

UNSW Physics Lawn

Urban Precinct Design Analysis Report

CODE 1231 Ubiquitous Cities

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March 2022**



Image: Physics Lawn
Source: Kerry Qian

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Precinct context: Historical

Research and analysis that defines the precinct historically and in relation to the client's requirements and aspirations (UNSW Estate Management definitions and the UNSW 2025 vision).

02

Precinct Stakeholders/user- groups

An identification of key precinct stakeholders through user profiles and use/time diagrams

03

Precinct characteristics: Spatial

An identification of the key spatial and organisational characteristics of the precinct, including orientation, bounding buildings and/or urban objects, primary and secondary entry and exit points.

04

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An identification of the key material characteristics of the precinct, including hard and soft landscaping, natural features such as trees and plantings, urban furniture and signage.

05

Problem definition framework

An identification of the key problems, issues and opportunities of the precinct

06

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An analysis of identified design precedents guided by the established problem definition framework.

00 Executive Summary

Tucked away behind the Physics building, the Physics Lawn is a space than can be used for casual sports or a quiet space for lunch.

The space also acts as a lesser-known entrance or exit to the UNSW campus and also as a 'buffer zone' between the campus and the Barker Apartments' student accommodation. Its many trees along the side and footpaths allow for shaded seating areas on the boundary while leaving the centre open for other activities such as sports and barbeques.

Although it is one of the largest lawns on the UNSW campus, the Physics lawn is overlooked by many and quite hard to locate being hidden behind two buildings from the UNSW

Mall. Additionally, the Physics Lawn Precinct is quite run down with old buildings and wire fences making it not the most welcoming of locations.

The Physics Lawn precinct has the potential to become a space for connection between community and university due to its prime location of being in the outer edges of both the university boundary and suburban boundaries. This tied with its rich history as one of the earliest precincts on UNSW presents itself as a key opportunity for all to celebrate and learn from its significant yet underappreciated past.

This Urban Precinct Analysis will therefore undergo an analysis of the Physics Lawn Precinct and its stakeholders as well as providing a design precedent analysis to inform the creation of a design problem definition framework. The analysis will be divided into 6 sections in order to support the decisions within the

problem definition framework.



Precinct Context

01

Image: Facade of Old Main Building from Physics Lawn
Source: Kerry Qian

01 Precinct Context



Image: Physics Lawn
Source: Kerry Qian

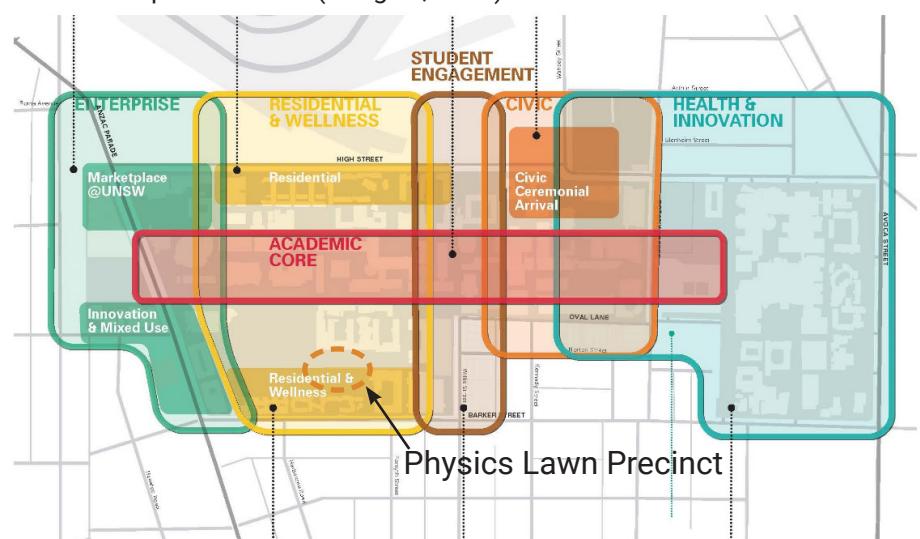


Image: First Graduation Ceremony on the Kensington campus at Old Main Building, 16 April 1955 & same location, 67 years later
Source: (Keith Bowling, UNSW Archives 04/6/6)

In 1950 the founding stone of the first permanent building on UNSW was placed. This building which was later completed in April of 1955, is now known as the 'Old Main Building' (1949 - 1959 | Records & Archives - UNSW Sydney, n.d.); a building that plays a crucial role within the experience of the Physics Lawn precinct.

The field which the Old Main Building overlooked is now known as the Physics Lawn and at the time, this was the ceremonial space used for graduations (1949 - 1959 |

Image: UNSW campus Structure
Source: Campus Structure (Douglas, 2018)



Records & Archives - UNSW Sydney, n.d.).

01 Precinct Context

Image: UNSW Kensington Campus
Source: <https://www.pinterest.com.au/>



Throughout the years, the physics lawn precinct has not changed significantly in terms of its physical appearance, however, in terms of its usage its popularity has declined significantly and is now almost forgotten even despite its rich history.

This may be due to a number of reasons including the opening of newer, more modern lawns such as the Library Lawn as well as the outdated, unchanged facade of the Old Main Building hence giving the precinct a sense of plainness

and dullness when compared to other areas of the university.

In 2020, UNSW introduced their 2025 Strategy update with a vision to "To improve lives globally, through innovative research, transformative education and commitment to a just society" (Gonski and Jacobs, 2020).

In order to achieve these goals, the UNSW Development Team plays a significant role in creating a thriving learning environment for its educators, researchers, and students

(Gonski and Jacobs, 2020). The Campus Vision and Placemaking key visions are to therefore attract the best minds, attract a diverse student and staff body, and create an accessible campus. (Douglas, 2018)

Overall, it is as a result of its inconvenient location and lack of evolution that the Physics Lawn precinct has seen a decline in usage throughout its years.

02 Precinct Stakeholders

Image: Circusoc on UNSW Physics Lawn

Source: <https://mapio.net/images-p/91415302.jpg>



Being located on the UNSW Campus, the Physics lawn precinct is mainly used by students however it is also accessible to the general public.

caters to a widespread of characters from academics and educators, to adults and children.

Containing many public amenities such as a barbecue stand, bike racks, and a 'return and earn' reverse vending machine, the location draws in many different people. In addition to this, there is also a daycare centre not far from the lawn diversifying its user groups even more so.

As a result, the Physics lawn



Image: Fire Spinning on Physics Lawn
Source: (Wan, 2016)

Precinct
Stakeholders

02

02 Precinct Stakeholders

Persona 1: Jordan

Jordan is a second-year student at UNSW studying civil engineering, she had recently joined the subcommittee of a society as a way to socialize with more people while also improving her portfolio.

As part of the subcommittee, she volunteered to be part of a team that was in charge of hosting weekly barbeques on the UNSW Physics Lawn.

Although it was already her second year at UNSW she had never really seen or been to the Physics lawn and as a result, she had trouble picturing how the setup of the barbeque would work.

On the day of the barbeque, Jordan arrives a few minutes late to the Physics lawn as she had some difficulty finding the location but he was still able to help his team set up for the barbeque just in time.

There was not much to do on the Physics Lawn so most people would come and get their free sausage sizzle and then leave.

Other than the weekly barbeques Jordan never really sets foot on the Physics lawn as she believes it is not a very nice area.



Image: Portrait of woman

Source: <https://this-person-does-not-exist.com/>

Personality

- Extroverted
- Objective-driven

Age: 19

Occupation: Student

Goals

- Make new friends
- increase her portfolio

Issues

- Difficulty locating site
- Hard to socialise with people
- very tiring to always have to set up weekly barbeques.

02 Precinct Stakeholders

Persona 2: Claire

Claire is an architecture student at UNSW. She is quite introverted and prefers to spend time alone but does not mind the company of her close friends.

Often, she studies alone until late in the red centre and leaves campus when the sun is down. She lives in the Barker apartments but due to the low lighting and "dodgy" surrounding of the Physics Lawn precinct, she often finds herself walking down the UNSW Mall and along ANZAC parade in order to get home rather than crossing straight through the Physics Lawn.

Claire often finds herself falling asleep for a few minutes while studying. She knows that there are sleeping pods in the UNSW library but thinks they are too far away from the red centre and is not bothered making the trip there.

Due to her long study sessions, Claire rarely finds time to spend outside in the sun.

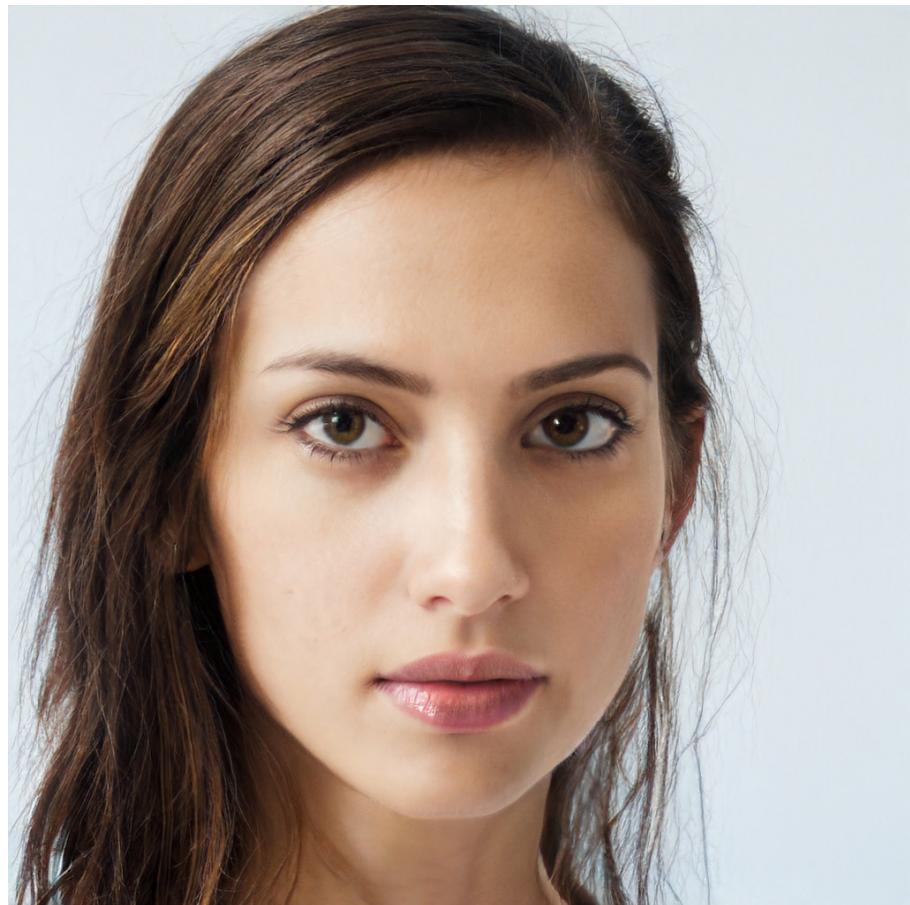


Image: Portrait of woman

Source: <https://this-person-does-not-exist.com>.

Personality

- Introverted
- Hard-working

Age: 20

Occupation: Student

Goals

- Graduate
- Take better care of herself

Issues

- Scared of going through the Physics lawn at night
- No good places near her study area to relax

02 Precinct Stakeholders

Persona 3: Jasper

Jasper's mother is currently undertaking her master's degree in education at UNSW. In the morning, Jasper is dropped off at the daycare centre on Barker Street and as a result, he often walks past the Physics Lawn precinct and the back entrances of UNSW.

Jasper's only exposure to UNSW is when he walks down Southern drive and sees the Physics lawn and the backsides of the physics building and the plain facade of the Old Main Building.

On some days when Jasper's mother finishes early, they will eat their lunch together on the Physics Lawn. Jasper likes the openness of the lawn however, he always stays close to his mother as he is scared of the Helium cylinders and constant loud humming of the generators located behind the physics building.



Image: Portrait of child

Source: <https://this-person-does-not-exist.xcom/>

Personality

- Playful
- Creative

Age: 4

Occupation: Stay alive

Goals

- Have fun
- Make friends

Issues

- Does not like UNSW
- Scared of the buildings surrounding the Physics Lawn

02 Precinct Stakeholders

Persona 4: Tree

During the day, the tree blocks out harsh sunlight and provides shade to the people on the Physics Lawn. However, at night the tree becomes more ominous as it blocks out a lot of light from the street lamps and also prevents people on the path from seeing out into the distance.

Additionally, much like the surrounding buildings within the precinct, the tree has not received much attention since it was planted.



Image: Tree on the Physics Lawn
Source: Kerry Qian

Personality

- wise

Age: 70

Occupation: Photosynthesis, provide shade

Goals

- Be more welcoming

Issues

- Neglected
- Ominous at night



Precinct Characteristics: Spatial

03

Image: View of Physics Lawn from Old Main Building
Source: Kerry Qian

03 Precinct Characteristics: Spatial



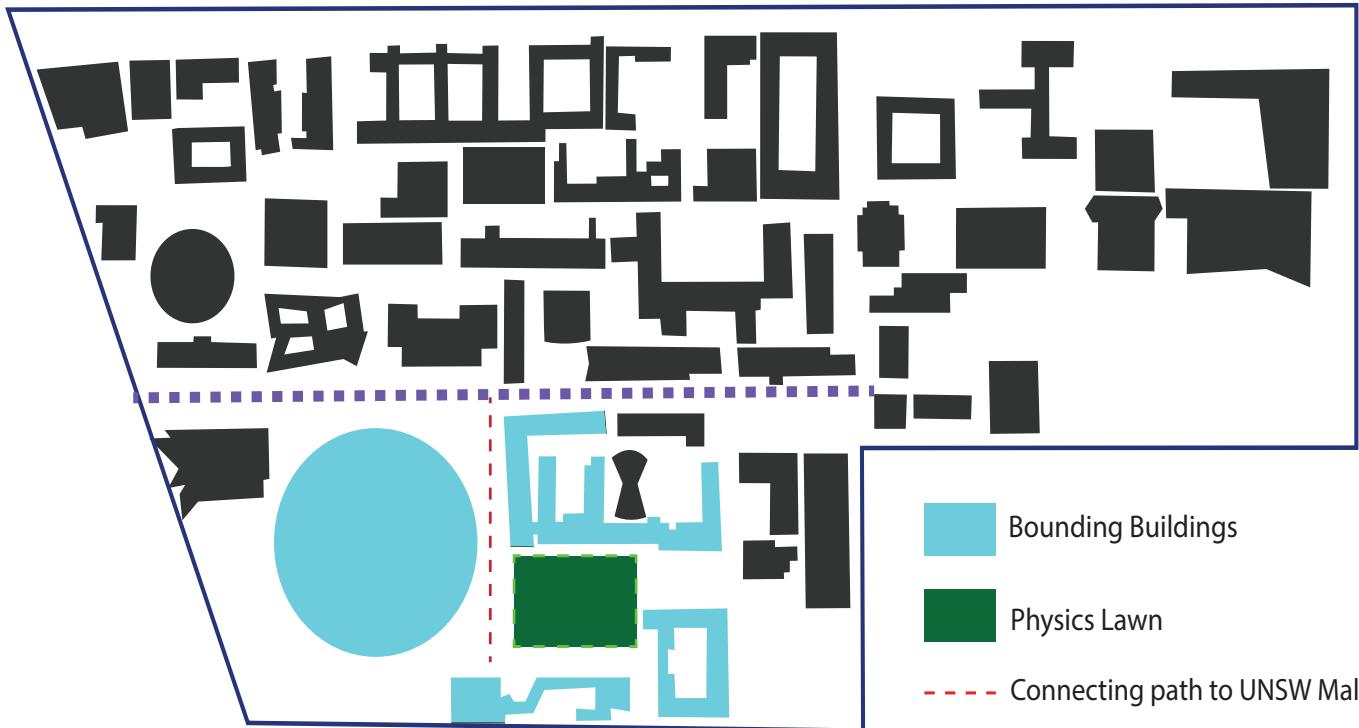
Image: UNSW Satellite Image
Source: Google Earth

03 Precinct Characteristics: Spatial

Bounding buildings & Urban objects

Image: Urban profile of UNSW

Source: Kerry Qian



The Physics Lawn is a 6-minute walk away from the UNSW Anzac Parade Light rail station, however, if you are not paying attention to the signs while walking down the UNSW Mall, you will likely miss the pathway leading up to the Physics Lawn precinct.

Even while following directions from signs, one may find themselves doubting their instincts as the ally leading down to the Physics Lawn precinct is almost suspicious when compared to the wide and imposing walkway of the UNSW Mall.

As you walk down the connecting path, you will pass the back exits of the School of Physics building where you will hear a loud constant humming

generator and see rubbish bins lined beside big helium cylinders.

In addition to this, as of 2022, the rebuilding of The Village Green has not been completed and is fenced off by portable aluminium cyclone fences this further enhances the narrowness of the connecting path from UNSW Mall to the Physics Lawn precinct.

Overall it is safe to say that the first impression of the Physics Lawn precinct is not a good one regardless of which entry you experience it from.

The Key spatial characteristics of the Physics Lawn precinct is therefore the:

- School of Physics building
- Old Main Building
- Physics Lawn
- Surrounding streets
- Barker Apartments

03 Precinct Characteristics: Spatial Bounding buildings & Urban objects



Image: Helium cylinders behind the School of Physics Building
Source: Kerry Qian



Image: Facade of buildings overlooking the Physics Lawn



Image: Footpath leading to Southern Drive Exit
Source: Kerry Qian



Image: One of 3 bins located on the Physics Lawn precinct



Image: Wire fences separating Physics Lawn precinct from Southern Drive
Source: Kerry Qian



Image: Bike Racks
Source: Kerry Qian



Image: Public Barbeque
Source: Kerry Qian



Image: One of 3 sets of tables on the Physics Lawn

03 Precinct Characteristics: Spatial

Primary & Secondary exit points

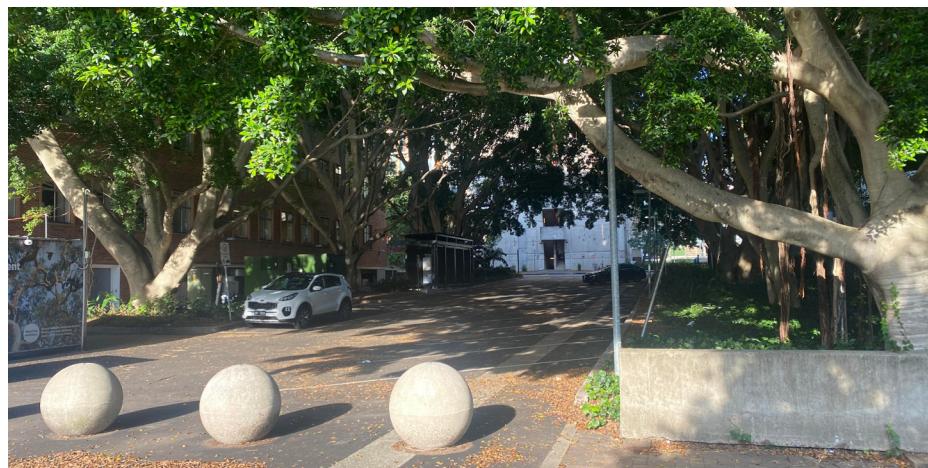


Image: Physics Road entrance
Source: Kerry Qian

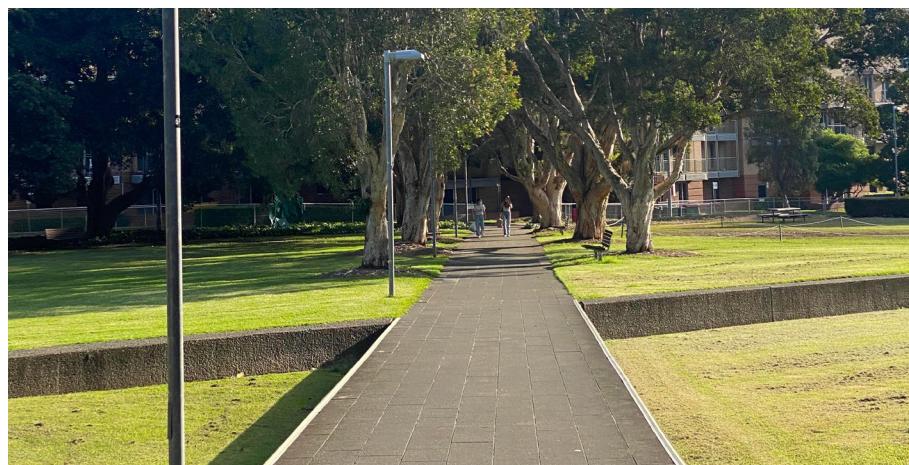


Image: Main footpath crossing
through the Physics Lawn
connecting Southern Drive and
Physics Road
Source: Kerry Qian



Image: Connecting footpath to
Physics Road
Source: Kerry Qian

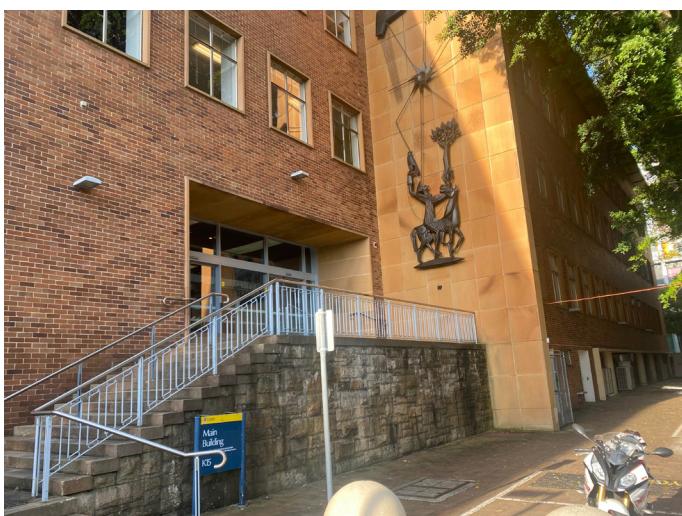
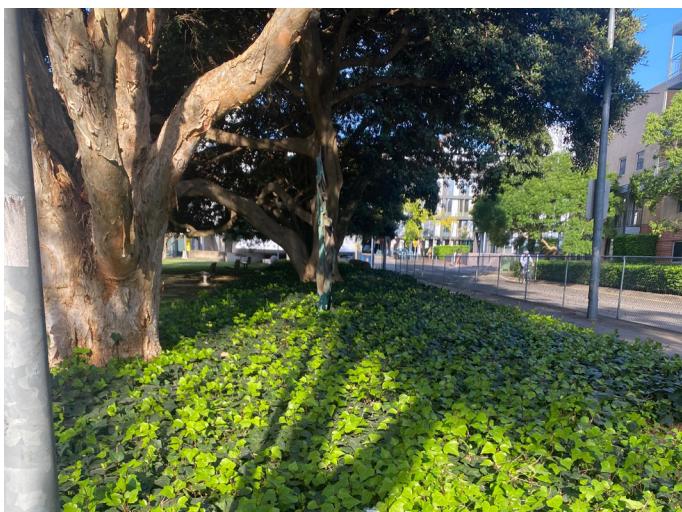


Precinct Characteristics:
Material

04

Image: Andrew Rogers - Screens
Source: Kerry Qian

04 Precinct Characteristics: Material



The Physics Lawn precinct is hidden behind the trees that border its lawn. This creates a very refreshing land of greenery to brighten up the tanned brown bricked walls of the Old Main Building and the School of Physics.





Problem Definition framework

05

Image: Southern Drive
Source: Kerry Qian

05 Problem definition framework

| Problems | Opportunities | Design Solutions |
|--------------------|--|--|
| Unpopular location | The precinct's lack of popularity is a concern to the university however, to the small group of its users, it may be the reason they come back to the location. | A design solution should aim to keep the Physics lawn as an area that is true to what it has cultivated itself to be; a quiet and relaxing space surrounded by nature |
| Forgotten | As one of the first Precincts to be formed on the UNSW campus, the location has the potential to be rediscovered. The precinct's lack of popularity is a concern to the university however, to the small group of its users, it may be the reason they come back to the location. a learning | A design solution should aim to encapsulate the rich history of UNSW whilst portraying the innovative ways of thinking in UNSW. |
| Run-down | As an entrance to UNSW, the Physics Lawn precinct has the ability to draw in visitors and leave rich impressions to those who pass by. | A design solution must acknowledge the context of the precinct (Department of Planning, Lands and Heritage, 2020). The Physics lawn is located in a position between the main road and an urban environment. The design solution should therefore aim to have "a clear and legible identity for the precinct based on its creativity, heritage and its specific geographical context" (Pancholi, Yigitcanlar and Guaralda, 2015) |
| Difficult to find | The Physics Lawn precinct is almost like a nature reserve tucked away in the university. This creates an opportunity for innovative design to aid people in discovering the Physics Lawn precinct. | A subtle design solution that is still easily noticeable to those who are actively looking for the Physics lawn. |



Design precedents

06

06 Design Precedents

Swing Time



Image: Swing Time - Eric Höweler and Meejin Yoon

Source: <http://www.howeleryoon.com/work/48/swing-time>

Designed by Eric Höweler and Meejin Yoon, Swing Time was part of an initiative to create interactive public spaces with the goal of creating a playground for people of all ages to interact with (Swing Time - Höweler + Yoon, n.d.).

when the rings detect a swinging motion, the swing illuminates and glows and when swinging is no longer detected, the light switches off (Swing Time - Höweler + Yoon, n.d.).

Relevance

- Innovative solution of drawing more attention to Physics Lawn precinct while remaining as a space of relaxation
- Design interaction is based on simple laws of physics
- Attraction point to draw in and connect people
- Acts as additional light sources at night

06 Design Precedents

Meandering River



Image: Meandering River- Onformative

Source: <https://onformative.com/work/meandering-river/>

Meandering River is an audiovisual installation consisting of algorithmically generated real-time visuals and AI-generated music. This digital art piece allows you to perceive change by creating a unique sense of time. This work, which spans multiple screens, reinterprets the changing behaviour of rivers by visualizing and sonicating their effects on the Earth's surface (onformative – Meandering River, 2018).

Relevance

- Subtly captures and draws the attention of those who pass by
- Collaboration between digital and natural; much like the Physics Lawn precinct.

06 Design Precedents

Social Fence



Image: Social Fence - Tejo Remy

Source: <http://www.remyveenhuizen.nl/work/public-space/social-fence>

Within his work, 'Social Fence', Tejo Remy aimed to change the commonly negative connotations towards fences. By distorting the fence on both sides, it creates seating spaces as well as a meeting space that connects people on both sides of the fence (Social Fence | Tejo Remy & René Veenhuizen, n.d.).

Relevance

-

06 Design Precedents

Aqueous



Image: Aqueous- Jen Lewin

Source: <https://www.jenlewinstudio.com/portfolio/aqueous/>

Aqueous is a work based on the natural systems of the Golden Ratio and is composed of hundreds of interactive modular platforms in order to form trails of light. During the day, the interactive footpath mirrors the sky and at night, it glows interactively engaging with the people who use it (Aqueous - A Meandering Pathway of Light, - Jen Lewin Studio, 2021).

Relevance

- Creating brighter, interactive footpaths at night
- Mathematically based design
- creative, approachable design during the day.

06 References

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