

## **What is the role of architecture and urban design in the creation of spaces that enrich human well-being through play?**

### **Introduction**

This thesis aims to develop a new urban and architectural condition for the site of the existing Molenpoort shopping centre, within Nijmegen city centre. Cities today have become focused on effective physical organisation and the efficient movement of people and goods. While there is certainly an argument for progress and efficiency in the world, this thesis aims to take a step back by balancing efficiency with spaces for play and escape. The project aims to achieve this balance through the design of a space for healthy living using play as one of its primary tools.

The most immediate issue seen on the site is the gradual decline of the Molenpoort, made evident by empty units. This issue reaches far beyond the site as similar issues are seen in malls and shopping centres around the world. The Harvard Project on the City identified the fact that shopping is vulnerable to decline due to its very nature. Shopping thrives on creating consumerist cycles, demanding people buy the newest version and forcing them to through planned obsolescence. In this way shopping centres need to appear new to attract the attention of consumers.<sup>1</sup> This situation raises the question of how shopping centres should be re-developed and if they provide society with an opportunity to reconsider its values.

### **Fieldwork**

#### **What time is this place?**

The themes of play and escape emerged as a response to the theme of structured time discovered through the group work carried out for P1. The group aimed to answer the question “what time is this place?”. The wide scope of this question soon became clear to us and the multiple angles that an investigation of this kind could offer.

During this investigation we chose to focus on three buildings surrounding the plot and the different stories that each building could tell relating to its position in society through time. The tool we decided to use to achieve this was anthropomorphism and the theme of talking buildings, which we presented through the medium of film. This choice of technique allowed us to explore the site from a different perspective compared with traditional architectural tools. The formation of characters helped us frame the historical research and decide what the important moments in each character’s development were. Anthropomorphizing the buildings made it easier to identify with the building’s stories on a more emotional level giving us a greater insight into the site’s past.

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<sup>1</sup> Koolhaas et al., *Mutations*, 174–77.

The three characters aimed to represent three different concepts of time. In answering the question “what time is this place?”, our investigation not only identified the changes that occurred to the site through time but also the different ways that time was and is experienced on the site. The church was used to demonstrate how its fragmented architectural elements act as an archive of historic moments and encapsulate a collective memory. The Farmhouse represented a time in history where there was no mechanical time but instead society functioned on the natural rhythms of life. Finally, the guesthouse was used to explore the change in society towards mechanical time that it used to enforce house rules. Together the relationships and conflicts between these three characters told the story of how the plot changed from a countryside community to a more fragmented collection of buildings as the site became part of the city.



Fig 01:  
Top - model of church fragments;  
Mid – model demonstrating the natural rhythms of the seasons;  
Bottom – model of the guesthouse demonstrating structured mechanical time.

The story of standardised time compared with experienced time became a focus of our research. The church on the site along with the guesthouse that previously stood in the place of the Molenpoort shopping centre were conceived together as a monastery. Monasteries held one of the most significant developments in the standardisation of time through the creation of the Benedictine order and their periodic bells. The mechanical clock, first used by the monasteries, helped to stabilise society, regulating the sensations and temporal patterns of the human body. The clock then turned from punctuating the days of the monks to standardising time for surrounding communities when the church began to ring its bell to signal the hours of the day. This standardisation of time has continued until today, where the clock on our phone governs our daily schedule. Perhaps in today’s world more consideration needs to be given to experienced time and the escape of constructed time.<sup>2</sup>

### People’s wants and needs

Part of the research conducted on the site by other members of the studio, focused on the theme of people. On reviewing the transcripts of interviews with locals it becomes clear that many themes were repeated. Firstly, it became clear that the residents view the city as very open minded and left wing, providing the example of the city housing thousands of refugees. Adding to this they mentioned the wide variety of cultural facilities in the city including: Lux art cinema, the Honing complex, the variety of small bars and cafes, Waalhalla, De Kaaij, Doomrose and Klinker. Some felt that this urban environment provided enough facilities and opportunities without the need for change.

However, some residents shared thoughts on what the city needed. These included the need for and appreciation of green space, the need to help low income families, the need for affordable housing, the need for facilities for children to play, and the want for places to sit and talk with people. These points align with the idea for the creation of an informal community focused setting that provides benefits to those with low income.

<sup>2</sup> Kwinter, *Architectures of Time*, 16–17.

### Investigation of rituals today

As the project developed, the investigation shifted to the formation of an urban plan with a group focus on creating an oasis within the city. We began with an investigation of ritual and routine on the site to gain a greater understanding of how the site is used in the present day, building on the historical research outlined above. The idea of close observation and documentation of behaviours in the city has developed further into the method outlined for continued study below.

As the first step in creating an urban plan, we implemented the drawing technique of sections. The use of sections allowed the four group members to work separately on the same proposal and allowed rituals and human interactions with the urban structure to be considered. Sections were key in implementing human interaction as “the section is the site where space, form and material intersect with human experience, establishing most clearly the relationship between body and building.”<sup>3</sup>

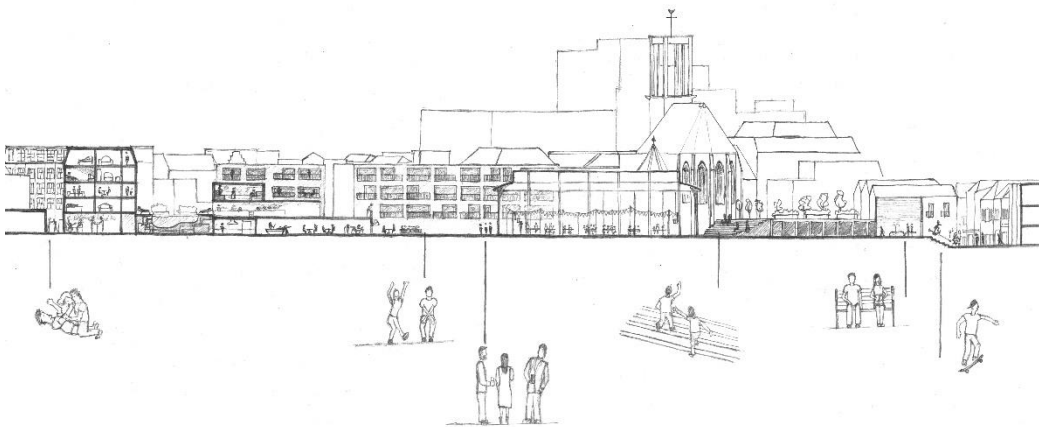


Fig 02:  
One of the first sections created in the formation of an urban plan. The section strives to insert moments of play at thresholds within the scheme.

### Further research questions

The site poses some very interesting questions about society today. Although a consumerist and capitalist society is definitely not collapsing in the world as a whole, it is on the site, with shopping units being left empty. This allows us to have a possible insight and speculate on the values we could have in a future society, post consumerism. Perhaps a future typology could provide an escape for people from consumption and constructed time, a place for self-reflection, health and well-being.

The development of the project to this point has driven a desire to investigate the creation of a space for escape from the world around us, focusing instead on health and well-being. Play has been identified below as one way to achieve this, leading to the posing of the question:

What is the role of architecture and urban design in the creation of spaces that enrich human well-being through play?

Sub-questions include:

What architectural and urban elements contribute to enabling play?

Which architectural elements create loose space for play within the city of Nijmegen?

What elements are used in projects specifically designed for play?

How much influence does architecture and urban design have in the conception of play?

What are the health benefits of play?

Consumerism dominates the spaces we have created for leisure today. Is consumerism fulfilling the needs of healthy life?

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<sup>3</sup> Lewis, *Manual of Section*, 8.

**Key terms, concepts, theories**

**Play**

Huizinga, in *Homo Ludens*, defines play as a wide-ranging concept that provides a step out of real life into a temporary sphere of activity with a disposition of its own. He sees the act of playing as something that is fundamental to being human.<sup>4</sup> Stevens builds on this with particular reference to behaviour within the urban environment in his book *The Ludic City*. He describes play as behaviours which provide informal, non-instrumental, unfunctional and inefficient social interactions. Stevens acknowledges the importance of child’s play and adds that adult play is a serious topic in its own right that can be used to stimulate and reconstruct space allowing for escape from surrounding social rules.<sup>5</sup> Play can be seen as “a voluntary departure from the mundane world of involuntary routinization”.<sup>6</sup>

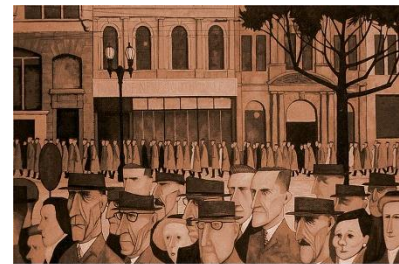
**Leisure**

Leisure can be seen as a more specific and controlled form of play. As discussed by Stevens in *The Ludic City*, the term leisure is associated with a social construct that presents play within the confinement of particular practices, normally demarcated in certain spaces and times.<sup>7</sup>

**Loose and latent space**

Loose space is defined as urban space that allows for a rich variety of activities that the space was not designed for. Activities that generate loose space are not carried out for functional purposes.<sup>8</sup> Loose spaces within the city can therefore be seen as spaces that allow enough freedom of use to be ideal places for play.

This concept is investigated further by Stanford Anderson in *On Streets*, where he discusses the idea of latent space in architecture. He argues that the potential environment seen throughout the city is experienced by the city occupants as individual effective (influential) environments unique to individual interpretation. The gap between the potential environment and the influential environments then creates the unutilised latent environment. Anderson argues that spaces that have less defined uses provide more latent space and therefore allow for more individual interpretation on how the space is used.<sup>9</sup> This individual interpretation creates loose space and allows for play to occur.



**THE LUDIC CITY**  
Exploring the potential of public spaces  
Quentin Stevens

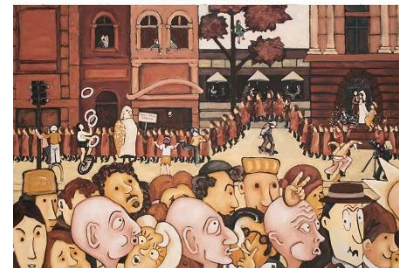


Fig 03:  
Cover of *The Ludic City* by Quentin Stevens. The cover is illustrated by Candy Stevens.

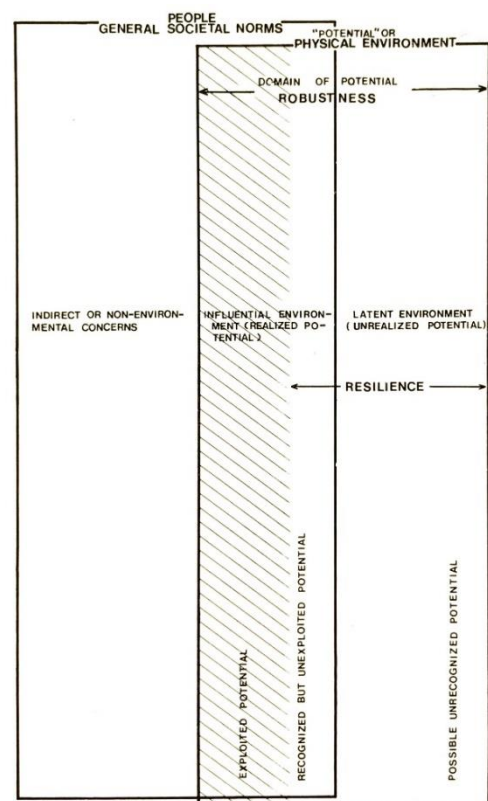


Fig 04: Social and physical environments yield influential and latent environments, from *On Streets*

<sup>4</sup> Huizinga, *Homo Ludens.*, 4–9.

<sup>5</sup> Stevens, *The Ludic City*, 1–28.

<sup>6</sup> Lyman and Scott, *The Drama of Social Reality*, 147.

<sup>7</sup> Stevens, *The Ludic City*, 28.

<sup>8</sup> Franck and Stevens, *Loose Space*, 3.

<sup>9</sup> Anderson, ‘People in the Physical Environment: The Urban Ecology of Streets’, 7–11.

Stevens develops the argument that one of the fundamental functions of public space is as a setting for informal non-instrumental social interactions, or play. He argues that play is neglected as part of the urban experience within cities, which instead focus on creating efficient spatial patterns driven by economic forces, with the aim being to maximise consumption of individuals within the city.<sup>10</sup>

This issue is also raised by the Harvard Project on the City which draws attention to the fact that movement through the city has become designed for shopping, focusing on the efficient movement of both consumers and goods. Links made between pedestrian routes, road systems, car parks, public transport and shops become the priority. Train stations, museums, hospitals, universities, the internet, the military and churches all become shops.<sup>11</sup> People within this system become cogs in the machine.

Play on the other hand is economically inefficient and impractical. In this way, play can be used as a tool to reconstruct space that allows for people to escape from the serious and efficient world constructed around them. Play is a way for people to develop their creativity and curiosity.<sup>12</sup>

Stevens suggests that paths, intersections, boundaries, thresholds and props are the places within the city that allow play to occur.<sup>13</sup> These places allow different social rules and categories to blur, providing people with the freedom to play in these spaces before then returning to another space with clear social ideas on how to behave. He gives the example of a man throwing his balled up paper bag into the bin like a basketball as he returns to work. Thresholds become spaces that allow freedom or escape of social rules.<sup>14</sup>

### **Preventative Health and Play**

There is a large collection of literature on the benefits of play for health. In the case of child's play, it is seen as an important part of development. With the mass production of toys and increased safety concerns, child's play has become more controlled. This has led to suggestions that a return to unstructured play for children, which provides physical, emotional and mental challenges, could be beneficial.<sup>15</sup> The benefits do not stop at childhood: play allows adults to escape the busy modern world around them, providing much needed stress relief. In addition to physical benefits play in adults is also important for creativity, imagination and emotional well-being.<sup>16</sup> However, one obstacle to adult play are limited social rules which restrict when it is acceptable for adults to play.<sup>17</sup> The research and design carried out as part of this thesis aims to investigate these obstacles and ways to overcome them by building on this existing knowledge and testing concepts through design.

### **Preventative Health Centres**

Perhaps best described by Pattern 47, "Health Center", of *A Pattern Language*, where Christopher Alexander calls for the creation of a new system of care, preventative health centres emphasise an active approach in keeping people healthy and not just the treatment of sickness. This system was tested during The Peckham Experiment which provided leisure and social facilities for the surrounding community as well as active participation from doctors providing knowledge on healthy living and regular consultations. The founders of the Peckham Experiment accused existing "health centres" of actually being polyclinics focused on the treatment of the sick. The Peckham Experiment was found to be successful in treating issues of early sickness leading to better health later in life, as well as providing the necessary social and physical activities for healthy living.<sup>18</sup>

The health benefits of play described above mean that play is able to perform a large role in healthy living and in the proposal for a preventative health centre.

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<sup>10</sup> Stevens, *The Ludic City*, 7.

<sup>11</sup> Koolhaas et al., *Mutations*, 125,140.

<sup>12</sup> Stevens, *The Ludic City*, 1,3,27,32,33.

<sup>13</sup> Stevens, 3.

<sup>14</sup> Franck and Stevens, *Loose Space*, 74,79,81.

<sup>15</sup> Lucas, 'Taking Play Seriously'; Whitebread, 'Free Play and Children's Mental Health'.

<sup>16</sup> Magnuson and Barnett, 'The Playful Advantage'.

<sup>17</sup> Walsh, 'Giving Permission for Adults to Play.'

<sup>18</sup> Pearse, *The Peckham Experiment*, 48,79,113,290; Alexander, *A Pattern Language*, 252-55.

## Bricolage

Bricolage is presented by Lévi-Straus in the book *The Savage Mind* as an instinctive way of discovering and creating. He cites the origin of the word from: “Bricoler - applied to billiards, to hunting, shooting and riding. It was however always used with reference to some extraneous movement: a ball rebounding, a dog straying or a horse swerving from its direct course to avoid an obstacle.”<sup>19</sup> This description gives a sense of the intuitive nature of bricolage that can be contrasted with the highly reasoned world of science. He furthers this idea by saying that an engineer works by means of concepts (aiming to be completely transparent with reality) and that, on the other hand, the bricoleur works with signs which point to concepts through the understanding of human culture.<sup>20</sup>

The role that the engineer and science has played in architecture is discussed by Rowe and Koetter in *Collage City*. They argue that total design has begun for some time to appear as a rather dubious and fruitless enterprise. They suggest in contrast a more intuitive approach influenced by a multiplicity of stimulus, aligning with the ideas of the role of the bricoleur.<sup>21</sup>

Bricolage proposes, instead of a top down total design approach, that the remains and debris of events in culture should be used to produce structure.<sup>22</sup> This can be seen as a need to move away from the top down design of effective physical order and efficiency in the city and consider balancing this with more loose and latent space inspired by what is already found in local culture. Venturi and Scott-Brown demonstrate this approach of observation and learning from our surroundings in *Learning from Las Vegas*. They propose enhancing what already exists in our environment instead of the modernist approach of changing environments.<sup>23</sup>

## Methodology

Bricolage can offer guidance on the choice and implementation of methods. Lévi-Straus describes the process as the creation of a treasury which the bricoleur will then interrogate in the creation of a new structure or project. The creation of the treasury is done through collecting elements and knowledge that might come in handy: turning back to existing sets of tools and materials to consider their use, engaging these elements in a dialog between themselves before applying the found answers to a problem. Possibilities remain limited by the history of each element and any constraints.<sup>24</sup>

With consideration for this process, I intend to continue to build on the work carried out so far and in a way that creates a treasury that I can then build from in my proposed design of a Preventative Health Centre. The aim of this centre will be to combine the benefits of play with those of having regular access to doctors and knowledge regarding health. One clear and obvious step in this process is the need to gain a greater understanding of existing knowledge on the design of health buildings as well as continuing to research the link between play and health. These aspects will be primarily dealt with through literature review and the use of existing health buildings as design precedents.

The other aspect of continued investigation is that of the design of architectural and urban elements that create meaningful spaces for play. The aim of this aspect of my research is to create a treasury of architectural elements that allow for play. This will be achieved in two ways.

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<sup>19</sup> Lévi-strauss, *The Savage Mind*, 16.

<sup>20</sup> Lévi-strauss, 13–19.

<sup>21</sup> Rowe and Koetter, *Collage City*, 51,53.

<sup>22</sup> Lévi-strauss, *The Savage Mind*, 22.

<sup>23</sup> Venturi, Izenour, and Brown, *Learning from Las Vegas - Revised Edition*, 3.

<sup>24</sup> Lévi-strauss, *The Savage Mind*, 18–19.

Firstly, through observation I will document loose space within the city of Nijmegen that provides opportunity for play. My aim in doing this is to gain a greater understanding of the context in which my project will sit, as well as building a collection of examples of real-world architectural elements that create space for play. This will be done by cataloguing architectural and urban elements in the city that are being used for something other than their primary function and are therefore successful in creating loose space. I will create a matrix of elements. For each entry into the matrix I will record the following fields with drawings: the element, the intended use, the observed use and a speculative use. The proposal of a speculative use field intends to introduce an element of design into the method and allow an investigation into the theory of loose and latent space.

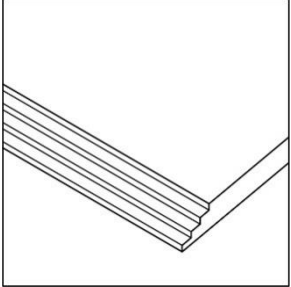
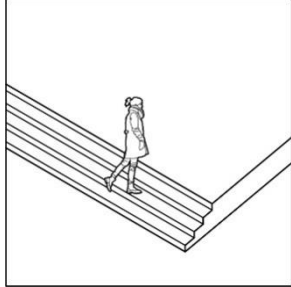
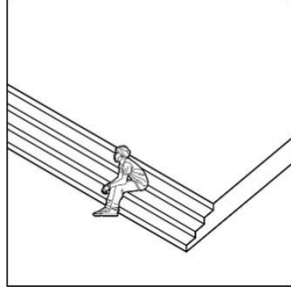
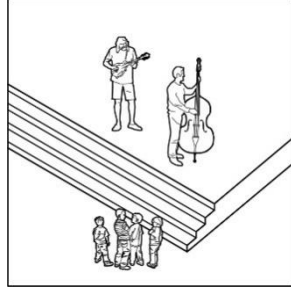
Element	Intended use	Observed use	Speculative use
 <p data-bbox="272 875 341 904">Steps</p>	 <p data-bbox="564 875 697 904">Circulation</p>	 <p data-bbox="927 875 986 904">Seat</p>	 <p data-bbox="1251 875 1310 904">Stage</p>

Fig 5: A basic example of an entry into the matrix for the architectural element "steps". In creating the matrix I will experiment with mediums and techniques in drawing.

Secondly, I will analyse and review architectural projects that have been deliberately designed to facilitate play. The Fun Palace by Cedric Price and New Babylon by Constant Nieuwenhuys will be the initial focus of this approach. For both projects, the theories and ideas behind each scheme will be analysed through literature review. With this gained interpretation of the projects I will then extrapolate and project the themes and ideas to produce drawings of architectural elements in line with the developed theoretical positions. This approach also helps to introduce an element of design into the methodology which will add to my treasury of architectural elements that facilitate play.

This treasury of elements along with all of the other information collected will form the tools used for the materialization of the design of a Preventative Health Center for the city of Nijmegen.

## Image references

Fig 1: Top - model of church fragment; Mid – model demonstrating the natural rhythms of the seasons; Bottom – model of the guesthouse demonstrating structured mechanical time: Photographs of models created as part of group investigation. Group members: Alma Bouwens, Alex Comanceanu, Alejandra Ferrera, Elisabeth Ihrig, Andrew Kelso, Julie Moraca, Laura Piccinin, and Roséane Singotani.

Fig 2: Created by author

Fig 3: Cover image illustrated by Candy Stevens from: *The Ludic City: Exploring the Potential of Public Spaces* by Stevens, Quentin, cover image. London ; New York: Routledge, 2007.

Fig 4: Social and physical environments yield influential and latent environments, from *On Streets*, by Anderson, Stanford, 1–11. Cambridge, Mass: MIT Press, 1978.

Fig 5: Created by author

## Bibliography

- Alexander, Christopher. *A Pattern Language : Towns, Buildings, Construction*. New York : Oxford University Press, 1977.
- Anderson, Stanford. 'People in the Physical Environmetn: The Urban Ecology of Streets'. In *On Streets*, 1–11. Cambridge, Mass: MIT Press, 1978.
- Franck, Karen, and Quentin Stevens. *Loose Space: Possibility and Diversity in Urban Life*. Routledge, 2006.
- Huizinga, Johan H. *Homo Ludens*. London: Routledge, 1949.
- Koolhaas, Rem, Stefano Boeri, Sanford Kwinter, Hans Ulrich Obrist, and Nadia Tazi. *Mutations: A Cultural Event on the Contemporary City*. Edited by Armelle Lavalou. Barcelona: Actar, 2000.
- Kwinter, Sanford. *Architectures of Time: Toward a Theory of the Event in Modernist Culture*. MIT Press, 2002.
- Lévi-strauss, Claude. *The Savage Mind*. University of Chicago Press, 1966.
- Lewis, Paul. *Manual of Section*. New York : Princeton Architectural Press, 2016.
- Lucas, Catherine. 'Taking Play Seriously'. *The Lancet Child & Adolescent Health* 4, no. 1 (January 2020): 19. [https://doi.org/10.1016/S2352-4642\(19\)30390-6](https://doi.org/10.1016/S2352-4642(19)30390-6).
- Lyman, Stanford M., and Marvin B. Scott. *The Drama of Social Reality*. Oxford University Press, 1975.
- Magnuson, Cale D., and Lynn A. Barnett. 'The Playful Advantage: How Playfulness Enhances Coping with Stress'. *Leisure Sciences* 35, no. 2 (1 March 2013): 129–44. <https://doi.org/10.1080/01490400.2013.761905>.
- Pearse, Innes Hope. *The Peckham Experiment : A Study in the Living Structure of Society*. New Haven, 1947.
- Rowe, Colin, and Fred Koetter. *Collage City*. MIT Press, 1983.
- Stevens, Quentin. *The Ludic City: Exploring the Potential of Public Spaces*. London ; New York: Routledge, 2007.
- Venturi, Robert, Steven Izenour, and Denise Scott Brown. *Learning from Las Vegas - Revised Edition: The Forgotten Symbolism of Architectural Form*. Revised edition. Cambridge, Mass.: The MIT Press, 1977.
- Walsh, Andrew. 'Giving Permission for Adults to Play.' *The Journal of Play in Adulthood* 1, no. 1 (9 July 2019). <https://doi.org/10.5920/jpa.565>.
- Whitebread, David. 'Free Play and Children's Mental Health'. *The Lancet Child & Adolescent Health* 1, no. 3 (1 November 2017): 167–69. [https://doi.org/10.1016/S2352-4642\(17\)30092-5](https://doi.org/10.1016/S2352-4642(17)30092-5).