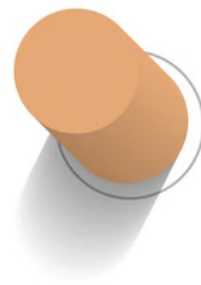


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CRITICAL CONTEXT

The unhomely space: The examination of homeliness in healthcare essay.



APPENDIX

- Essay map
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PHYSICAL CONTEXT

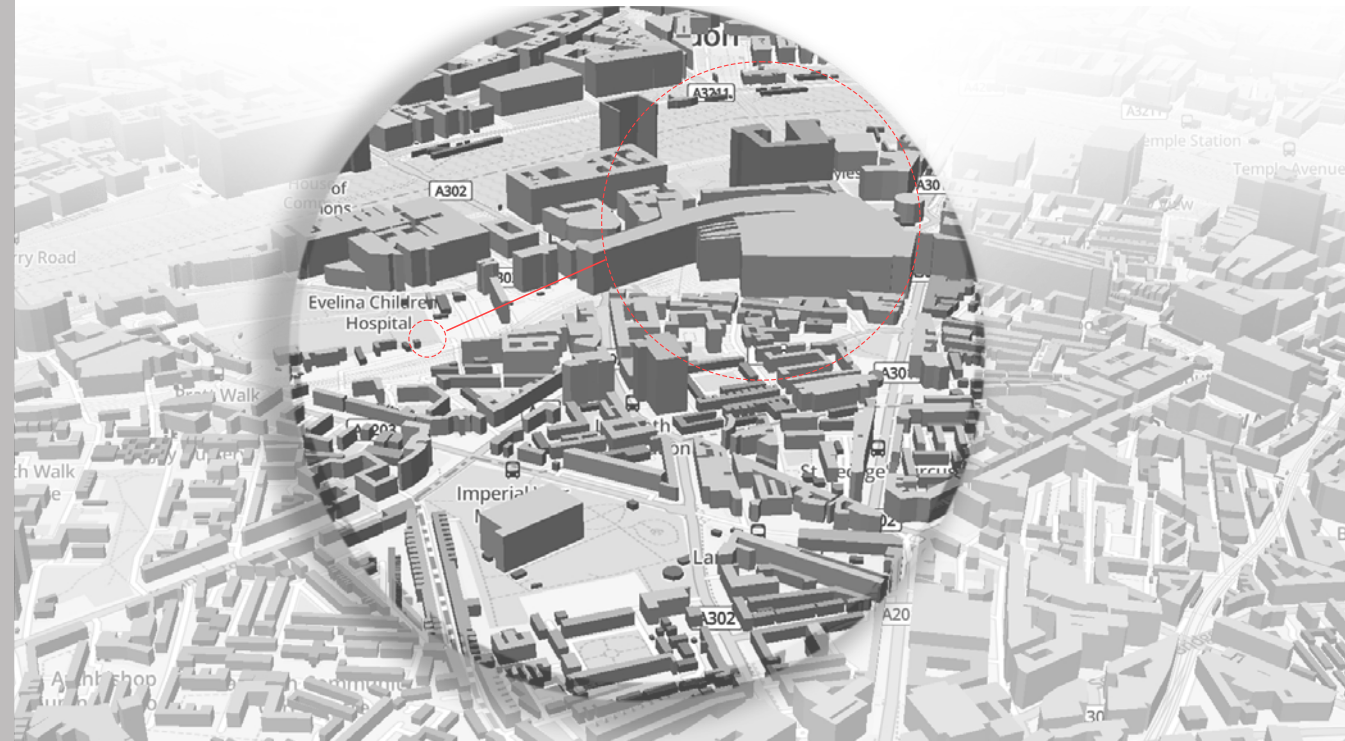


Image above showing Waterloo Station in relation to the Waterloo Farm that is positioned further across the site.

SITE MAPPING

The Thames Path: Walking and cycling route, continuous flow of people.

Moderate traffic leading towards the River Thames with all the attractions.

Lambeth Rd: Noisiest street because of the amount of schools, cars, vans.



SITE WRITING : EXTERIOR

Slow looking



Waterloo Station is a first semester site located on the South Bank of the River Thames and in the borough of Lambeth. Entering Waterloo Station from Victory Arch, I was immediately struck with the station's historical importance. The arch is built out of Portland Stone and commemorates the Railway workers who gave their lives in WWI. Entering the station under the eyes of the intricate sculptures left me feeling grateful for their sacrifice. The overhead grouping of the three largest statues made me think of guardian angels offering safe passage.

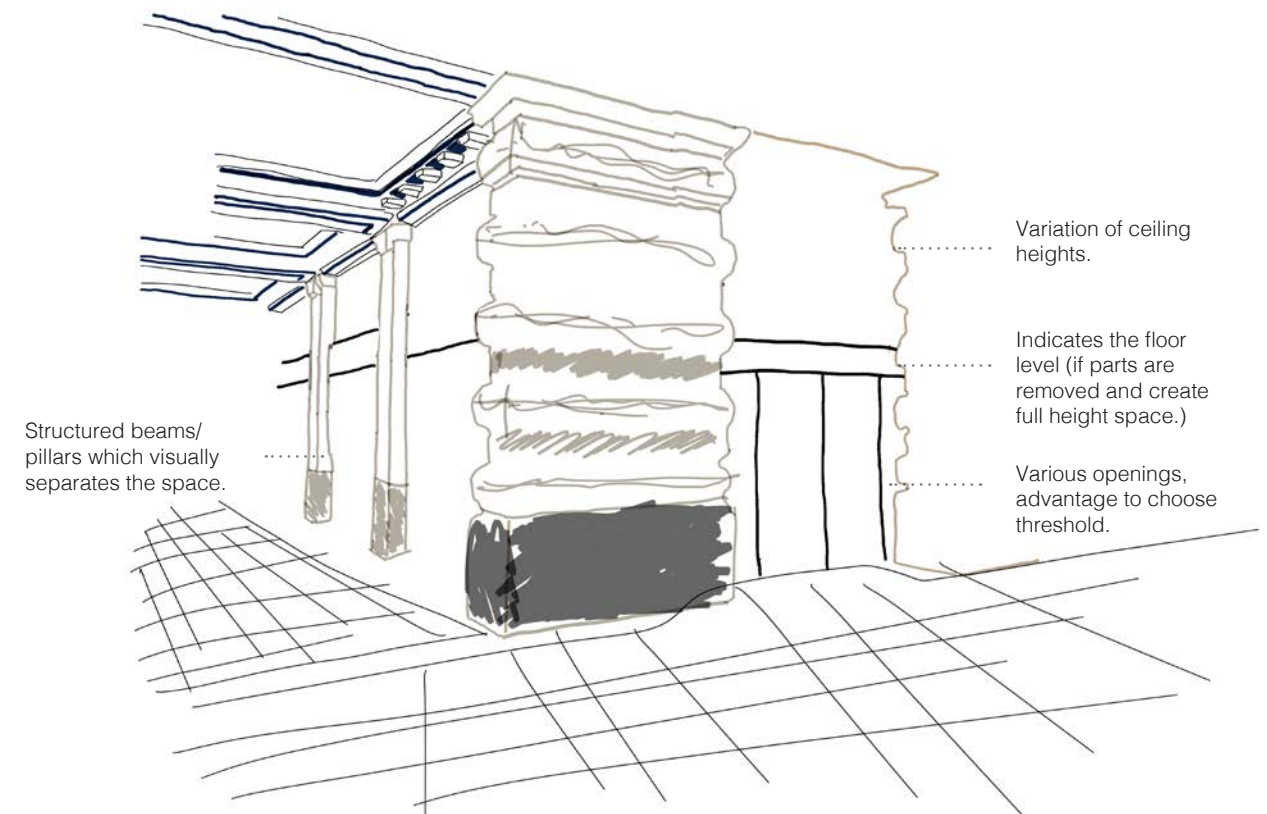
Once inside, I was struck by a burst of cold air and the sound of many rushing travellers. Together with the wide passageways, flashing departure screens and reflective white floors made me feel rushed and I quickly made my way deeper into the station. The double volume walkways with the overhead railing and industrial lighting gave the distinct impression of an aeroplane hanger which further added to the feeling of frantic energy I associate with travel.

SITE WRITING : INTERIOR

Slow looking

The station is the largest in the UK and was not designed to be a terminus/main station so was rebuilt in the early 20th century but the many different platforms, entrances and exits still gave me the impression of being lost in a maze. Contrasting this, the slow moving escalator guides one up into the second level where shopping stores, coffee couches and slow walking shoppers give off the opposite energy. There are almost 100 million entries to the station each year and standing above watching the hurried travellers criss cross each other made me feel overwhelmed at the speed of the cities busiest transport hub. The large clock hanging in the middle of Waterloo stands as an eerie reminder of time quickly passing and the need to hurry onto my train while also providing another reminder of the stations historical significance. There's an incredible transition between the inside and the outside from where I am standing.

There's a remarkable sense of place, a feeling of complete focus and concentration from when I walk into the station where I suddenly become enclosed, where the station has enveloped me, it's keeping travellers, strangers and myself together. Observing the tension which is maximising, people are keen to hurry home and relax for the weekend. By contrast, cyclists are relaxed and enjoying themselves in the city street, they seem to be monopolising the cities most functionalised space, rolling along slowly. This is their playful escape from efficient transport.



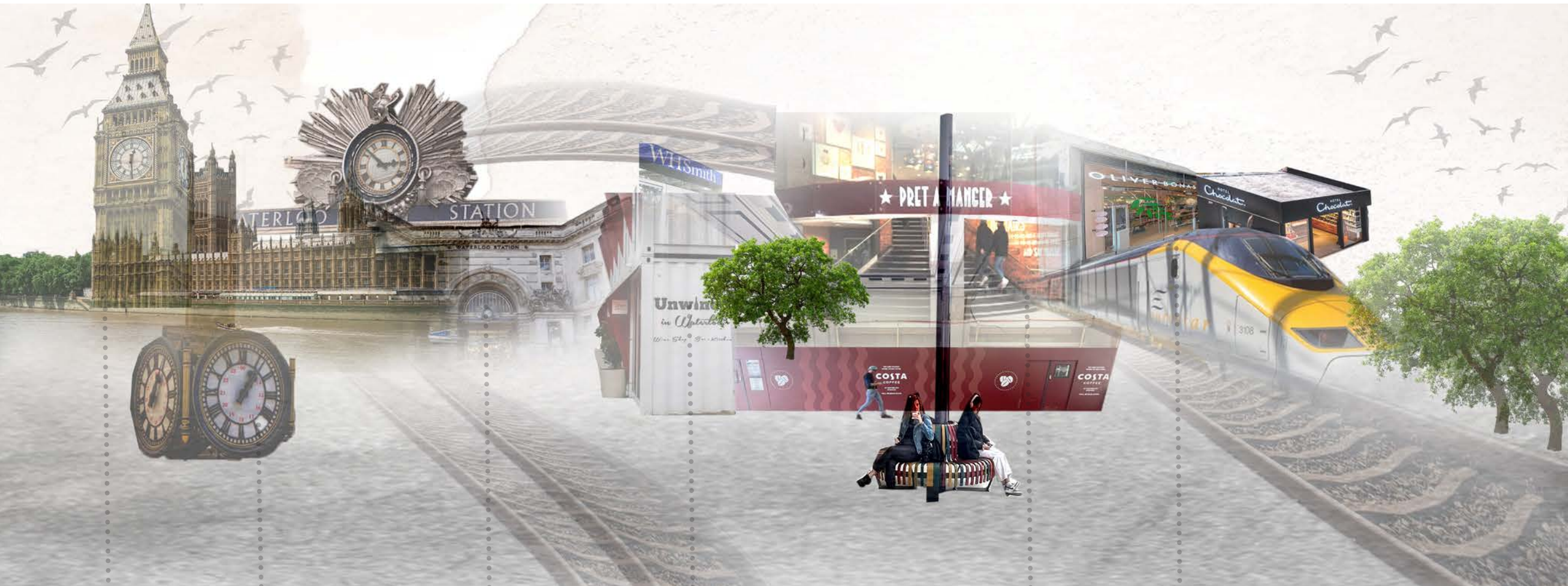
Structured beams/
pillars which visually
separates the space.

Variation of ceiling
heights.

Indicates the floor
level (if parts are
removed and create
full height space.)

Various openings,
advantage to choose
threshold.

PHOTO MONTAGE



House of Parliament

There is a lot of rich culture around Waterloo, the houses of Parliament is seated across the River Thames; reminding residents/visitors of the rich history England has. There is also a lot of green land around the area, where kids can play in the play-grounds area.

Big Ben

The Great clock of Westminster is located at the north end of the Palace of Westminster. The monument reminds residents about the rich history, the area feels busy and touristy.

Waterloo Station

Located in the busy parts of London, thousands of people come in and out. The interior and exterior of the building also highlights the significant history that went on around WW1 and WW2. Restaurants, cafés, retail stores surround the station, making a day out in London enjoying and pleasant.

Unwined

The bar is a 5 minute walk from the station, located on Lower Marsh, offering various wine tastings and seasonal wines. The area feels quiet calm, whilst at night it is more vibrant and loud.

Pret a Manger

A coffee store located in the station. It is a two story dining and takeaway shop, facing the big Waterloo clock and train times.

Oliver Bonas

The retail store is located on the second level of the station, a separation between the business and calm. Tourists or residents who come into the station may want to spend their time shopping, which is also easily accessible

ZOOM IN
Fragments & details -exterior & interior of Waterloo Station



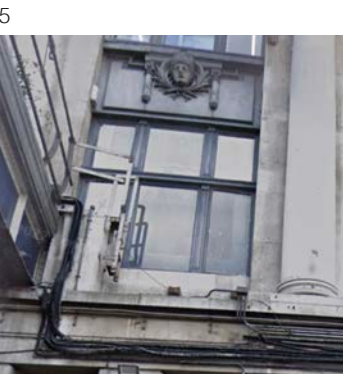
1. Timber wood structure that supports and holds the foundation of the building. Contrasting with the plastic sheet that also is bring supporting by the wood with metal bolts. The difference in materials is complimentary for it's purposes.

2. This commemorates the London and Southern Railway men who gave their lives in the First and Second World Wars.



3. Another dynamic infill of what used to be there which is replaced by a rustic metal.

4. Stamford Street coal hold cover. This was the last remaining 'dog and pot' coal hole cover left which has not been stolen; it is set in concrete. The name is an old pub name which Dickens noted.



5. The pips lines are reflect on being exposed and seen.

6. The original archway which is hidden by the glass balcony. This used to be the main road entrance. The stained glass window was incorporated into the finished building.



7. The dynamic and contrasting pattern within the pavement was used to add details, determine circulation routes and create visible separation.

8. Cold and rough concrete surface contrasting with richly metal. Material difference secretly implies what is being hidden, or what was there and now is removed. Dramatic changes suffered over time.



9. Remains from the structure of when the station was rebuilt in 1922. These exposed bolts and screws were kept to preserve this historical background.

10. The tactile beige paint shows the wear and tear of the building contrasting with the navy painted structure that wraps around both ends of the pillar. Showing versatility between old and new.



11. Various metal structures that were left to slowly decay can be found on the outside wall of the site. The weathered metal that still remains attached to the wall implies to the area s nostalgic atmosphere.

12. Another way of self-expression by the younger generation, highlighting the residential aspect of the area.



The illustration created demonstrates the layout of the station. Standing on the first floor I sketch out the busiest and most iconic transportation hubs in the city. Sketching movement of travellers, whilst also engaging with the interior design of the station which must effectively balance functionality and aesthetics. The result is a noteworthy example of transportation design that enhances the passenger experience. It is designed to facilitate the flow of passengers, with multiple entrances and a central concourse leading to the various platforms. The use of multiple colours used in the image indicates the rapid movement in the station. For example, the colour orange in the image functions as the amenities such as food vendors and shops to serve the needs of its travellers. In terms of aesthetics, the interior design of Waterloo station impresses with its use of materials and finishes. The architecture of the station is grand and imposing, with high ceiling and arched openings. The result is a passenger experience that is both efficient and enjoyable.

Etymology

According to Cambridge Dictionary, the word 'corkscrew' is defined as 'a device for removing corks from bottles, that consists of a handle with a twisted metal rod to push into the cork and pull it out'.¹

Detailed description of the object

The object in front of me looks foreign yet it can be described entirely in terms of its physical make-up. It has a certain weight, a certain combination of colour, it has a certain shape, several parts, it is made of certain materials with certain chemical, optical, mechanical properties. I can assume it can be used for all sorts of different purposes, due to its weight, it could for instance, be used as a paper weight on a desk. It has a certain yet strange dynamic feel to it, as there are many parts which move.

At hand, the object looks like an extraordinary toy because of the different ways it operates and moves. There are physical and structural properties which seem to be more complicated than a child's entertainment toy, such as the metal lever. The metal lever that look like two metal legs hang down from the structure, as I squeeze it together it reminds me of a stress ball sensation. Physical effort spreads in an optimal way across the surface of my palm when I grip and squeeze the tool.

The relatively thick curved legs, or wings have a flat yet curved surface, the pushing and pull force and the gripping surface area seem to be one of the most important features. Paying attention to the tactile product design shows the material selection, which is brushed metal that feels smooth and cold, joined with a black matt plastic feature. These two materials contrast each other in their weight properties. The metal gives an impression of heaviness, whilst plastic portrays the opposite. The different types of material show that this object is modern, usable, upgradable, and beautiful; it is not a traditional design due to its complexity and material choices.

The object looks a few years old as there's some imperfections inside the wings, such as scratches and stains, indicating how usable it is. Due to its strong physical makeup, the object is properly constructed, therefore, I would believe it was massed produced in a manufacturing factory.

The object as a marker of transition

The cork in the bottle being closed to then being open, relates to the design project exploration of transitioning spaces. There is a transformation process and a journey in which the cork comes off to when the bottle is exposed. Similarly this space acts as a separation from the busyness of Waterloo Station. The cork acts as a safe haven for the bottle, as it preserves it and 'exposure to oxygen is the greatest threat it faces'.¹ If too much air gets inside the wine, it will turn into vinegar, therefore it is important to protect wine from exposure to the air as much as possible. Storing open wine in cooler temperatures slow down chemical processes, allowing the wine to stay relatively fresh between 3-5 days. Another form of protecting and preserving wine is through the insertion of the mixture of 'gas into the bottle to protect the wine from oxygen'². Achieving this, one would need to uncork the bottle and 'use the gas when re-sealing it, so there will be some exposure to oxygen'³. This will preserve the wine for 'months and even years'⁴. Presently, wine is stored in glass bottles as it 'portrays a premium image for wine'⁵ and also gets sold at a 'higher price'⁶. Furthermore, wine gets bottled due to the quality and taste, as well as the overall aesthetics, drinking experience and sustainability as it is not harmful to the environment. Glass manufactures are producing 'thicker glass to reduce the risk of breakage'⁷, this will allow safety in the transportation process. Wine, much like glass, is a natural product, marking an important role in a more environmentally friendly future. This is in contrast to being stored in oak barrels as was done historically. Historically, wine was stored in oak barrels which was invented by the ancient Romans, they did this for an 'easy and practical way to transport wine'⁸, not only through sea but by land. Noticing that the oak affected the wine in terms of its flavour and tannins. The exploration of the corkscrew has shown the contrasting materials, industrial yet sustainable elements and the transition of the cork being closed to open. These elements can be seen in the design project, which is a calming but commercial space.

¹ Wset Global (2020) The best ways to preserve wine after opening. Available at: <https://www.wsetglobal.com/knowledge-centre/blog/2020/march/31/the-best-ways-to-preserve-wine-after-opening/>

² IBID

³ IBID

⁴ IBID

⁵ The wine and more (2020) Available at: <https://www.thewineandmore.com/stories/history-wine-bottle/>

⁶ IBID

⁷ Friends of glass (2022) Available at: <https://www.friendsofglass.com/taste/why-is-wine-stored-in-glass/>

⁸ IBID



Personal experience

On a Saturday night I opened my draw in the dining room and I am troubled by the corkscrew. It has to live in a drawer with all the other hand held kitchen tools, including the cutlery whilst the knives, forks, and spoons have their segmented tray, but everything else just jumbles around. In terms of burdensomeness, the corkscrew is thick and bulky which reads to me as something like arrogance, incommensurate with its simple, single task. It's primary function it to open wine, it is designed to perform a singular function. In evoking a mode of analyse the little object is performed only for one thing which is to take the cork out of a bottle. It's a complex object which is mismatched between complexity and action that it is designed to perform.

Despite the size, form and weight of the corkscrew it is an item that is deeply valued and treasured. As a young child wine was always brought to life in my family. My father loved to brew his own wine and watch the grapes ferment for a couple of days until it started to form wine. Most importantly the act of pouring and tasting the wine that he made was greatly appreciated in my home. It brought a family dynamic of unity and togetherness as we sipped on the wine. Watching my father open the bottle of wine, with his corkscrew, which was his fathers, we stood in salience to hear the 'POP' noise of the cork coming off. Wine has become a significant segment in my life through my father teaching me how to love and appreciate it, especially understanding the rich historical value to each bottle. Therefore, opening a bottle of wine sparks certain memories that I reminiscence and reflect over.

The corkscrew is a family heirloom which gets passed down through generations, holding significant value. On my birthday the item was handed to me.

It is not just an ordinary corkscrew that rests in my draw, it is proudly exposed, displayed and honoured on my dining room sideboard. The object allows me to bring it to life in a home where it's used and taken care of. When the corkscrew descends into the cork and it comes up there's usually a loud 'POP' sound of the opening of the wine bottle. Once the cork pops off there's a gas mixture that gushes from the bottleneck which is the water dew point of water vapour, which is therefore observed in the form of a characteristic grey-white cloud of fog.

The representation of my corkscrew gives off the feeling of appreciation of importance as well as recognition, and of long-term memories. These memories are treasured and kept precious, keeping the object essential in giving life meaning. Certain memories become the mean of communicating with the substance, and justification of a life history.

Looking at perfectly imperfect internal coating of the wings, I notice a rich warm colour palette of a stain that lies peacefully on the brushed metal. Therefore, I subconsciously make a parallel to the Leake Street graffiti tunnel through the eyes of something that was once perfect and untouched is now not the same. However, the inner side of the wings is shiny, smooth and has an unyielding structure, whilst the black plastic gives a delicate and light impression. The sensations of touching both materials are even more divergent than I expected. The brushed metal of the inner and outer wings feel cold and perfectly smooth. However, some places are sharp and dangerous to play with. The plastic balances the heaviness of the metal. Similarly holding this object I reflect on my relationship with the corkscrew which contains elements of my past and present.

HISTORICAL CONTEXT



Royal Festival Hall

Royal Festival Hall is a multifunctional arts and performance venue which sits on the banks of the River Thames. It is the largest centre for the arts in Europe. The building hosts, Orchestras, concerts, dance performances and talks.

National Theatre

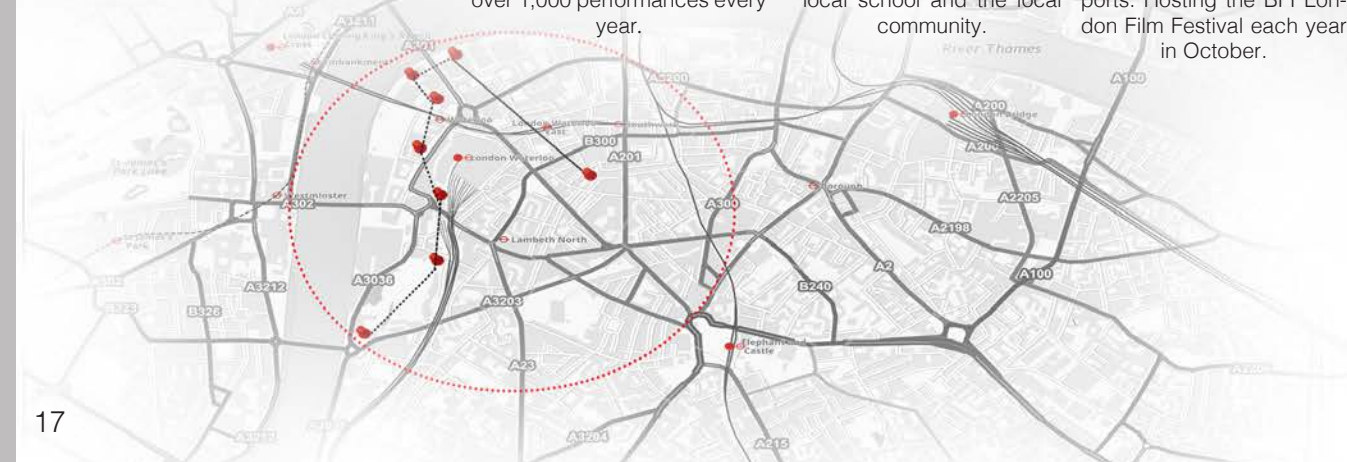
The National Theatre empowers artists and craftspeople to make world-leading work, investing in talent and developing new productions with theatre companies. Several productions can be seen in any one week and there are over 1,000 performances every year.

Young Vic

Young Vic Theatre is a performing arts venue located on The Cut, near the South Bank. The place focuses on presenting innovative productions of classic plays. It hosts workshops working with young people, local school and the local community.

BFI Mediatheque

Capitalising on the BFI's extension archives, this is the leading repertory cinema in the UK. It opened in 1951 as part of the Festival of Britain. The BFI explores black and white classics or foreign non-Hollywood imports. Hosting the BFI London Film Festival each year in October.





2017

2012

2008

Garden Museum and Cafe

Wahaca South-bank

Leake Street Arches

The award-winning Garden Café at the Garden Museum serves up a daily changing menu of modern-British and European, light, fresh and seasonal dishes.

A UK restaurant group selling Mexican style street food, with 13 branches in the UK. Wahaca has won awards for its food, design and sustainability, it is the first restaurant group in the UK to be certified as carbon neutral.

It's named after Dr. John Leake; an 18th century physician whose pioneering general lying in hospital once stood nearby. Along the street were popular wine merchants and other purveyors of alcohol. It is in Lambeth, where graffiti is tolerated regardless of the fact it is against the law.

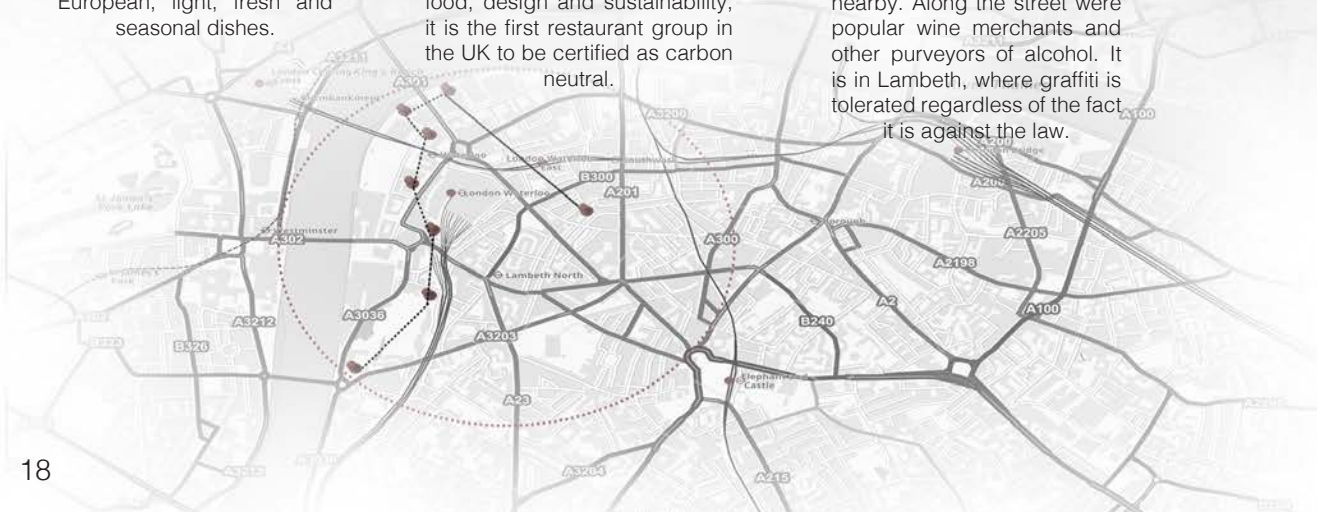


Fig.1: View of the farm.

OASIS FARM WATERLOO

Waterloo City Farm is a community farm located on a previously vacant plot of wasteland, south of Waterloo station. The site emerged when Guys' and St Thomas' Hospital invited meanwhile use proposals for 1630spm of their land. Oasis Hub Waterloo and Jamie's Farm partnered to develop the site into an education, conservation and community-oriented resource.

They have achieved this by running events, workshops and volunteering programmes on the site where at risk youth participate and learn valuable lessons while caring for the animals and contributing to the community.

This is congruent with the work of Jamie's farm who take children in danger of exclusion from an urban school to the countryside for a week of activities and therapy or give them a six week version at a farm within the city. The site is owned by Guy's and St Thomas' Hospital and was developed under a lease stipulating that the site could only be used for a limited time. As a result, all structures including the barn have been designed with prefabricated timber frames which can be disassembled and rebuilt.

Fig.3: Showing the building structure of the timber frames



Fig.2: Workshops taking place



Fig.4: Interior of the space, exposed timber frames



Fig.5: Perspective view of the building construction process



Fig.6: Threshold view looking into the interior

The farm is a half-acre in size and has three poly tunnels, raised planter beds growing vegetables, three animal sheds and an quadraphonics system. The farm was designed by Feilden Fowles Architects whose studio is now located on the farm, overlooking a Dan Pearson designed Garden. A timber barn and walled garden were subsequently constructed as centre pieces of the site. The barn is positioned across the entire site width at the entrance of the property to give it a feeling of enormous presence. Working with a temporary structure allows for design decisions to be changed, allowing flexibility for changes.



Fig.7: Render visual of group activities and talks taking place



Fig.8: Timber frames are exposed as the sun creates shadows into the space.



Fig.9 Short section of the barn.



Fig.10: Rendered perspective view of the site.

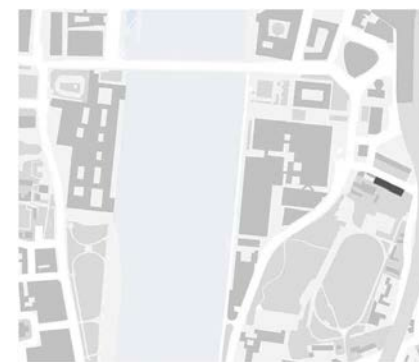


Fig.11: Site location

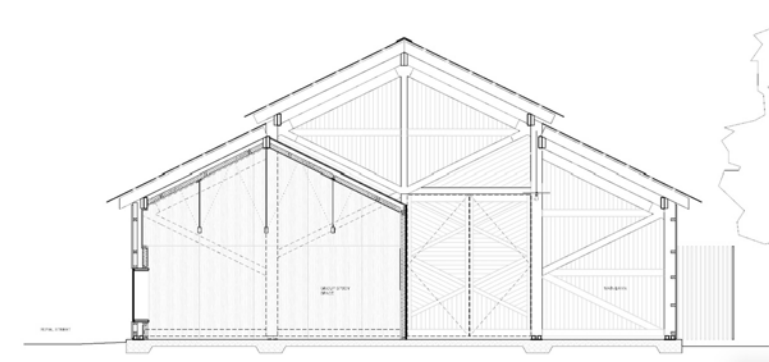


Fig.12: Short section



Fig.12: Rendered drawing

It is 6.1m tall and made from timber, corrugated glass fibre form and galvanised rolling doors. Original ideas of a steel portal frame were not used because of the soft London Clay below. The structural engineer was Peter Laidler from structure workshop and the lighting design within the barn is Re:Lit of Michael Grubb Studio. The corner of the barn has a galvanised tin enclosure, a classroom. "The insulated classroom is lined with birch-faced ply, selected for its economy and whitewashed to lift the finish. It provides space for shelving and pinned up work. The classroom provides a more traditional learning environment but retains a simple, agricultural aesthetic in line with the whole site."¹ (Fergus Feilden of Feilden Fowles) The funding for the development was from grants tied to construction packages so this area remained a concrete slab until it was enclosed through a donation from the architect. In 2018, semi enclosed garden annex was added to facilitate outdoor work in bad weather.



Fig.13: Waterloo City Farm in production

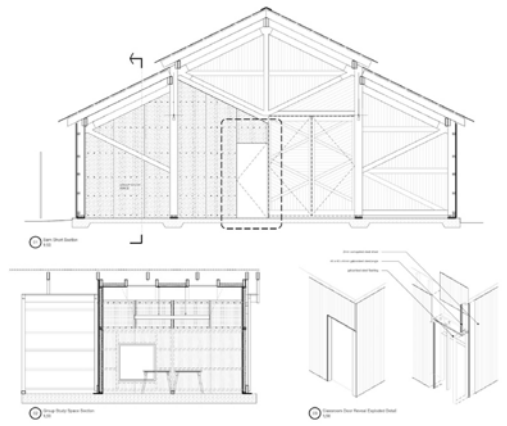


Fig.14: Technical and construction detailing drawings

CRITICAL CONTEXT

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Fig.30: <https://archello.com/story/81290/attachments/photos-videos/8>.....Page. 43

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Fig. 1. Jewish Museum, Berlin, facade. Photographed by: Mal Booth



THE UNHOMELY SPACE
THE EXAMINATION OF HOMELINESS IN HEALTHCARE

Abstract and Introduction

Abstract

This Essay aims to outline different meanings and benefits of homely and unhomely spaces in the context of interior design and architecture by exploring them in three case studies. Namely, the Nelson Mandela Children Hospital, The Maggie's Centre in Leeds and The Kitakami Health and Childcare support Complex. Each of the spaces is linked by their clinical nature and their evolution of design of clinical environments from unhomely to homely spaces to help patients of different ailments to heal. The main findings include beneficial impacts of the patient's response to the improved environment including mental health and physiological impacts. The Essay also finds that patients with serious medical procedures have better recovery experiences than their counterparts in unhomely environments.

Introduction

The word 'homely' embodies a sense of belonging and security; it is something familiar, comfortable and embodies happiness. Freud deconstructs the meaning of 'homely' as 'belonging to the house, not strange, familiar, tame, intimate...arousing a sense of agreeable restfulness and security as in one within the four walls of his house'¹. The term 'homely' is, unsurprisingly, associated with residential spaces where materials are used to create a sense of feeling at home or a sensory ambience is created which feels inviting to us. This can be achieved when entering, and being in, a certain space.

'Unhomely' refers to a negative feeling or uncomfortable sensation created by an often-clinical lack of warmth or familiarity. In 'The Architectural Uncanny' Anthony Vidler expresses the modern unhomely in which Freud demonstrates 'unhomeliness' as 'more than a simple sense of not belonging; it was the fundamental propensity of the familiar to turn on its owners, suddenly to become de-familiarized, de-realised, as if in a dream'². This feeling, too, can be based on, or provoke, emotional impulses, for example, fear or fright. Hospitals can be 'unhomely' when they are purely focused on functional, rather than emotional, needs, and a subsequent absence of warmth and a propensity to focus on pale, white surfaces to highlight cleanliness, can have the effect of making these spaces appear uninviting. This is inextricably linked to historic notions of the purposes of these environments; clinical typologies, like hospitals, were meant to heal physical ailments, prisons were designed purposely to punish, schools to educate, churches to enforce belief in God above all else. These spaces are traditionally designed as 'unhomely' to reflect their specific function and role within society.

An example of an unhomely space is the Ohio State Reformatory. Originally, The Ohio State Reformatory was not a prison but became one between 1886 and 1910³. The architecture was designed purposely like a cathedral⁴, an imposing structure, where inmates would have time to think about their sins to better themselves. The facility, and its irreparable conditions, forced the inmates to become inhuman. The disastrous condition of the interior had a catastrophic effect on inmates; the paint peeling very leprously off the walls and ceilings, making them appear as if they have got scabs on them, reflected, and reinforced the anguish that had become embedded within these prison walls⁵. The unhomely state of the prison was enforced by the lighting, with inmates living in almost total darkness⁶, creating an uncanny, eerie, and atmospherically ghostly sensation. The free-standing steel block cells and solitary confinement contributed⁷ directly to the inhumane living conditions the inmates undertook. Each cell block was constructed from steel and stone, together with a cement floor⁸; all harsh, unforgiving materials designed to punish and remind inmates of their crimes, rather than to comfort. The construction of the beds, from iron and steel which barely held together⁹, left the inmates in a rough and unhomely environment. The Ohio State Reformatory is designed to purposely shape the inmates in a brutal way and the architectural design is very unapproachable, a fortress almost, due to its towering gothic turrets and stone castle appearance¹⁰.

The negative emotional impact of the unhomely is perhaps best expressed in the Jewish Museum in Berlin, which showcases the raw, uncanny elements of how certain medical devices were used in homicide against the Jews in an extremely senseless manner. Whilst Libeskind undoubtedly designed the building as a visual metaphor for the pain and brutality of the holocaust, the architecture of the outside of the building is impressive and not entirely unwelcoming. Instead, it is the design of the interior of the museum which most obviously reflects upon the catastrophic past and reminds visitors, through the multitude of personal lost possessions which are on display, about the abhorrent persecution that was suffered.

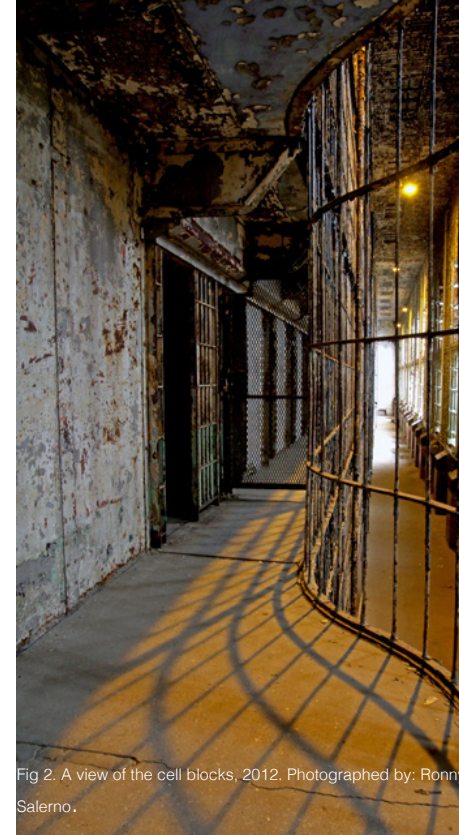


Fig 2. A view of the cell blocks, 2012. Photographed by: Ronno Salerno.



Fig 3. Installation Shalekhet (Fallen Leaves), 10,000 faces cover the floor captures painful memories of the victims. Photographed by: Hufton + Crow.

Historically, hospital environments have been frightening and unwelcoming, in part because they are associated with illness, disease and even death. Yet, since the purpose of a hospital is to diagnose and cure patients, increasingly hospital spaces have been re-imagined through more homely and playful designs, to negate this fearful feeling of going to a hospital and to help promote patient welfare. Typically, hospitals were not designed to make patients feel calm and relaxed, and their designs reflected the functions of physical treatment or the prevention of the spread of disease, rather than design considerations which would help the mental and emotional well-being of patients. My chosen case studies suggest that the evolution of hospitals has shifted towards providing comfort and calmness to aid the healing process and highlight that in medical spaces, patients are more likely to respond better to treatment when they are in a more welcoming and thoughtfully designed environment. Designers are pushing the boundaries of redesigning typical and traditional hospital environments into more homely ones through, for example, the decoration of the walls and the strong use of bright, positive colours, or through bringing nature that is outdoors, inside.

I will explore three case studies that will examine the homely elements in clinical environments: Nelson Mandela's Children's Hospital, the Maggie Centre in Leeds and the Kitakami Health and Childcare Support Complex.

The Nelson Mandela Children's Hospital in South Africa creatively uses decorative art that surrounds the walls to mimic what would be found in a domestic arrangement, as well as integrating nature within the grounds that aids the healing process. Colour plays a significant role in the design of the space and, as opposed to the unhomely spaces mentioned above, the visual appearance of this interior immediately produces feelings of safety and comfort. The hospital considers the ways that atmospheric functions play a critical role in care in ways rarely considered in my historical examples.

The Maggie Centre in Leeds demonstrates biophilia and domesticity, with the designers taking the domestic motif of bringing nature into the space, to bring a sense of comfort and intimacy and to remove the sense of fear associated with cancer and cancer treatment. Whilst the space is not residential, it has been designed to incorporate domestic elements of a residential home, such as sofas and a kitchen to bring a sense of familiarity and the security associated with the homely.

The Kitakami Health and Childcare Support Complex, located in Kitakami City, Iwate was designed by Unemori Architects. This space was previously an office which was then converted into a play space, with the architects successfully managing to keep the original structure and use an insertion to retransform the space, as a type of adaptive reuse. By transforming the unfriendly typology of the office building into a park-like space, has turned something functional into a building that is able to heal, support and relax those who frequent it through its focus on playfulness.



Fig 4. A view of the building facade and nature gardens. Photographed by: Tristan McLaren

The Nelson Mandela Children's hospital, designed by Sheppard Robson and John Cooper Architecture and completed in 2016, is located in Johannesburg, South Africa and the landscape is 'based on the principles of visual and therapeutic design. The therapeutic value is purposely designed to allow children to interact with nature to aid the healing process'¹¹. There are multiple sections of the hospital which has a functional layout as well as a consistent approach within inside and outside spaces. The reception leads to an internal street that links six wings, each relating to a specialisation such as, cardio-thoracic¹², surgery, intensive care and transplant. There is a generous amount of space throughout the wards and operating rooms to accommodate care givers and parents staying overnight. Amongst these areas are the courtyard gardens, where special attention was given to the detailing and finishing. The plants, ponds, playgrounds, and the use of colour are the reasons behind the spaces' success in the healing process.

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torn-apart-by-politics

Holmes, D. (2017) World landscape architect. Available at: <https://worldlandscapearchitect.com/the-landscape-spaces-of-nelson-mandela-childrens-hospital/>
Roux, H.L. (2017) Architects Journal. Available at: <https://www.architectsjournal.co.uk/buildings/nelson-mandela-childrens-hospital-a-healing-role-in-a-nation->



Colour is incorporated throughout the hospital. Including bright colours in a medical environment (often associated with drab greys and soulless whites) provides and cares for the psychological and emotional needs of the patients, which is a high priority¹³ when caring for children. When a child, care worker or family member enters a space filled with colour and life it 'can repair and heal the body'¹⁴. The main waiting area uses positive greens, yellows and oranges which reinforce safety and security. Entering a hospital space can be a fearful experience, however, the designers and architects deliberately stripped away the negative connotations of clinical environments, aware of the 'strong radiating effect on the whole body'¹⁵ that colour can have and reshaped its purpose to be more positive. The choice of basic colours is fundamentally symbolic, as they have positive and psychological effects due to the colour combinations. The designer has chosen colours that are in harmony with one another and have a poetic relationship. It is noticeable that in the waiting area, the colour red, 'an intense, or even angry colour'¹⁶ is used minimally (some of the furniture, for example, is red and orange), because of its associations which could, according to the psychologist Van Wagner, spike negative behavioural responses, or 'feelings of excitement and intensity'¹⁷. Despite associations with red as 'a bright, warm colour'¹⁸ it still evokes strong emotions; therefore, avoiding its use when creating and designing a space which conveys calmness and reassurance, will allow the patient to respond in a positive way to the healing process. The Persian physician, Avicenna talks about how 'someone who was bleeding should not look at anything red'¹⁹ suggesting instead that blue, a colour which is prevalent throughout the hospital's indoor and outdoor spaces, should be used 'because it ha[s] a calming effect'²⁰. It has been proven that colour can be used as an effective treatment tool in conjunction with the mind and body of a patient. For example, green is shown to be 'restful, soothing, cheerful, and health-giving. Green is thought to relieve stress and help heal'²¹, indicating how the effect of a colour is associated with the cure of bodily functions. The allocation of carefully chosen colours links all the elements associated with homeliness, such as comfort and reassurance, into that space. Often patients will need to stay overnight for treatment or to recover, therefore, choosing appropriate colours that reinforce a happy, non-threatening environment provides patients with the security they may associate with home. Whilst colour, or the absence of a sterile looking environment (through the addition of colour), is not intrinsically homely, it is nonetheless useful in creating a warmer, more welcoming environment.

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https://www.researchgate.net/publication/252307449_Health_Benefits_of_Gardens_in_Hospitals
Zena O'Connor, (2009). 'Colour psychology and colour therapy: Caveat Emptor'. *Research and Application*, Vol, 36(3). Available at: <https://doi.org/10.1002/col.20597>
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Norris, S. (2018). *Secrets of Color Healing*. United Kingdom: Ivy Press
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Zena O'Connor, (2009). 'Colour psychology and colour therapy: Caveat Emptor'. *Research and Application*, Vol, 36(3). Available at: <https://doi.org/10.1002/col.20597>

Fig 5. A view of the buildings main entrance, showing colour throughout. Photographed by: Tristan McLaren



Fig 7 A beautiful design of an exam room with starry nights and animals on the walls to seem less frightening. Photographed by: Nelson Mandela Children's Hospital Trust

Fig 6. A view of a medical room with custom art theme. Photographed by: Nelson Mandela Children's Hospital Trust

The patients' rooms, particularly within the children's wards, are designed in a domestic arrangement that a patient would normally find in his/her own room at home, rather than in keeping with rooms in conventional hospital wards. Wards are shared by two or four children, reflecting the fact that South African children who tend to share rooms at home might have their healing hindered by isolation²². Providing scenic nature murals on the walls of the procedure rooms, reinforces the hospital's 'focus on connecting nature'²³ across each of the hospital's spaces, something which architect Sheppard Robsen states has shaped the design of the whole hospital. Together with complimentary colours, this creates a calming atmosphere of home to help provide 'high-quality child healthcare in a natural healing environment'²⁴. The images on the wall also 'stimulate the imagination through the presentation of beautiful photograph images of richly textured environments'²⁵ to provide a calming, healing environment for children. These design decisions are a 'starting point to creating a welcoming, safe environment for both children and parents'²⁶ who are involved in the healing process.

22 Roux, H.L. (2017) Architects Journal. Available at: <https://www.architectsjournal.co.uk/buildings/nelson-mandela-childrens-hospital-a-healing-role-in-a-nation-torn-apart-by-politics>
 23 Griffiths, A. (2017) Dezeen. Available at: <https://www.dezeen.com/2017/05/13/nelson-mandela-childrens-hospital-concrete-brick-colourful-windows-architecture-health-sheppard-robson-john-copper-south-africa-johannesburg/>
 24 IBID
 25 Komiske, B. K. (2012). Designing the World's Best Children's Hospitals: The Future of Healing Environments. Austria: Images Publishing Group.
 26 Griffiths, A. (2017) Dezeen. Available at: <https://www.dezeen.com/2017/05/13/nelson-mandela-childrens-hospital-concrete-brick-colourful-windows-architecture-health-sheppard-robson-john-copper-south-africa-johannesburg/>

The health care delivery rooms are completely transformed into unique creative experiences by a combination of sculptures, wall coverings and 3D technology to create an immersive experience for the patient during treatment. It has been found that large depictions of nature in clinical spaces reduce stress in patients, as seen in reduced heart-rate and self-reporting of stress levels. Bringing patients into an immersive space, which incorporates the 'visual perception of depth, light, colour, objects, scenes and landmarks' auditory perception of sound and silence²⁷ allows patients' anxiety to be taken away. Neuroscientists state that supporting 'all these brain function[s] will aid the body's own healing processes'²⁸. South African landscapes and hot air balloons fill the room with vibrant colours. Whilst patients are lying on the stretcher, they feel as if they are floating in the air with the rest of the characters on the wall. This sense of fun, happiness and vibrancy is designed for the patients to feel as if they are also playing in their back garden at home, rather than confined in the rooms of a hospital. This allows patients to feel a sense of homeliness, bringing a sense of relief during a potentially traumatic time.



Fig 8. View of fun custom themed wall in the MRI rooms. Photographed by: Nelson Mandela Children's Hospital Trust



Fig.9. View of operation room with scenic murals on the walls to distract the children.



Fig. 10 Operation room with nature views surrounding the room to ease the patients pain. Photographed by: Tristan McLaren



Fig. 11. View of a patients room with a typical domestic layout, bright colours are used in a positive way. Photographed by: Tristan McLaren



Fig. 12. View of the hospitals gardens with benches on the pathway and lily-pad ponds. Photographed by: Tristan McLaren



Fig. 13. Exterior landscape of the sensory gardens and water feature. Photographed by: GREENinc Landscape Architecture

Both the emotional and psychological needs of patients are important considerations when designing and governing hospitals. Growing scientific evidence reinforces that, gardens in hospitals, which 'not only provide restorative and pleasant nature views'²⁹, can measurably reduce patient anxiety and significantly aid recovery, where 'simply looking at environments dominated by greenery, flowers, or water as compared to built scenes lacking nature (rooms, buildings, towns) is significantly more effective in promoting recovery or restoration from stress'³⁰. The integration of nature inside the hospital, shown, through the specially chosen paintings on the wall, creates a design where nature plays a critical role in the healthcare environment in reducing stress and improving clinical outcomes 'through other mechanisms such as increasing access to social support, and providing opportunities for positive escape from stressful clinical settings'³¹. Nature is captured from the patients' rooms to the outdoor area, which is oriented towards the trees, play and sunshine. Here, as Kirkbridge suggests, 'scattering gardens [create] a place for patients to enjoy, a rural haven where their emotions'³² are at the heart of design decisions.



Fig. 14. Exterior landscape of the water feature pond and flower shaped benches. Photographed by: GREENinc Landscape Architecture

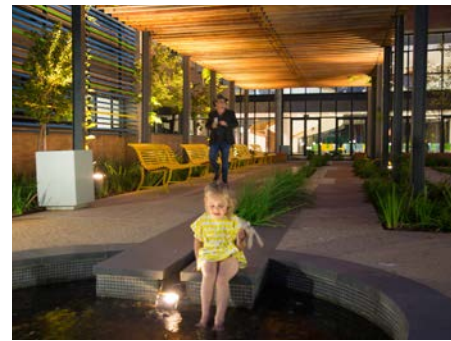


Fig. 15. Shallow water ponds, allows the sensory notion of touch whilst adding a calming effect. Photographed by: Brian Kerrin



Fig. 16. Exterior landscape of the sensory gardens and water feature. Photographed by: GREENinc Landscape Architecture



SECTION AA (East-West looking South)
Fig. 17



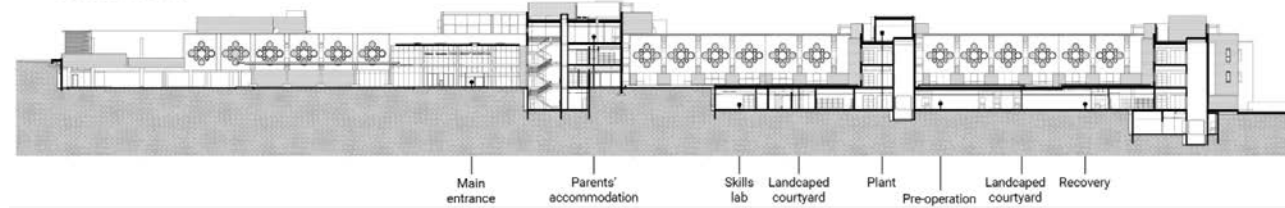
SECTION BB (North-South looking East)
Fig. 18



SECTION CC (North-South looking East)
Fig. 19

Fig. 17, 18, 19. Section cut through the building to understand floor arrangement and movement.

Section A-A



Main entrance Parents' accommodation Skills lab Landscaped courtyard Plant Pre-operation Landscaped courtyard Recovery

Historically, hospitals never focused on the healing process and making patients feel comfortable but, rather, the space optimised the care of the medical equipment rather than the care for the patients. The design change has shifted towards the improvement of the environment, as patients increasingly 'crave more attention to their states of mind and emotions, and to all those things in the environment that sustain them'³³. This can be seen through improved lighting, the creation of a pleasant, comfortable spaces in hospitals such as the Nelson Mandela Children's Hospital, that reduces stress. The overall effect of incorporating nature to create a biophilic design of peace and tranquillity, undoubtedly improves the overall effect of one's mind, restoring 'patients to a more natural balance of the senses'³⁴ and in relation to stress recovery 'laboratory and clinical investigations have found that viewing nature settings can produce significant restoration...in blood pressure, heart activity, muscle tension, and brain electrical activity'³⁵.

29 gate.net/publication/252307449_Health_Benefits_of_Gardens_in_Hospitals. Available at: https://www.researchgate.net/publication/252307449_Health_Benefits_of_Gardens_in_Hospitals
30 IBID
31 IBID
32 Sternberg, EM. (2009) Healing Spaces: The Science of Place and Well-Being. London, England: Harvard University Press.

33 Sternberg, EM. (2009) Healing Spaces: The Science of Place and Well-Being. London, England: Harvard University Press
34 IBID
35 'Plants for People, Florida, 6-20 October' (2002) Health Benefits of Gardens in Hospitals. Available at: https://www.researchgate.net/publication/252307449_Health_Benefits_of_Gardens_in_Hospitals



Fig. 20. The outdoor space includes a climbing structure, seating and a chalk board. Photographed by: Emily Martin



Fig. 21. The children's play area with gardens and diverse play elements, along with brightly coloured mat flooring and fixed furniture structures



Fig. 22. Water interaction element in the outdoor area. Photographed by: Griffiths.

Consisting of 5 internal landscaped courtyards, the 'green heart'³⁶ of the Nelson Mandela's Children's hospital, and 'three exterior therapy gardens'³⁷, the natural elements allow the children the opportunity to actively participate in the cycle of nature. Various elements incorporated into the design appeal to all five senses³⁸. 'Designed for occupational therapy and play'³⁹ these spaces consist of water features, a variety of seating, colourful rubber floors, 'a bird-bath and mounded lawn'⁴⁰, and a wide range of plants. The colourful chalk board structure and shallow water ponds add an uplifting and calming effect, 'inviting contemplation'⁴¹ compounded by plentiful fragrant herbs such as lemon grass, basil, thyme, rosemary and sage, which appeal to the patients' sense of smell. Applying these healing elements to engage children in the outdoor environment, as part of their recovery and healing process provides respite through natural therapy. These gardens 'provide restorative and pleasant nature views'⁴², but have been constructed in a psychological way, which foregrounds homeliness, to 'reduce stress and improve clinical outcomes'⁴³. 'Providing opportunities for positive escape from stressful clinical settings'⁴⁴ demonstrates the experiential advantage of providing a nature garden in a hospital space, to counterbalance the stress, fear and pain that hospitals bring. Creating gardens which envelope the hospital calm patients and could help to address emotional needs through a soothing distraction from the conventionally clinical design of healthcare facilities. A children's hospital 'should be a place not just where a sick patient might get better, but the instrument or machine that would cause a cure'⁴⁵, and the Nelson Mandela Children's Hospital has certainly foregrounded this approach through its design.

36 Holmes, D. (2017) World landscape architect. Available at: <https://worldlandscapearchitect.com/the-landscape-spaces-of-nelson-mandela-childrens-hospital/>
 37 Roux, H.L. (2017) Architects Journal. Available at: <https://www.architectsjournal.co.uk/buildings/nelson-mandela-childrens-hospital-a-healing-role-in-a-nation-torn-apart-by-politics>
 38 Holmes, D. (2017) World landscape architect. Available at: <https://worldlandscapearchitect.com/the-landscape-spaces-of-nelson-mandela-childrens-hospital/>
 39 Roux, H.L. (2017) Architects Journal. Available at: <https://www.architectsjournal.co.uk/buildings/nelson-mandela-childrens-hospital-a-healing-role-in-a-nation-torn-apart-by-politics>
 40 Holmes, D. (2017) World landscape architect. Available at: <https://worldlandscapearchitect.com/the-landscape-spaces-of-nelson-mandela-childrens-hospital/>
 41 Abdo, H.M., El-Gezawy, L.S.E., Khodier, H.A.I. (2019) 'The role of the healing gardens elements in pediatric hospitals to cultivate a more 'cognitive and sensory spaces', Al-Azhar University Engineering Sector, Vol.14, No.53. Page 15.
 42 'Plants for People, Floriade, 6-20 October' (2002) Health Benefits of Gardens in Hospitals. Available at: https://www.researchgate.net/publication/252307449_Health_Benefits_of_Gardens_in_Hospitals
 43 IBID
 44 IBID
 45 Schrank, S., Ekici, D. (2016) Healing Spaces, Modern Architecture, and the Body. New York: Taylor & Francis.



Fig. 23. The building during the night, whilst exposing the wood panelling structure gives a calming effect. Photographed by: Hufton+ Crow



Fig. 24. Looking at the interior spacial movement, and the free flowing circulation, giving a warm and inviting feel to the space. Photographed by: Hufton+ Crow.

The Maggie Centre, located in Leeds, opened in 2020 and was designed by Heatherwick Studio. As Maggie's is situated in St James University Hospital, an environment which may give an unfriendly impression to the cancer care patients, due to the negative clinical connotation surrounding hospitals, the designers and architects had to re-imagine and design a therapeutic space for cancer patients that stripped away undesirable connotations of healthcare and design. They achieved this through nature, materials, open spaces, and large windows which remove many of these connotations. A typical clinic usually has a reception desk, however Maggie's intended to 'intuitively guide the patients'⁴⁶ whilst allowing them to 'explore for themselves and gain some agency'⁴⁷ by 'disorienting time'⁴⁸. By not confronting visitors with a reception desk, the centre immediately becomes less intimidating and allows patients to have control and direction. Having an open space allows visitors to move freely, and therefore be in control of their movement around the space. This provides a 'sense of stability and calmness'⁴⁹, rather than a sense that one is being forced to navigate around a healthcare environment, subconsciously, through way-finding strategies. Open space provides cancer patients with the opportunity to be 'more independent'⁵⁰, 'to have more control over the environment' and to act 'more autonomously'⁵¹, as well as feeling more 'secure'⁵² when dealing with cancer. Design and architecture have significant influence in the healing process of patients, through the construction of 'personal control'⁵³, improving patients' 'quality of life'⁵⁴.



Fig. 25. Entrance of the building is accompanied by a bench along with garden walks before entering in. Maggie's Centres support people with cancer. Photographed by: Heatherwick Studio

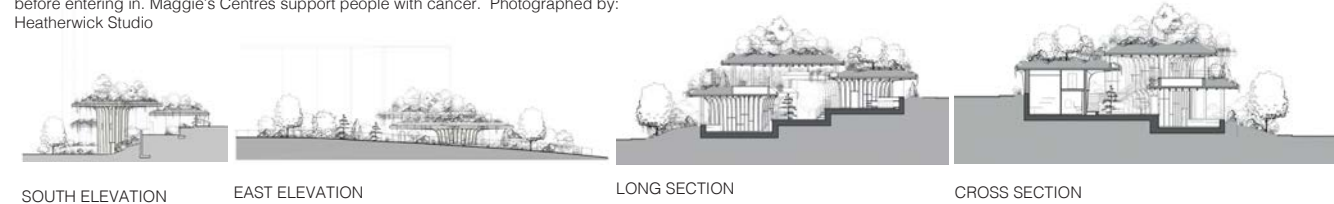


Fig. 26,27,28,29. Technical drawings of the elevations and sections. Photographed and drawn by: Heatherwick Studio

The functionality of the architectural design creates a 'homelike environment'⁵⁵, which, according to the architects, improves patients' overall performance as well as providing comfort. Project leader Angel Tenorio mentions that when designing the Maggie Centre, they were 'genuinely interested in improving people's experience'⁵⁶ through the way 'the physical environment has a direct effect on peoples lives'⁵⁷. The centre has an overlapping canopy structure that provides an 'embracing, comforting feel'⁵⁸, as well as offering free flowing movement. The relationship between the Centre's architecture and the experience of the visitors, extends beyond a typical patient and their healthcare arrangement. This is first emphasised at the Centre's threshold, which has the psychological effect of being the starting point where the patient accepts that they have cancer. Whilst designing the space, it was important to make sensitive decisions, like having a bench outside for those not ready to step inside yet and a walkway path leading to a garden where one can think before entering the space.

46 Parker, A. (2021) 'Architects data file', Building Projects, Page 39.
 47 IBID
 48 IBID
 49 Sakuragawa, S., Miyazaki, Y, Kaneko, T., Makita, T. (2005) 'Influence of wood wall panels on physiological and psychological responses'. Japan Wood Research Society, Vol 5(1). Available at: 10.1007/s10086-004-0643-1 (Accessed: 15 December 2022).
 50 DuBose, J., MacAllister, L., Hadi, K. Sakallaris, B.(2018) 'Exploring the Concept of Healing Spaces', Health Environments research & Design Journal, Vol. 11(1), Page 43-56.
 51 IBID
 52 IBID
 53 IBID
 54 IBID

55 DuBose, J., MacAllister, L., Hadi, K. Sakallaris, B.(2018) 'Exploring the Concept of Healing Spaces', Health Environments research & Design Journal, Vol. 11(1), Page 43-56.
 56 Parker, A. (2021) 'Architects data file', Building Projects, Page 39.
 57 IBID
 58 IBID

Fig.30 Showing the sustainably sourced wood, as the curved timber structure is exposed. The space indicates openness, nature and colour. Photographed by: Hufton + Crow.



Fig.31 View of the stairs, natural light and curved timber beams. Photographed by: Hufton + Crow.



Fig.32 View a patients room, where discussions, private talks take place. The aesthetic of warm lighting and nature plants create a calming effect. Photographed by: Heatherwick Studio



Fig.33 Comfortable seating ; sofa and chairs create a relaxed feeling. Photographed by: Heatherwick Studio

As a cancer support environment, it is important that the design brings joy as well as 'a sense of hope'⁵⁹ to the people who are coming to face their reality with cancer. Tenorio wanted to 'create a home for people that they wouldn't have dared build themselves'⁶⁰, and just as a home provides stability, identity and connectivity, the centre is built around a homely concept to help stabilise and organise the complex requirements of cancer patients. The curved timber canopy, which is like a giant hug, echoes safety and security, with the organic curves emphasising the importance of support whilst highlighting that Maggie's is 'a safe environment'⁶¹ and that if people get emotional, they have the protection to do so as 'they are not going to be told to not cry'⁶². Interior Designers have become increasingly more aware of the importance of designing a space that improves well-being and are now conscious about how a person feels in that environment. There is a subtle understanding of the way 'people feel about the buildings'⁶³ and their understanding of the 'feeling that they have whilst in the buildings'⁶⁴, that is more common in a domestic environment than that typically found in a clinical setting, which often lack the creative aspiration to achieve atmospheric emotions or aesthetics. When capturing the 'feel of a space'⁶⁵ in which care is 'delivered'⁶⁶, it is important to foster both the logic, and the atmosphere, of care through clinical environments as 'atmospheres are intermediate phenomena, belonging neither in the world out there nor in the individual person'⁶⁷. Integrating nature, and the use of natural light should make visitors to the Centre feel more 'buoyant, more optimistic'⁶⁸. Creating an atmosphere of home, where the Centre 'has a sense of family'⁶⁹ is 'very welcoming'⁷⁰.

59 Parker, A. (2021) 'Architects data file', Building Projects, Page 39.
 60 IBID
 61 Martin, D., Nettleton, S., Buse, C. (2019) 'Affecting care: Maggie's Centres and the orchestration of architectural atmospheres' Social Science & Medicine, Volume 240, Page 1-8.
 62 IBID
 63 IBID
 64 IBID
 65 IBID
 66 IBID
 67 IBID
 68 IBID
 69 IBID
 70 IBID



Fig.34 The warm toned lighting compliments the curves of the beams, creating a homely feel. Photographed by: Hufton+Crow



Fig.35 Typical domestic arrangement of a domestic kitchen, using naturally sourced materials such as timber and cork, whilst keeping with a minimalistic and calming palette. Photographed by: Vincent & Brown.

The Centre, then, has elements of residential functions of a home in a non-home environment. For instance, there is a communal kitchen and table, a point where 'visitors feel ready to share their experiences'⁷¹, as people begin to trust the process and talk freely about their story. Being in an open plan space, especially within the kitchen, opens difficult conversations, allowing the visitors to be expressive and socialise through their stories, allowing them to re-engage with the 'human psyche through a space where someone could feel comfortable to talk about difficult things'⁷². Upon entering, visitors are exposed to a large domestic area, that is dominated by a homely kitchen, which is again characterised through an absence of signage one would expect in a clinical environment. By stripping away signs of control and movement, the patients are free to make their own directional experience and navigate the space for themselves, giving them a sense of identity and importance. Jennifer DuBose has identified 'that patients in homelike environments which less resemble hospitals experience an increased sense of connection to the environment and feel more control over it'⁷³, and the Centre therefore reinforces the emotional well-being of the people in the space, through a design which embodies 'the antithesis of a hospital'⁷⁴.

71 Architect Magazine (2020) Available at: https://www.architectmagazine.com/project-gallery/maggies-centre-leeds_o

72 Mawhood, D. (2017) Issuu. Available at: https://issuu.com/fmawhood/docs/maggie_s_centres_case_study

73 DuBose, J., MacAllister, L., Hadi, K. Sakallaris, B.(2018) 'Exploring the Concept of Healing Spaces', Health Environments research & Design Journal, Vol. 11(1), Page 43-56.

74 Mawhood, D. (2017) Issuu. Available at: https://issuu.com/fmawhood/docs/maggie_s_centres_case_study



Fig.36 Concept model making for the building

The main material in the space is natural wood. The use of wood was given wide attention through interior industries as natural elements can 'elicit a response of aesthetic liking'⁷⁵ that leads to more 'positive feelings'⁷⁶. The Centre integrates built scenes of nature, through gardens that promote 'restoration from stress'⁷⁷, stimulating visual access through positive feelings to reduce 'negative feelings such as anxiety and anger'⁷⁸. Designing a space that includes wood, gives a 'warm impression'⁷⁹ due to the minimal reflectance of UV light from its surface, which, according to Masuda, ensures that people 'experience less stimuli and may consequently be less fatigued'⁸⁰. There is a clear response from people's positive attitudes towards being 'surrounded by wood'⁸¹, a material which is perceived as warm, natural, homey and inviting.

Healthcare facilities like hospitals, nursing homes and clinics have been exploring the impact of exposure to natural elements on patient recovery and the healing process. Forest and Wood Products Australia worked on a wellness and wood study linking nature and biophilic design, showing how 'wood can improve physical and mental well-being'⁸²; for example, employees in work environments with 'less than 20% natural wood surfaces were up to 30% less satisfied with both their working and physical workplace life, compared to those with a high proportion of wood'⁸³. The Maggie Centre embodies the relationship between the experience the visitor receives and how the materials achieve this experience.

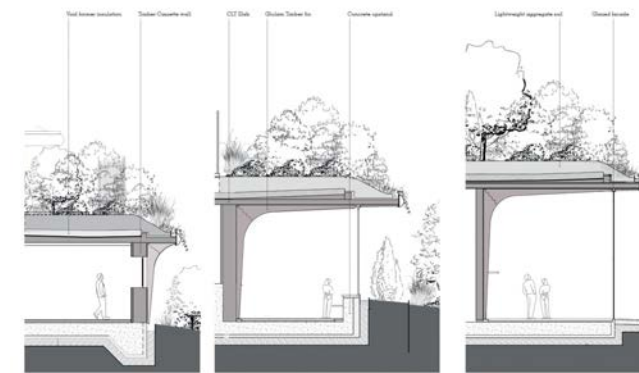


Fig.37 Timber structural detail of the design.



Fig.38 Curved timber beams, with sun reflection. Photographed by: Hufton+Crow.

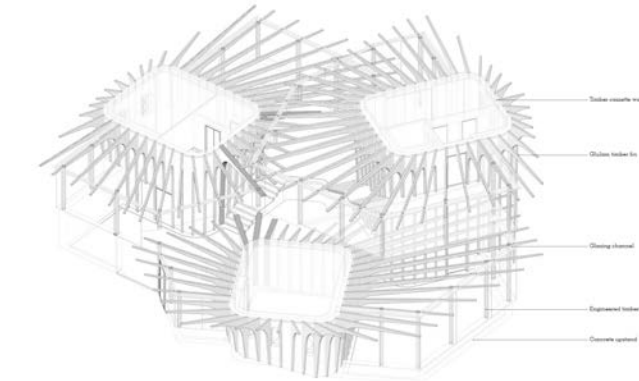
Being surrounded by the naturalness of wood, people have 'clearly positive aptitudes'⁸⁴, therefore an interior environment 'that contains wood facilitates restoration and provides stress reduction'⁸⁵, providing the necessary environment for recovery. The natural materials are a significant focus in the space especially in the upholstery, chairs and tables as well as the curtain finishes, showing the tactile qualities which are 'often missed in healing environments'⁸⁶. As Zumthor suggests the 'singular density and mood, this feeling of presence, well-being, harmony, beauty'⁸⁷ which is created by the atmosphere of a space, is perfectly encapsulated in the design of the Maggie Centre.



TIMBER STRUCTURE DETAILS



GLULAM TIMBER FIN



TIMBER STRUCTURE

Fig.39,40,41. Timber structural and technical detailing of the buildings construction. Photographed by: Hufton+Crow

75 Nyrud, A. & Bringslimark, T. (2010). 'Is interior wood use psychologically beneficial?' A review of psychological responses toward wood. *Wood and Fiber Science*, 42,(2), Pages 202-218.
 76 IBID
 77 IBID
 78 IBID
 79 IBID
 80 IBID
 81 IBID
 82 Think wood: Why do we feel better with wood? (2022) Available at: <https://thinkwood-wordpress.s3.amazonaws.com/wp-content/uploads/2020/09/22162311/cA-Thinkwood-FINAL-WP.pdf>
 83 IBID

84 Nyrud, A. & Bringslimark, T. (2010). 'Is interior wood use psychologically beneficial?' A review of psychological responses toward wood. *Wood and Fiber Science*, 42,(2), Pages 202-218.
 85 Li, J., Wu, J., Lam, F., Zhang, C., Kang, J., Xu, H. (2021) 'Effect of the degree of wood use on the visual psychological response of wooden indoor spaces', *Wood Science and Technology*. 55(1), Page 1485-1508
 86 Parker, A. (2021) 'Architects data file', *Building Projects*, Page 39.
 87 Zumthor, P. (2006). *Atmospheres: Architectural Environments, Surrounding Objects*. Germany: Birkhäuser



Fig.42 Street view. Photographed by: Kai Nakamura.

The Kitakami Health and Childcare Support Complex

The project of the Kitakami Health and Childcare Support Complex, located in Japan, involves the conversion of the ground and first floors of an eight-story commercial building into a health and support complex. Here the 'notion of playfulness and the interactions between it, through caring interventions'⁸⁸, illustrate how the application of creativity can transform an existing environment and how beneficial play can be in the healing process.



Before renovation



Fig.43. Before and after renovation of the building. Photographed by: Unemori teco Associates.

After renovation



Fig.44. Community space, showing the offices on the first floor and the healthcare on the ground floor. Photographed by: Kai Nakamura.

The building has been transformed through the deconstruction of the office space, to a space where ‘people from all walks of life’⁸⁹ can gather and ‘freely visit and spend time’⁹⁰. The space acts as an insertion, through the remodelling of a once unhomely space into the recreation of a homely health centre for children. With the conversion, the architects Unemori Teco showcase their ‘architectural competence for sensitive redevelopments of existing buildings’⁹¹ through adaptive re-use of city space. In modern design, architects and their designs are redefining the means to preserve buildings through remodelling what already exists. Rather than destroying an already built structure and rebuilding it, architects and designers have instead chosen to consider different configurations for existing buildings, protecting the form of a building typology through both exterior and interior evolution. This framework for ‘change that is continuous and ever evolving’⁹² can be seen in the Kitakami Health and Childcare Support Complex, where the architecture underlines the ways in which urban designers have developed a sophisticated understanding of old and new buildings, and how to protect, preserve and maintain the ‘conditions that drive them’⁹³. The healthcare building in this case study has undergone the adaptation and transformation of change, altering both the ‘use-type’⁹⁴ the ‘function’⁹⁵, whilst maintaining the skeleton of the original building.

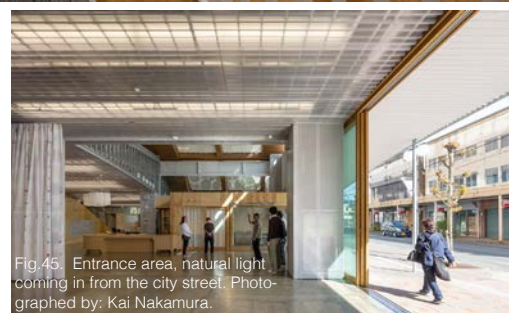


Fig.45. Entrance area, natural light coming in from the city street. Photographed by: Kai Nakamura.

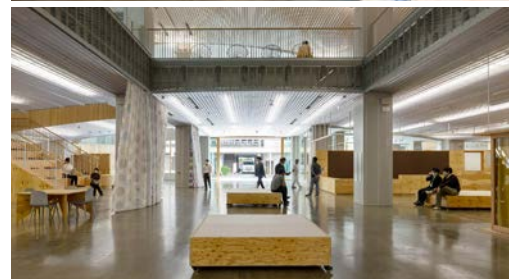


Fig.46. Central waiting area, showing a glimpse of the activities of the floor above. Photographed by: Kai Nakamura.

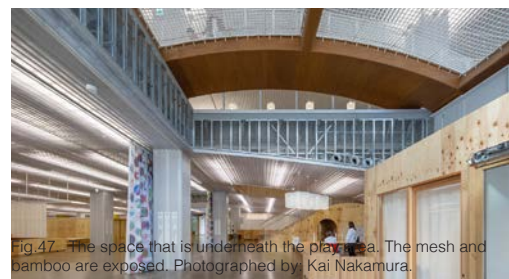


Fig.47. The space that is underneath the playground. The mesh and bamboo are exposed. Photographed by: Kai Nakamura.



Fig.48. The indoor playground includes gentle materials of mesh and rope. Photographed by: Kai Nakamura.

Fig.49. View from the entrance to the community areas. Photographed by: Kai Nakamura.

The indoor open space of the transformed building houses a reception, café, waiting area, medical check-up rooms and a childcare support centre. The space also includes a ‘community space’⁹⁶, a ‘temporary nursing room’⁹⁷ and an indoor playground and conference rooms. The fixed play equipment encourages ‘exploration’⁹⁸ as the child can play and investigate materials for themselves in a space where the act of play concentrates on the ‘tactile experience’⁹⁹. The bamboo ropes and mesh create a soft surface, reinforcing the complex’s desire for ‘sensory pleasure’¹⁰⁰, which both test a child’s bodily limits as well as ‘engaging with strangers’¹⁰¹. The space uses a lot of wood which takes away from the clinical, unhomely feel of the building’s previous use and juxtaposes the aesthetic of many traditional hospital and healthcare environments. Here, the use of such materials anticipates intimacy, closeness, and homeliness.



Fig.50. Members of staff/visitors are welcomed to relax by taking off their shoes in the seating area that is designed in warm timber. Photographed by: Kai Nakamura.

88 Gillam, T. (2013) ‘Creativity and mental health care’. *Mental Health Practice*, Vol.16,24-30. Available at: 10.7748/mhp2013.06.16.9.24.e807
 89 Kitakami Health & Childcare Support Complex (2022) Available at: <https://anc.masilwide.com/2060>
 90 Carlson, C. (2022) Dezeen. Available at: <https://www.dezeen.com/2022/01/27/unemori-architects-teco-architects-health-childcare-centre/>
 91 Abdel, H. (2021) Archdaily. Available at: <https://www.archdaily.com/970741/kitakami-children-health-and-support-center-uta-unemori-teco-associates>
 92 Scheer, B.C (2017) *The Evolution Of Urban Form*. London and New York: Routledge. Page 2.
 93 IBID
 94 IBID
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96 Carlson, C. (2022) Dezeen. Available at: <https://www.dezeen.com/2022/01/27/unemori-architects-teco-architects-health-childcare-centre/>
 97 IBID
 98 Stegelin, D.A (2005) *Making the Case for Play Policy*. *Young Children*. Page 60.
 99 Stevens, Q. (2007) *The Ludic City*. USA and Canada: Routledge. Page 56
 100 IBID
 101 IBID



Fig.51. The arch wooden bridge connects the two levels and the glass walls allows the space to be seen. Photographed by: Kai Nakamura.



Fig.53 The design choice of using wood for the ceilings and floor of the Centre creates a more friendly and homely interior. Photographed by: Kai Nakamura.



Fig.52. Material choices of wire mesh used in the playground creates lightness to the space. Photographed by: Kai Nakamura.

Play is a 'symbolic function of space'¹⁰² and provides the need for social life, so often lacking when children and adults come into healthcare environments. The Kitakami Health and Childcare Support Complex provides a playful and exploratory space to relax, where the healing potential of play offers the opportunity 'for children to explore the world around them'¹⁰³ and develop practical skills. Play has been described as 'a child's life'¹⁰⁴ and as 'the means by which [they] can come to understand the world'¹⁰⁵ they live in. The designers have recognised that play is vital for child development, and that the differing health needs children within the Complex may be experiencing are likely to induce 'different moods'¹⁰⁶ and that, therefore, they will need activities to balance this; the openness of the space enhances this, as the children do not feel enclosed or trapped, but rather they feel free, energetic, and safe.

In order to balance people in an environment, such as children in healthcare settings, buildings need to be in harmony, and this can be achieved by the 'typological process and biological processes'¹⁰⁷ which demonstrate the relationship between 'humans and the natural environment'¹⁰⁸. Working with existing buildings is a 'creative and fascinating challenge'¹⁰⁹ within the 'architectural discipline'¹¹⁰ because it is about restoring building materials for continued use. The conversion between the old and new use for buildings allows for the function to change such as the circulation, orientations 'relationship between spaces'¹¹¹. From the child's perspective, a play area is where they can be imaginative, playful, adventurous and this invitation of opportunity is 'inherently rewarding'¹¹² for them as it also offers them a sense of 'self control'¹¹³. For children, play 'lies at the centre of their experience of the world'¹¹⁴, as playing in a playground, playing with objects or on fixed equipment aids their primary 'function'¹¹⁵ which they are meant to 'pursue'¹¹⁶. Including a built-in playground inside the space as part of the conversion portrays the sense of clinical removal, where the focus for the child is on the play. This conscious decision of balancing play and childcare support allows the dialectic engagement and discussion to be opened, as the play encourages people to 'step outside themselves'¹¹⁷ and their 'everyday instrumental goals'¹¹⁸. Play acts as a separation barrier between everyday functions such as, 'demands'¹¹⁹, 'restrictions'¹²⁰ and expectations, and the architects and designers of this space have redesigned the familiar outdoor playground to facilitate 'new orders and structures'¹²¹. This constructive ability to think 'outside the box'¹²², has led to new ideas, angles and methods and shows a clear understanding of the architectural possibilities of transformations and conversions whilst keeping and preserving the existing structure. Understanding how to adapt building to incorporate a new function and use, through 'combining old and new'¹²³, has been at the heart of the design of the Kitakami Health and Childcare Support Complex.

102 Maffei, G. L., Caniggia, G. (2001). Architectural Composition and Building Typology: Interpreting Basic Building. Italy: Alinea. Page 21
 103 IBID
 108 'Reinventing architecture and Interior: the past, the present and the future, Ravensbourne 28-29 March' (2012) Adaptive reuse as a strategy towards conservation of cultural heritage: A survey of 19th and 20th century theories. Available at: https://www.researchgate.net/publication/263124836_Adaptive_Reuse_as_a_Strategy_towards_Conservation_of_Cultural_Heritage_a_Survey_of_19th_and_20th_Century_Theories#fullTextFileContent
 109 IBID
 110 IBID
 111 Stegelin, D.A (2005) Making the Case for Play Policy. Young Children. Page 5
 112 IBID
 113 Stevens, Q. (2007) The Ludic City. USA and Canada: Routledge. Page 28
 114 IBID
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 120 Gillam, T. (2013) 'Creativity and mental health care'. Mental Health Practice, Vol.16.24-30. Available at: 10.7748/mhp2013.06.16.9.24.e807
 121 IBID
 122 Carlson, C. (2022) Dezeen. Available at: <https://www.dezeen.com/2022/01/27/unemori-architects-teco-architects-health-childcare-centre/>
 123

102 Stevens, Q. (2007) The Ludic City. USA and Canada: Routledge. Page 194
 103 Stegelin, D.A (2005) Making the Case for Play Policy. Young Children. Page 4
 104 IBID
 105 IBID
 106 Day, C. (2004) Places of the Soul. Italy: Thorsons. 2nd ed. Page 24

C O N C L U S I O N

A 'homely' atmosphere, then, can be understood as an ambience which creates a sense of ease and belonging, grounded in a solidarity which is attached to a space. Each of the aforementioned spaces, through varying aspects of design, have replaced the negative feelings typically associated with clinical environments such as hospitals and health support centres, with those more frequently associated with residential spaces. Decisions regarding materials, colours, arrangements, spatial planning, and the use of nature have, at least in part, attempted to replicate a 'homely' sense of belonging and security, familiarity and comfort and positivity, in order to support children through their recovery. For children, this inviting sense of familiarity and security is particularly keenly felt, and the designers have employed different strategies to ensure that 'homeliness' is central to their designs.

The use of colour and nature in the Nelson Mandela Children's Hospital, makes the environment more 'homely' and the healing process less intrusive. The Maggie Centre focuses on the integration of natural materials and open spaces, together with sensitive decisions to explore and merge a home-like atmosphere. The crucial sense of belonging is established and expressed in the Maggie Centre through the use of warm materials, to generate safety and security, encompassing a homely atmosphere. Materiality and nature integration can be felt through the senses, which assemble interaction and communication. By focusing on play, the designers of the Kitakami Health and Childcare Support Complex have foregrounded familiarity as a means of promoting well-being. In all three environments the move away from purely functional healthcare, towards a more personalised, almost homely character, has the ability to support the process of healing.

The design of the spaces and environments we occupy can help us alter the ways we behave and how we interact with those spaces. As architects and designers, we have a huge responsibility, because through the power of design we have the ability to change a person's mental health and medical processes. The knowledge and the understanding of the subjects discussed in the essay have reinforced my vision towards the understanding of how environments can be designed to heal, protect, and save lives. By understanding the creation of homely spaces, my approach for future projects is based on an emotional and technical level.

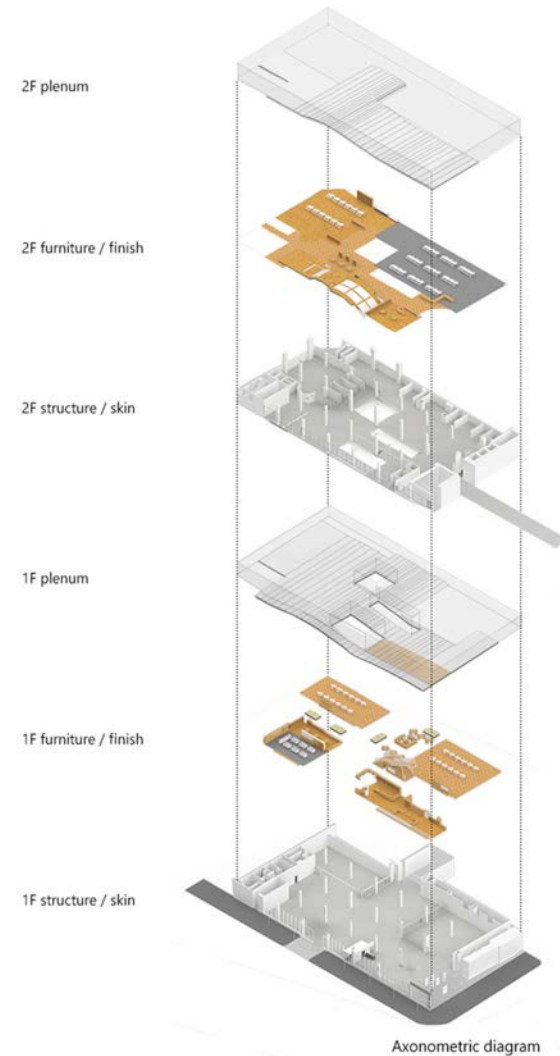


Fig.55. Rendered view, created by: Unemori teco Associates



Fig.56. Sectional perspective, created by: Unemori teco Associates

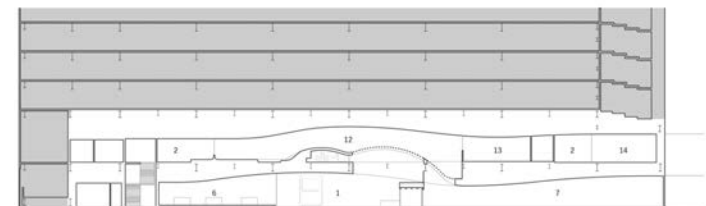


Fig.57. Section detail, created by: Unemori teco Associates

Fig.54. Axonometric diagram. Created by: Unemori teco Associates

Typically, an outdoor playground, for example, is politically controlled; a standardised area, 'governed by regulations'¹²⁴ and 'monitored by adult eyes and cameras'¹²⁵, enclosing children into the space typically by a gate. This typical construction does not create a homely or friendly space, therefore moving public outdoor urban playgrounds into 'smaller spaces'¹²⁶ can aid children's interaction and communication, especially with their feelings. Bringing the outdoor play inside, children have freedom to move and act out 'their experiences in a safe'¹²⁷ and 'non-judgemental'¹²⁸ manner. It is how architects choose to design a space for children to meet and socialise that alters the way they feel and behave. In the childcare complex, there are opportunities for 'climbing and balancing'¹²⁹ and to explore movement together with 'imaginative play'¹³⁰ with different 'textures, materials, heights, level planes'¹³¹. Exploring the play possibility, of climbing on fixed equipment, aids 'developmental progression'¹³² as children use their hands and feet as well as balancing their visual focus. In a healthcare environment is it crucial for children 'to engage in simulative play'¹³³ as they have the opportunity to explore and examine their own bodily skills 'as an escape into fantasy'¹³⁴ as well as making the complex space comes alive.

124 Stegelin, D.A (2005) Making the Case for Play Policy. Young Children. Page 5
 125 IBID
 126 Woolley, H. (2008) 'Watch this space! Designing for children's play in public open spaces'. Geography Compass, 2(2). pp. 495-512. Available <https://doi.org/10.1111/j.1749-8198.2008.00077>
 127 Benefits of playground equipment for therapy (2022) Available at: <https://www.softplay.com/blog/benefits-of-playground-equipment-for-therapy/>
 128 IBID
 129 Woolley, H. (2008) 'Watch this space! Designing for children's play in public open spaces'. Geography Compass, 2(2). pp. 495-512. Available <https://doi.org/10.1111/j.1749-8198.2008.00077>
 130 IBID
 131 IBID
 132 IBID
 133 Stevens, Q. (2007) The Ludic City. USA and Canada: Routledge. Page 28
 134 IBID

APPENDIX

ESSAY PLAN

INTRODUCTION

Introduction of the topic, it's basics and significance.
Outlining the meaning of 'homely' and 'unhomely'.
Looking at historical examples from the past that exist, and describe the design elements that make them unhomely. This will show how architects and designers have improved the change of built environments.
How have hospitals evolved into homely spaces.
Introducing chosen case studies that will examine the homely elements in clinical environments.

ANALYSIS

[The Nelson Mandela Children's Hospital in South Africa. Designed by Sheppard Robson and John Cooper.](#)

Introduction of the design.
Analysing the design features of integrating nature within the grounds.
Showing how the use of colour plays a significant role in the design and how it aids the healing process.
Looking at patient's responses to happier interiors.
Understanding atmospheric functions in which they play a critical role in hospitals
Analysing the experience of the space.

[The Maggie Centre, located in Leeds. Designed by Heatherwick Studio.](#)

Understanding of the word 'biophilia' and the role it plays in healthcare.
Knowing how certain materials can bring a sense of homeliness.
Examining the user experience and free flowing movement.
What impact does wood and nature have on the cancer patients and how it bring a sense of homeliness and security.
The sensitive approach of certain furniture decisions.

[The Kitakami Health and Childcare Support Complex, located in Kitakami City. Designed by Unemori Architects](#)

The approach of the architects and their design methods.
Understanding the transformation process of old and new buildings.
The ability to keep the original structure of a building and use an insertion to re-transform a space.
Analysing the role of play and how it is able to heal and support those who need it.
The spacial arrangement and user experience.

CONCLUSION

Ending that brings it back to the whole idea of re-purposing and its link to homeliness.
Summarising the case studies and the knowledge I gained from them.
Pointing out suggestions and conclusions I have drawn from the research about the concept of unhomely and homely buildings.
Evaluating how the spaces we occupy ourselves with can alter the way we behave and how we interact with them.

Critical reflection of Design Project 1

When we were introduced to our brief for the first- semester design project, it was exciting to find out that we have multiple options to choose from. Therefore, I conducted a preliminary analysis to identify the most suitable option for the area. The option which went for was option 1 Leisure and Hospitality, which involved designing a wine bar for the first-semester project. After completing this project I have acquired a generous amount of knowledge in operational and spatial aspects of a wine bar design. However, sometimes I felt that the technical part of the design process was not emphasised enough. Due to our first year being on zoom during COVID, the year missed out of face-face interaction and 'getting our hands dirty' with raw materials, especially with the model making and laser cutting machines. Therefore, during the detailing and materiality process I was curious and excited to understand this further, which enhanced my creative personality which gained my knowledge of the subject.

The site analysis, client research about wine research were the first tasks that I had completed, in order to collect as much information as possible about the area of the site and the company. I was interested in how people enter Waterloo station, especially understanding who they are, as well as what their interests are. I looked at local bars to better my understanding of the market within the area, especially who their target audience is and what makes their company successful. Zoning in on what is around the site and what is available for people helped me emotionally connect with the space, allowing me to understand what kind of experience and atmosphere they will endure.

The biggest struggle which I encountered during the design project was to switch my attention from practicality and spatial solutions. I was shifting my focus to various design directions without realizing that I already had a strong concept to build on. Therefore, the longest part of the process was putting all my ideas together and making it work in harmony. In the end, I had a clear picture of how I wanted the space to look like, feel and which materials I could use. I felt I was most efficient with, was defining the materials, and working with sketch-up quite early on, which allowed me to recognise the scale I was working with. Therefore, multiple trial and error judgements were made.

Reflecting on how I performed on the design project, there are things such as presentation and graphics that I can improve upon. Sometimes, the desire to achieve perfectionism makes it difficult to understand when the task should be finished and a new one started.

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