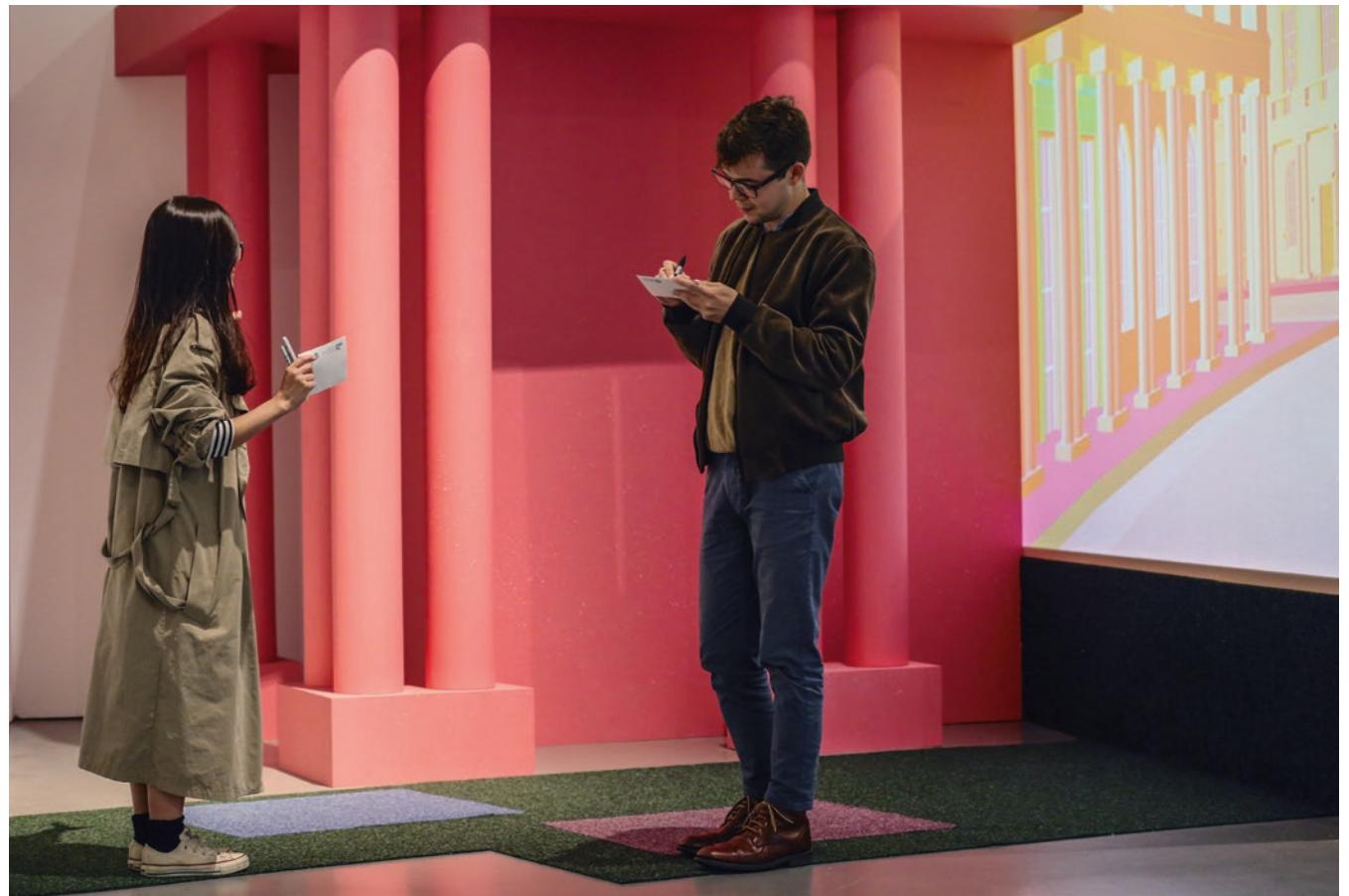
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40 *Playing the Picturesque*,
The Edge, Bath, 2019.

Dissemination

Playing the Picturesque was primarily disseminated through two solo exhibitions comprising five built structures and six digital videogames. The first exhibition, running from June to September 2019 was installed at RIBA, London, and received 6,943 visitors. During this period, Pearson and Youkhana gave invited lectures at the RIBA on the project (324 visitors); conducted public and private tours, including for organisations such as Samsung Design Europe; and provided supplementary information for school tours run by the RIBA education team. They also designed project visuals for the RIBA's *What's On* guide, alongside large-scale banners within the RIBA headquarters (41) and digital signage. Visuals from the project were disseminated through a commissioned edition sold through the RIBA's website. Notable reviews include the *The RIBA Journal*, *Londonist* and *Architecture Today* (all 2019).

Following this, the project was commissioned as a travelling exhibition by the Andrew Brownsword Gallery and The Edge in Bath, which also involved the production of a new site-specific folly and digital videogame. This second exhibition ran from September to December 2019, receiving 2,080 visitors, plus several workshop and community group visits. During this period, Pearson and Youkhana gave an invited lecture at The Edge on the design of the project and their wider research. They also produced visuals for the website, digital signage, exhibition guides and merchandise, and designed a custom double-decker bus livery that was advertised on routes within Bath, giving the project significant public presence (42). Pearson and Youkhana were also interviewed by *The Bath Magazine* about the project (2019).

The project is directly discussed in a piece for *SITE* (2019), as part of a wider conversation into Pearson's research practice. This practice and the approaches that have been developed to help realise the work were discussed in more detail in Pearson's 9,000-word double-blind reviewed article 'A Machine for Playing In: Exploring the Videogame as a Medium for Architectural Design', published in *Design Studies* (see pp. 86–115).

Further relevant themes such as the colour and materiality of virtual worlds have been explored in an article by Pearson for the book *Architectonics of Game Spaces: The Spatial Logic of the Virtual and Its Meaning for the Real* (Gerber and Gotz 2019).

The relationship between games and historical architectural representations, including the Picturesque, was examined in 'Videogame Urbanism: A Visual Manifesto by You+Pea', commissioned and published by *Volume* (2019). It was further discussed by Pearson in 'From Superstudio to Super Mario', published by *e-flux* (2019).



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41 Signage at the RIBA's London headquarters, using custom drawings produced specifically for public engagement throughout the course of the exhibition.



42 A bus livery in Bath featuring bespoke drawings by You+Pea.

Project Highlights

Playing the Picturesque was a prestigious commission by the RIBA. The original competition was won through an international open call and the design was selected from 80 entries. The commission panel included the RIBA's Head of Exhibitions, Dezeen's Deputy Editor and the V&A's Keeper of Design, Architecture and Digital. As part of the commission, Pearson and Youkhana produced an edition that the RIBA acquired for its permanent drawing collection, prints of which are sold to the public through the RIBA's website (43). Following the commission, Pearson was appointed as a judge for the RIBA Open 2020 competition.

The success of *Playing the Picturesque* led to it being optioned as a RIBA travelling exhibition, resulting in a second commission to produce an expanded version for The Edge in Bath. In total, the project comprised six months of solo exhibition. Following the exhibition at The Edge, the Bath-specific game produced for the exhibition became a permanent exhibit at the arts centre.

Bibliography

Böttger, M., von Borries, F. and Walz, S. (2007). *Space Time Play: Computer Games, Architecture and Urbanism: The Next Level*. Basel: Birkhäuser.

Gerber, A. and Gotz, U. eds. (2019) *Architectonics of Game Spaces: The Spatial Logic of the Virtual and Its Meaning for the Real*. Bielefeld: Transcript.

Green, M. A. (1904). *The Eighteenth Century Architecture of Bath*. Bath: George Gregory.

Macarthur, J. (2007). *The Picturesque: Architecture, Disgust and Other Irregularities*. London: Routledge.

Nitsche, M. (2008). *Video Game Spaces: Image, Play and Structure in 3D Worlds*. Cambridge, Mass.: The MIT Press.

Pearson, L. (2016). 'Architectures of Deviation: Exploring the Spatial Protocols of Contemporary Videogames'. *Architectural Research Quarterly*. **19** (3). pp. 269–82.

Pearson, L. (2018). *Architecture of the Half-Real*. PhD Thesis. The Bartlett School of Architecture, UCL.

Pearson, L. (2018). 'Worlds That Are Given: How Architecture Speaks Through Videogames'. *Thresholds: Scatter!*. **46**. pp. 264–75.

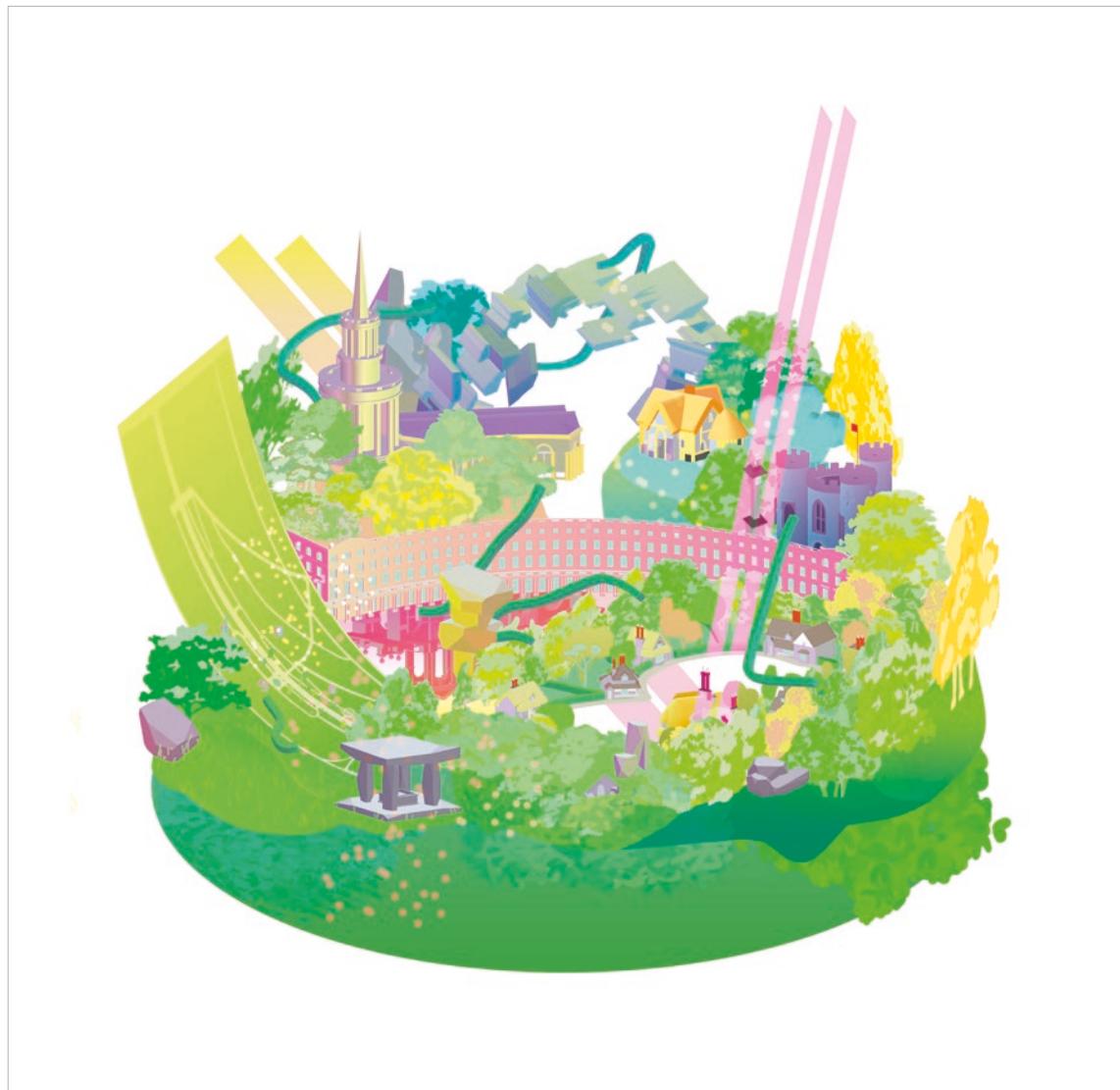
Repton, H. (1985). *Humphry Repton's Red Book for Blaise Castle*. Bath: Friends of Blaise.

Sharp, J. (2015). *Works of Game*. Cambridge, Mass.: The MIT Press.

Shenstone, W. (1764). *The Works in Prose and Verse of William Shenstone, Esq.* London: James Dodsley.

Venturi, R., Scott Brown, D. and Izenour, S. (1972). *Learning from Las Vegas*. Cambridge, Mass.: The MIT Press.

Walz, S. (2010). *Toward a Ludic Architecture: The Space of Play and Games*. Pittsburgh, Penn.: ETC Press.



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43 Drawing combining structures and natural forms from the six games. This drawing was developed using multiple screenshots, a form of

drawing that operates between dynamic game spaces and static representations developed as a way of communicating the games.

Related Publications by the Researchers

Pearson, L. (2019). 'Video Game Urbanism: How We Design Virtual Game Spaces to Engage New Audiences with the Architecture of Tomorrow'. Gerber, A. and Gotz, U. eds. *Architectonics of Game Spaces: The Spatial Logic of the Virtual and Its Meaning for the Real*. Bielefeld: Transcript. pp. 5–24 

Pearson, L. (2020). 'A Machine for Playing In: Exploring the Videogame as a Medium for Architectural Design'. *Design Studies*. **66**. pp. 114–43. 

Pearson, L. and Youkhana, S. (2019). 'Videogame Urbanism: A Visual Manifesto by You+Pea'. *Volume*. **2**. pp. 54–9. 

Pearson, L. and Youkhana, S. (2019). 'Videogame Urbanism: Using Game Spaces to Challenge the Future of Cities'. *Site*. pp. 28–39. 

Pearson, L. (2019). 'De Superstudio a Super Mario'. *Arquine*. **90**. pp. 88–93. 

Pearson, L. (2019). 'From Superstudio to Super Mario'. *e-flux*. 21 February. 

Related Writings by Others

Khan, T. (2019). '14 Exhibitions That'll Blow You Away This Summer'. *Londonist*. 21 June. 

Architecture Today (2019). 'Fresh Perspectives on History'. *Architecture Today*. 6 June. 

Buxton, P. (2019). 'Fun and Gaming with Picturesque Follies'. *The RIBA Journal*. 17 June. 

The Bath Magazine (2019). 'The Picturesque in Bath'. *The Bath Magazine*. October. pp. 28–9. 

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