The Island of the Day Before

Taylor Ray

a 120-point thesis submitted to the Victoria University of Wellington in partial fulfillment of the requirements for the degree of Master of Architecture (Professional)

Victoria University of Wellington
Wellington School of Architecture
2023
Ka Mua, Walking Backwards into the future
Ka Muri.
Fig. 0.1. Salvador Dali, The Persisitence of Memory, 1931.
Theories about temporality underwent rapid transformations in the twentieth century. Philosophers such as Maurice Merleau-Ponty (1908-1961) and Martin Heidegger (1889-1976), for example, argued that the past, present, and future are not isolated temporal contexts but instead are interwoven. At the same time, creative disciplines also began to look for new ways to represent time. Paintings such as Salvador Dali’s The Persistence of Memory (1938) and films such as Christopher Nolan’s Interstellar (2014) were made to challenge our normative understanding of temporal contexts. Works of literary fiction such as Alain Robbe-Grillet’s Topology of a Phantom City (1976), Alan Lightman’s Einstein’s Dreams (1992), and Umberto Eco’s The Island of the Day Before (1994) represent the past, present, and future as interwoven, no longer situated separately upon a linear timeline.

In encouraging architecture to take up this challenge of re-presenting temporality, this design-led research investigation proposes to use Umberto Eco’s allegorical novel The Island of the Day Before as a literary provocateur for an architectural project, interrogating how Eco’s literary devices ‘spatialise’ time and applying those devices to architecture. The thesis investigates how an allegorical architectural project can spatially re-present temporal conditions in ways that challenge and augment our normative understanding of time.

This thesis asks:

How can a speculative, allegorical architectural project spatially re-present temporal conditions in ways that challenge and augment our normative understanding of time?
Fig. 0.2. Wrangel Island, 2018 A.
In my fourth year of study at Te Herenga Waka | Victoria University of Wellington, I was taught by Daniel K Brown, my now supervisor. At this time, I was enlightened about narrative-based architectural design research.

I consider this framework of architectural design to be the key to unlocking the often predictable, monotonous, orthogonal design and CAD processes that I struggled to escape over prior years of my studies. Although these processes were rich and valuable, I often found myself privileging technical design solutions at the expense of developing a work of architecture that also evidenced meaning. Unbeknownst to me, I had failed to acknowledge the design opportunities presented by narrative-based architectural research – primarily due to a lack of exposure and critical comprehension.

Through this new lens, I began to engage in architectural projects that manifest richer dialogues with architecture’s diverse contexts, theories, and, more specifically, transience with time. This reinvigorated my passion for the world of architecture and design. Now, all my thoughts, desires, technical skillsets, and developing knowledge can exist on the same plane. Through this, my intrigue with time and its connotations (recently reignited by Christopher Nolan’s film Interstellar) could enter the architectural discourse. This is where this design-led Research Investigation finds itself.

This thesis can be understood as a culmination of my lifelong passion for architecture and my intrigue with time. By engaging in the narrative methodology that Daniel has exposed me to, I seek to translate these interests into a theoretically supported and critically interrogable allegorical architectural project that explores the spatialisation of non-linear time in new ways.
Fig. 0.3. Wrangel Island, 2019 B.
ACKNOWLEDGMENTS

To Daniel,

Thank you for the limitless patience, kindness, knowledge, and respect you have given to my peers and me over the most rewarding two years of our academic lives. You have had more impact on me than I can describe.

To my friends and family,

Thank you for your endless love and support throughout my academic life. I sincerely appreciate everything you have done to support me.

To Zena,

Thank you for your unwavering faith in me. You’ve driven me to push onward when I’ve otherwise doubted myself. I could not have come this far without you, and I am thankful for that.
Fig. 0.4. True Colour Modus photograph of Wrangel Island, 2001.
# TABLE OF CONTENTS

## 1.0 INTRODUCTION

1.1. Research Agenda 2
1.2. Research Proposition 2
1.3. Research Question 3
1.4. Research Aim and Research Objectives 4-5
1.5. Design Methodology and Research Processes 7-9
1.6. Scope of the Design Research 11
1.7. Thesis Structure 12-13

## 2.0 LITERATURE AND PROJECT REVIEW

2.1. Introduction 19
2.2. Allegory and Temporality 21-29
2.3. Speculative Cartography 31-35
2.4. Liminality 37-41
2.5. Fragmentation 43-47
2.6. Multiplicity, Dualities, and Oppositions 49-53
2.7. Conclusion of Literature and Case Study Review 55

## 3.0 CONCEPTUAL DESIGN

3.1. Introduction 61
3.2. Speculative Cartography Experiments 62-79
3.3. Liminality Experiments 80-91
3.4. Integrating Conceptual Design Experiments 92-95
3.5. Critical Reflection 96-97
4.0 PRELIMINARY DESIGN

4.1. Introduction 101
4.2. Early Preliminary Design Experiments 102-105
4.3. Fragmenting the Research and Identifying a Unified Approach 106-111
4.4. Architectural 'Stitch' Exploration I 112-127
4.5. Architectural 'Stitch' Exploration II 128-131
4.6. Architectural End Conditions 133-135
4.7. Master Plan and Section 137-141
4.8. Visualising Preliminary Design 143-151
4.9. Critical Reflection 152-153

5.0 DEVELOPED DESIGN

5.1. Introduction 157
5.2. Architectural 'Stitch' Development 158-181
5.3. Site Plan 183-185
5.4. Speculative Architectural Renders 187-211
5.5. Critical Reflection 212-213

6.0 CONCLUSION AND CRITICAL REFLECTION

6.1. The Past 217
6.2. Critical Reflection on Design Research 218-219
6.3. Bibliography 222-224
6.4. Image Index 225-227
"I pluck something from my neck that feels like a grain of sand. I drop it for inspection on the open desk diary. It lands on the blank expanse of Sunday, Christmas Day. ... It's the merest scrap of a beetle of some sort. ... Nothing evades the relentless onrush of time. Except, that is, my tiny beetle which has now crossed the uncrossable border from Sunday into Saturday, from Christmas Day to Christmas Eve. It's rewrapped the presents, uncooked the turkey, sobered the uncle and undisappointed the children. In celebration of which feat I pick up the diary, carry it carefully outside, blow the little beastie off the page and back dateless world..."
feels like a grain of sand. I drop it for
seconds on the blank expanse of Sunday,
life, a couple of millimetres in length, a
relephant onrush of time. Except, that
and the uncrossable border from Sunday
Christmas Eve. It's rewrapped the presents,
the and undisappointed the children. In
my, carry it carefully outside, blow the little
ark into a dateless world..."
INTRODUCTION
1.1 RESEARCH AGENDA

Theories about temporality, “the circumstances in which time is perceived as a problem or as a structure” (McKeon 124), have undergone rapid transformations in the twentieth century. Philosophers such as Maurice Merleau-Ponty (1908-1961) and Martin Heidegger (1889-1976), for example, argued that the past, present, and future are not isolated temporal contexts but instead are interwoven (Aho 2005). At the same time, creative disciplines also began to look for new ways to represent time. Paintings such as Salvador Dali’s The Persistence of Memory (1938) and films such as Christopher Nolan’s Interstellar (2014) were made to challenge our normative understanding of temporal contexts. Works of literary fiction such as Alain Robbe-Grillet’s Topology of a Phantom City (1976), Alan Lightman’s Einstein’s Dreams (1992), and Umberto Eco’s The Island of the Day Before (1994) re-present the past, present, and future as interwoven, no longer situated separately upon a linear timeline.

1.2 RESEARCH PROPOSITION

The principal issue that this thesis identifies, and therefore wishes to address is as follows:

In encouraging architecture to take up this challenge of re-presenting temporality, this design-led research investigation proposes to use Umberto Eco’s allegorical novel The Island of the Day Before (henceforth, IDB) as a literary provocateur for an architectural project, interrogating how Eco’s literary devices of allegory, temporality, cartography, liminality, fragmentation, multiplicity, dualities, and oppositions can be used to ‘spatialise’ time, by applying those devices to architecture.

The thesis investigates how an allegorical architectural project can spatially represent temporal conditions in ways that challenge and augment our normative understanding of time. The site for this investigation is Wrangel Island, which is part of the Chukotka Autonomous Okrug in Russia. Intersected by the International Date Line, one half of the island resides in the past and the other in the present.
1.3 RESEARCH QUESTION

To investigate how contemporary architecture can free itself from preconceived notions of temporality, the thesis asks:

How can a speculative, allegorical architectural project spatially re-present temporal conditions in ways that challenge and augment our normative understanding of time?
RESEARCH AIM AND RESEARCH OBJECTIVES

The Research Aim of this design-led research investigation is:

RA - ALLEGORY AND TEMPORALITY

To investigate how a speculative, allegorical architectural project can spatially re-present temporal conditions in ways that challenge and augment our normative understanding of time.
To address the Research Aim, the following Research Objectives have been established:

**RO1**  
**SPECULATIVE CARTOGRAPHY**  
To investigate how architectural theory relating to speculative architectural cartography can help to spatially re-present temporal conditions in ways that challenge and augment our normative understanding of time.

**RO2**  
**LIMINALITY**  
To investigate how architectural theory relating to liminality can help to spatially re-present temporal conditions in ways that challenge and augment our normative understanding of time.

**RO3**  
**FRAGMENTS**  
To investigate how architectural theory relating to fragments can help to spatially re-present temporal conditions in ways that challenge and augment our normative understanding of time.

**RO4**  
**DUALITIES, OPPOSITIONS AND MULTIPLICITIES**  
To investigate how architectural theory relating to dualities, oppositions and multiplicities can help to spatially re-present temporal conditions in ways that challenge and augment our normative understanding of time.
This methodology for this design-led research investigation is presented graphically in Fig. 4. It builds upon and tests Penelope Haralambidou’s proposition for the allegorical architectural project as a critical method for design research (see section 3), by interrogating the themes and literary devices of Umberto Eco’s *IDB* and translating them into an architectural context, as a way to spatially re-present temporal conditions in ways that challenge and augment our normative understanding of time.

Digital modelling and rendering are used as the principal tools in the design-led experimental process. The methodology develops iterative experiments to translate and build upon ideas and insights derived from the literary devices of *IDB*, principal theories, and relevant case studies—interrogating and translating these ideas and insights into an architectural context. Digital modelling offers opportunities for engagement with high levels of complexity in a productive manner, enabling more extensive interrogation of the experiments addressing the Research Aim and Objectives. Digital drawing and rendering are used to support and represent the digital modelling experiments. This enables a visualisation of the iterative processes of this research, which facilitates critical reflection. Both tools supplement each other by providing a generative visualisation of the iterative processes of the research, which can then be critically evaluated against the Research Aim and Objectives.

This research critically reflects on key authors and case studies relating to allegorical architecture, temporality, the interdependency of speculative cartography and speculative architecture, use of architectural fragments as components for storytelling, and use of multiplicity, dualities, and oppositions in the expression of allegorical narratives. This research looks to produce a speculative architectural outcome that spatially represents temporal conditions in ways that challenge and augment our normative understanding of time. These outcomes are critically interrogated for their contribution to the field, shortfalls, and potential further research opportunities.
**Research Question**

How can a speculative, **allegorical architectural project** be used as a critical method to spatialise time?

**Research Aim**

To investigate how a speculative, **allegorical architectural project** can be used as a critical method to spatialise time?

**RO1**

To investigate how architectural theory relating to **speculative cartography** can help to allegorically convey the spatialisation of time.

**RO2**

To investigate how architectural theory relating to **liminality** can help to allegorically convey the spatialisation of time.

**RO3**

To investigate how architectural theory relating to **fragments** can help to allegorically convey the spatialisation of time.

**RO4**

To investigate how architectural theory relating to **dualities, oppositions and multiplicities** can help to allegorically convey the spatialisation of time.

---

**Conceptual Design**

Iteratively develops the research through designed experiments, focuses on exploring the RA, RO1 and RO2.
**Preliminary Design**

Continues to develop research, applying AO3 (Fragments) to identify a unified approach which is iteratively constructed out of elements of the Research.

Reflecting on integration of theory, processes of research, feedback from internal critical reviews, and next steps.

**Developed Design + Conclusions**

Considers critical reflection of Preliminary Design. Identifies approach for a developed speculative architecture which spatialises time.
1.6 SCOPE OF DESIGN RESEARCH

The limitations and scope of this research are that:

As a speculative architectural investigation designed through allegorical processes, the outcome spans the entire north-south width of Wrangel Island (approximately 80 km), and therefore is not intended to be buildable. As such, architectural technologies, structural systems, detailed program, costs, and buildability are outside of the scope of the research. The research site of the thesis’s island of the day before, Wrangel Island, was unvisitable given cost and time restraints. Like the island described in Eco’s novel, Wrangel Island’s “real and imagined inaccessibility represents the impossibility of truthfully representing the past, or history, from our position in the present” (Marais 568). The speculative scope of this design-led research project is reflected in Haralambidou’s argument that:

*The allegorical architectural project, although at times visually and physically inhabited, is often disconnected from the material construction of a building. The imaginative, sometimes poetic bringing together of ideas positions it closer to visual literature and, because of its high dependency on narrative, it can be a bridge between a work of art, painting or sculpture, and a literary text, poem or novel.*

IX. THESIS STRUCTURE

This research is organised into 6 chapters as follows:

CHAPTER 1: INTRODUCTION

Chapter 1 introduces the Research Problem, Research Question, Research Aim, Research Objectives, Methodology, Scope, and Structure of the thesis.

CHAPTER 2: THEORETICAL REVIEW

Chapter 2 introduces principal theorists and case studies that are relevant to addressing the Research Aim and Research Objectives.

CHAPTER 3: CONCEPTUAL DESIGN

Chapter 3 begins by identifying the research site, Wrangel Island. The principal focus is to build upon insights derived from the Literature and Project Review and interpret those insights as iterative design-led sketch experiments. The chapter critically reflects on the Conceptual Design outcomes in relation to how well they address the RA and ROs, as well as opportunities and directions for Preliminary Design experiments in the following chapter.
CHAPTER 6: CONCLUSION AND CRITICAL REFLECTION

Chapter 6 critically considers the thesis as a whole. The principal focus is to reflect upon why the Research Problem has been an important issue to resolve through design; the effectiveness of the methodology; an evaluation of the successfulness of architectural spaces; what conclusions can be drawn from the investigation; what are the constraints and limitations of such findings; other potential applications of the findings; and how this study might advance further in the future, if pushed beyond the original scope.
For people like us who
the separation between
has only the importa
tenacious

Albert Einstein, Writing
who believe in physics, past, present and future
ance of an admittedly
is illusion.

on 'Time's Arrow', 1953.
LITERATURE and CASE STUDY REVIEW
2.1 INTRODUCTION

In his novel *The Island of the Day Before*, Umberto Eco spatialises time using the narrative devices of allegory, temporality, cartography, liminality, fragmentation, multiplicity, dualities, and oppositions. In this Literature and Project Review, section 2.2 explores theorists and case studies related to allegory and temporality, key components of the Research Aim of the investigation. Section 2.3 explores theorists and case studies related to speculative cartography, the principal device in RO1; section 2.4 explores liminality (RO2); section 2.5 explores fragmentation (RO3); and section 2.6 explores multiplicity, dualities, and oppositions (RO4). Section 2.7, the conclusion, considers opportunities and directions for Conceptual Design Stage experiments in the following chapter.
2.2 ALLEGORY AND TEMPORALITY

Section 2.2 explores theorists and case studies related to allegory and temporality, key components of the Research Aim of the investigation:

To investigate how a speculative, allegorical architectural project can spatially re-present temporal conditions in ways that challenge and augment our normative understanding of time.

PRINCIPAL THEORISTS

ALLEGORY

Walter Benjamin (1892-1940) (supported by Bainard Cowan), German philosopher and critical theorist.

Bainard Cowan, Professor of Literature at the University of Dallas.

Jeremy Tambling, British writer, critic, and previously a Professor of Literature at the University of Manchester.

Penelope Haralambidou, Professor of Architecture and Spatial Culture at the Bartlett School of Architecture, London.

TEMPORALITY

Maurice Merleau-Ponty (1908-1961) (supported by Patricia Locke & Rachel McCann).

Martin Heidegger (1889-1976), German philosopher, and critical theorist.

Friedrich Kümmel, Professor of Philosophy at the University of Tubingen, Germany.

Andrew Carr, Senior Architect at Brady Mallalieu Architects.

David Leatherbarrow, Professor of Architecture at the University of Pennsylvania.

CASE STUDIES

ALLEGORY


TEMPORALITY


Carlo Scarpa, Fondazione Querini Stampalia, 1961. Venice, Italy.

Louis Kahn, Yale Center for British Art, 1953. New Haven, USA.
Allegory allows for a rhetorical, metaphorical, and plurally interpretive approach to the representation of ideas, also allowing their subsequent interrogation. Walter Benjamin’s (1928) book *The Origin of German Tragic Drama* establishes a theoretical foundation for allegory in this thesis investigation, which will then be built upon by contemporary theorists. When discussing the allegorical nature of philosophical writing and its processes, Benjamin outlines that allegory’s:

method is essentially representation…. Representation as digression… [where] the absence of an uninterrupted purposeful structure is its primary characteristic. Tirelessly the process of thinking makes new beginnings, returning in a roundabout way to its original object. This continual pausing for breath is the mode most proper to the process of contemplation. (28) Benjamin establishes the temporal nature of allegorical processes, reflecting that “…the heart of the allegorical way of seeing, of the baroque, secular explanation of history… resides solely in the stations of its decline… because death digs most deeply the jagged line of demarcation between physical nature and significance…” (166).

Bainard Cowan interrogates Benjamin’s proposition in his article “Walter Benjamin’s Theory of Allegory”. Cowan interrogates the ability of allegory to explore alternative ‘truths’ of the world, where:

…in Benjamin’s analysis, allegory is pre-eminently a kind of experience… from an apprehension of the world as no longer permanent, as passing out of being: a sense of transitoriness… fragmentary and enigmatic… [where] the affirmation of the *existence* of truth… is the first precondition for allegory; [and] the second is the recognition of its *absence*… [Representation of allegory] is thus not to be viewed for its end product, but its process. The activity of representation is the dwelling-place of truth, the only “place” where truth is truly present, (110, 114).

In his (2009) book *Allegory*, Jeremy Tambling, in reflecting upon the interrelation between narratives relating to time, allegory, and temporality, explains that:

the knowledge and experience of time constrains narrative, which is therefore a figure, an allegory, expressing a relationship towards temporality. It emphasizes that the narrative exists in time… A narrative is an allegorization of being within time… [and] allegorical interpretation, while perhaps revealing a truth that allegory seems to seek, can never reach it; it can only generate further allegorical writing… this makes repetition a feature of allegorical narratives… comprising fragments… (Ch. 7, Ch. 7.3).

Tambling’s reflections about repetition within allegory suggest an approach to architectural design experiments that might explore repeated forms along the International Date Line – the context of the temporal allegory.

In her article “The Fall: The Allegorical Architectural Project as a Critical Method”, Penelope Haralambidou discusses allegory as a critical method for architectural research. Haralambidou explains that “the allegorical architectural project can be employed to unravel another piece of work, a site or drawing itself by questioning its underlying syntax… and becomes a vehicle for criticism… a structure of thought where meaning is not grasped directly but through metaphor, which often takes the guise of narrative and story-telling” (225, 226). This position establishes a theoretical framework with which to unravel Umberto Eco’s (1994) *IDB* and use it as a generator for an allegorical architectural project as that spatialises time. Haralambidou privileges metaphor as a design tool. Haralambidou’s (2004) design installation *The Fall* provides a case study to investigate how allegorical processes can be applied to an architectural project in relation to the thesis objectives. *The Fall* metaphorically interprets a bridging between
two works of art: Leonardo da Vinci’s *Mona Lisa* (1503-7) and Marcel Duchamp’s *Given: 1° the waterfall, 2° the illuminating gas* (1946-66). Haralambidou explains that:

Lady on a Balcony, [is] a less-known title for The Mona Lisa, [which] suggests that the female figure sits on the balcony of what might be a tower… [Architecture] occupies the void behind the head in the portrait… It comprises the tower supporting the balcony, which joins to a long corridor transversing the void and leading to the view from the backyard. After the fall, the female figure travels through the corridor and climbs the staircase in the tower to assume the original position, only to fall… again [repetitively] in a repeated cycle” (227-228).

Ultimately, this case study suggests how architecture can be used as a metaphorical bridge between works or ideas, such as with linear and non-linear time. Additionally, Haralambidou’s *The Fall* suggests a temporal allegory, with ‘the lady’ experiencing a cyclical temporal narrative by constantly repeating the fall.
2.2.2 KEY THEORISTS AND CASE STUDIES RELATING TO TEMPORALITY

For this research, Maurice Merleau-Ponty and Martin Heidegger provide a theoretical foundation for theories of temporality. Merleau-Ponty’s work has been interrogated by contemporary scholars Patricia Locke and Rachel McCann in the book *Merleau-Ponty: Space, Place, Architecture*. Heidegger is interrogated due to the theoretical connections to Walter Benjamin’s theory of allegory and its temporal nature.

In his (1945) book *Phenomenology of Perception*, Merleau-Ponty discusses subjective and interwoven temporality, explaining that:

…time is… not a real process, not an actual succession… It arises from my relation to things. Within things themselves, the future and the past are in a kind of eternal state of pre-existence and survival… What is past or future for me is present in the world… within things themselves, the future is not yet, the past is no longer, while the present, strictly speaking, is infinitesimal, so that time collapses… it is through time that being is conceived, because it is through relations of time-subject and time-object that we are able to understand those obtaining between subject and world (478, 500).

In his book *Being and Time*, Heidegger discusses the concept of interwoven temporality:

Coming back to itself futurally, resoluteness brings itself into the situation by making present. The character of "having been" arises from the future, and in such a way that the future which "has been" (or better, which "is in the process of having been") releases from itself the Present. This phenomenon has the unity of a future which makes present in the process of having been; we designate it as "temporality"… (374).

This thesis investigation can apply Heidegger’s theory to an architectural language that can be used to evoke a ‘sense of future’ or ‘being-towards’ for observers (Dasein) of a speculative architectural outcome that occupies interwoven temporal contexts along the International Date Line.

Friedrich Kümmel, Professor of Philosophy at the University of Tubingen, Germany, coined the terms succession and duration in his essay “Time as Succession and the Problem of Duration”. He explains how time as succession signifies… [that] the coexistence of the “times” means that a past does not simply pass away to give way to a present time, but rather that both as different times may exist conjointly, even if not simultaneously… [whereas] true duration… [is not seen as] an exceptional experience “beyond” time but rather as a sustaining element of time and as wholly “given” in temporal experience, although in its pure state it does not appear to be experienced as time at all but rather as eternity (36, 38).

In his article “The Quick and the Dead: Temporality, Temporal Structure, and the Architectural Chronotope”, Andrew Carr applies these terms to architecture, identifying how “architecture that is based on duration seeks to persist unchanged within time while that based on succession engages with change, transience, and rhythm” (95). Carr notes how a “more extreme view of duration suggests notions of the eternal and timeless, or at the very least a collapse of past and future into an unchanging present… a slower, thicker form of succession or an architecture of duration ‘as a machine for slowing down time’ (109).

Carr’s theory suggests that two ways this thesis investigation could develop experiments relating to temporality could be through successive and durational design. Designed experiments, specifically in the Conceptual Design Stage, will explore how architecture can engage with time to defy (augment) or deny (challenge) it. Later stages of this experimentation will seek to explore a developed speculative architectural outcome that acknowledges both concepts.
Eric Owen Moss’s (2010) Samitaur Tower in Culver City, California is a case study that suggests ways in which Carr’s discussion of successive architecture can be applied to a design outcome to challenge or augment normative understandings of time. Samitaur Tower uses hot-rolled steel as a primary material. This allows the architecture to engage with the change that occurs through successive time, because the steel weathers, expressing change over time. Its rhythmic staggering of floor plans adjoined by major and minor balconies suggests a continual reorientation of its users, reflecting moments of transience throughout.

In his book Building Time, David Leatherbarrow identifies how architecture can reflect time as a spatial experience, two of which are relevant to this research: Time of the World (natural phenomena), and Time of the Body (movement, experience) (17). Leatherbarrow explains Time of the World as how:

Buildings record times of different durations and the events or effects through which they are known and recalled as if their various parts were clocks, calendars, or chronicles… a new building or a recent finish on an old one shows no signs of the labor of resistance. The surfaces of older buildings, by contrast, attest to their opposition in marks that qualify their surfaces… by virtue of sedimentation… (24).

Carlo Scarpa’s (1961) Fondazione Querini Stampalia in Venice, Italy is a case study that suggest ways to interpret Leatherbarrow’s proposition for “Time of the World” into a design outcome. This case study is a remodelling of the ground floor in a 16th-century palace. Scarpa, either directly or indirectly, has designed architecture that engages with “Time of the World” by allowing the Venetian tides to enter from the channel using gates on its perimeter walls. This creates an evolving engagement between the architecture and temporality, augmenting the space by demarcating time through the gradual weathering of marble.
"Clean" modern concrete used in spaces of present. (no erase)

Gap signifies new context

Emphasis on traditional arch form and material

New walls are broken, creating dialogue of the designer's immutable response to time.

Past is flimed.

Traditional column is offset, forcing acknowledgement of the building's past.


Author, Analysis of Fondazione Querini Stampalia, 2022.
Leatherbarrow also discusses the concept of “Time of the Body” (17). He uses Nicolaes Maes’s painting, *The Eavesdropper* (1657) to explain how embodied movement engages with temporality. He reflects that

> together with the distances shown in this image are times: passages, pauses, and advances, also progressions and retreats. Far from incidental to these movements, the spaces allow, invite, and recall them… the times of these spaces are amplified by the pacing and spacing of… architectural elements… (97, 98).

Essentially, “Time of the Body” can be understood as the structure of movement that is implied (or not) within architecture, where the knowledge or experience of the time it takes to undergo a certain movement is its temporality.

This thesis investigation can draw from Leatherbarrow’s “Time of the Body” by exploring tools such as scale, orientation, and displacement to challenge traditionally implied movements or spatial experiences within architecture. This may still be explored more explicitly in Developed Design architectural renders, when considering speculative ideas of inhabitation.

Louis Kahn’s *Yale Center for British Art* invites a dynamic and evolving spatial experience for users by integrating voids in walls that mimic paintings on the opposite walls, offering views through to the opposite side of the museum. In this sense, when looking through a void, visitors can perceive a future spatial experience, as well as looking back to a past experience.
Scott Norsworthy, Yale Center for British Art - Louis Kahn, 2013.

No doorways

- Kahn used voids to allow gallery to seem endless (like time itself).
- Voids also make space a everlasting functional vessel.

Form makes wall seem lighter.

Very regular grid.

Long lines of sight.

Window out to the always.

Vessel.

Offset center.

Framing opportunities in every grid.

Framing opportunities in every grid.

Opposing sides frame each other.

Past

Present/Future
2.3 SPECULATIVE CARTOGRAPHY

Section 2.3 explores theorists and case studies related to speculative cartography, the principal device in ROI:

ROI

To investigate how architectural theory relating to speculative cartography can help to spatially re-present temporal conditions in ways that challenge and augment our normative understanding of time.

PRINCIPAL THEORISTS

SPECULATIVE CARTOGRAPHY

Dr. Lorenz Hurni & Gerrit Sell
Professors of Cartography and Architecture at ETH Zurich.

Adam Barrows
Professor of the English Language and Literature Department at Carleton University, Canada.

Perry Kulper
Associate Professor at the University of Michigan’s Taubman College.

CASE STUDIES

SPECULATIVE CARTOGRAPHY


Cartography, the act of map-making and reading, deals with the spatialisation of temporal conditions through the concept of longitude and its counterpart latitude. Theories relating to speculative cartography is integral to this thesis investigation due to its focus on the International Date Line in Umberto Eco’s novel and the research site of Wrangel Island.

In their article “Cartography and Architecture: Interplay between Reality and Fiction”, Lorenz Hurni & Gerrit Sell discuss architecture and cartography in relation to conditions of fiction and reality:

Cartography deals with the depiction of real space; architecture, however, directly intervenes in and thereby changes real space… [Overall,] both cartography and architecture… are based on a set of well-established construction rules… On the other side, there is still enough freedom for individual design, allowing for an alteration of those rules… [However,] the two disciplines are characterized by their different points of departure… [W]hereas mapping is facing reality in scale 1:1, the architectural sketch is based on a fiction. Towards the end of the process, these conditions are reversed… Architecture means creating space on the basis of territory, cartography is documenting this territory for further intervention and this process leads to a circular flow of interdependency… (323, 324, 331).

In his book *Time, Literature, and Cartography After the Spatial Turn*, Adam Barrows provides a theoretical foundation to link cartography, literature (narrative), and temporality (subsequently an allegory of temporality). Barrows reflects:

Any lasting spatial relationship is made upon and dependent upon a series of constitutive temporal processes, just as the ability for those temporal processes to occur in the first place depends upon the structural stability of the spatial configuration that enables them… leaving chronometry out of cartography, in other words, potentially enshrines the existing state of affairs or the current spatial configuration as timeless and static, outside of the forces of historical change (4).

Barrows establishes a connection between the temporal process of chronometry (timekeeping) and cartography, arguing that:

narrative’s contribution to the cartographic imaginary is its expression of “chronometric imaginary,” which is inescapably bound up with spatial conception. A necessarily temporal art form, narrative gives vivid shape and materiality to that which is absent from conventional maps: the textures, rhythmic complexities, and uneven progressions of temporal movement (151).

This reflects how narrative can intertwine temporality and its processes into cartographic practices. In this sense, “the knowledge and experience of time constrains narrative, which is therefore a figure, an allegory, expressing a relationship towards temporality” (Tambling Ch. 7). This discussion suggests how cartography can engage with an allegory of temporality, and in turn, this allegorical architectural project.

Building upon Hurni & Sell’s theory of architecture and cartography’s interdependency, and Barrow’s discussion of cartography’s engagement with temporality, the thesis will explore how the ‘mapping’ of the International Date Line (I.D.L.) can act as, either literally or metaphorically, a timekeeper of the temporal processes between contexts on Wrangel Island. One approach is translating cartographic devices from Umberto Eco’s *IDB*, developing them into architectural devices that both map and record time along the I.D.L. Barrow's proposes “that while narrative temporality and Greenwich-based cartography might be incompatible, the time of literature could find an analogue among alternative cartographic practices that have found idiosyncratic means for accounting for the intricate temporalities of place...” (151).
Neil Spiller’s (2013) work *Frustum: Microphage Duos* is a case study that suggests ways to interpret Barrow’s theory of cartography by engaging with temporality through ‘chronometric imaginary’. Presenting as four portrait duos, the left image offers a view of present architecture, while the right maps outcomes from temporal relationships. Spiller labels these as “clean” or “dirty” sides (Spiller 2013). This case study suggests how cartography can be applied to an architectural drawing (or model) to both ‘map’ and ‘time keep’ relationships between architectural elements. This ultimately provides an allegory of temporal past, present and future conditions through this engagement with cartography.

In the article “A World Below”, Perry Kulper draws from known conditions to find the unexpected, and unknown, providing a cartographic approach that is architectural, allegorical, and defined by temporal reflection throughout the process of drawing. Kulper establishes an alternative framework for integrating architecture, allegory, cartography and temporality into a contemporary and speculative approach. This framework allows for the account of intricate temporal conditions occurring at the International Date Line on Wrangel Island, drawing from the known (real) conditions of the site to explore the unknown (fictional) conditions. Although Kulper applies his theory through drawing, speculative modelling offers the same freedom from real-world limitations, and hence, its application can be tested in this allegorical architectural thesis project to explore how the International Date Line may be interrogated or translated into an unexpected spatial experience of temporality, rather than the ‘known’ imaginary line it is in reality.

Bryan Cantley’s (2016) work *Early Native Topography 15:7* suggests a way to reconcile known and discovered ideas through speculative architectural mapping techniques. Like Kulper, Cantley’s speculative architectural drawing engages with “nuanced misalignments, approximate thoughts and imperfect moments… [through] ideas both known and discovered” (Kulper 63). He uses architectural notation devices/symbols to establish a known dialogue within which unknown, erratic, conditions can be provoked. These conditions present as tears, layers and changing perspectives of the drawing. Ultimately, Cantley’s work represents an allegory of a drawing’s relationship with time, as elements are perceived to be dynamically moving across the drawing (indicated by dashed construction lines). A similar drawing relating to Wrangel Island could be undertaken to establish a speculative spatialisation of relationships between the temporal contexts that intersect at the International Date Line.

Author, Analysis of Microphage Duos, 2022.
The fictional architectural concept is realised by using cartographic notations of reality.
2.4 **Liminality**

Section 2.4 explores theorists and case studies related to liminality, the principal device in RO2:

---

**RO2**

To investigate how architectural theory relating to liminality can help to spatially re-present temporal conditions in ways that challenge and augment our normative understanding of time.

---

**Principal Theorists**

---

**Liminality**

**Victor Turner (1920-1983)**
Professor of Anthropology at the University of Chicago

**Roger D. Abrahams (1933-2017)**
Professor of Humanities Emeritus at the University of Pennsylvania.

**Maurice Merleau-Ponty**

---

**Glen Mazis**, Distinguished Professor of Philosophy and Humanities Emeritus at The Pennsylvania State University.

**Edward Casey**, Distinguished Professor of Philosophy at Stony Brook University of New York.

---

**Case Studies**

---

**Liminality**


The term liminality first appeared in the (1909) book *Les Rites de Passage* by Arnold van Gennep, a French ethnographer and folklorist who studied the rites of passage of various cultures. Van Gennep discussed how an individual or group undergoing a transition between states experiences “rites of passage [which] theoretically include preliminal rites (rites of separation), liminal rites (rites of transition), and postliminal rites (rites of incorporation) … [that are] not always equally important” (Ch. 1). Victor Turner and Roger D Abrahams build upon van Gennep’s work in the book, *The Ritual Process: Structure and Anti-structure*. Turner outlines how within:

\[
\text{liminal phenomena… we are presented, in such rites, with a “moment in and out of time”, and out of secular social structure… of society as an unstructured or rudimentarily structured and relatively undifferentiated comitatus, community… [or preferably] ‘communitas’ (96).}
\]

With the interwoven states of past, present and future, as well as between the known and unknow, reality and fiction, there is the opportunity to explore what Turner and Abrahams describe as a liminal “communitas” (96) state between them. Ultimately, the International Date Line acts as a threshold between temporal states, and it can be used to establish itself as a speculative liminal space within which conceptual design experiments can situate themselves to challenge or augment users’ perceptions of being within and between different spatial and temporal constructs.

Helen Haverstick’s work *Twin Houses* is a case study that begins to suggest ways to interpret Turner and Abrahams’s proposition for spatially representing architecture in a state of temporal and spatial “communitas” into a design outcome (Turner and Abrahams 96). *Twin Houses* suggests the use of architectural techniques, such as the manipulation of scale, orientation, displacement, and mirroring of form, to challenge and augment normative architecture form, and to present a “moment in and out of time”, and out of secular social structure… of society as an unstructured or rudimentarily structured…” (96).

The mirroring of certain architectural forms suggests the existence of two defined states being represented in a liminal transition between them. Similar approaches of manipulating scale, orientation, displacement, and mirroring of form can be applied to designed experiments in this thesis to explore how a speculative architectural outcome may exist both across and within the “communitas” (96) state along the International Date Line on Wrangel Island.

In the book *Merleau-Ponty: Space, Place, Architecture*, Glen Mazis and Edward Casey discuss ways to apply aspects of Merleau-Ponty’s theory to liminal spaces within architecture, outlining three key tools that can also be explored in this thesis investigation: depth, darkness, and edge.
Depth: In the working note “Depth” within his book *The Visible and The Invisible*, Merleau-Ponty discusses how: “depth… is pre-eminently the dimension of the hidden…. There must be depth since there is a point whence I see the world surrounds me… [Depth] is pre-eminently the dimension of the simultaneous. Without it, there would not be a world or Being, there would only be a mobile zone of distinctness…. Whereas by virtue of depth, they coexist in degrees of proximity… it is hence because of depth that things have a flesh…” (219). Mazis reflects that:

depth as understood by Merleau-Ponty is not one dimension of space, but rather the *dimension of dimensions*… more about taking on a style of thinking that in the first place is “a survey from above”… a “second order”… [However,] depth will disappear… for an architecture… [or] artist who does not render space as it is lived from within some particular situation with its accidents of history, its rhythms of moving in concert with the moving natural world… with a host of other sorts of interrelations… (24, 25).

Darkness: Mazis considers that:

the play of light is inseparable from how qualities appear and what sense they have, and it is also inseparable from the structure of the space and its sense… [Additionally] night has a difference spatiality from the space of the daylight world… In looking into the heart of the night or enough of the surrounding black to retain its distinctive sense, pure depth emerges and enfolds us… [imposing] an overcoming of structures, an envelopment, an infiltration, a blow to our secure sense of ourselves, and a transgression of boundaries… in the depths of night, the order of things is experiences as suddenly precarious… (32, 36).

In this sense, *darkness* is a method for augmenting the spatial experience of users, subsequently augmenting the implied temporal engagement within it.

Edge: Edward Casey discusses how “edges— felt as well as seen, heard as well as thought— have everything to do with how things and thoughts come to an end as well as with how they commence and get underway… we only need to reflect on the presence of cognitive and perceptual horizons to sense the importance of edges at every level of the lived body…” (65). In this sense, *edge* is an architectural method to define either pre-liminal, liminal, or post-liminal states by manipulating the interpretable boundaries of spatial experiences.

These concepts can be applied to this thesis’s allegorical architectural project in the following ways: Firstly, *depth* can be integrated into the representation of the iterative allegorical processes, exploring perspectives that visualise the ‘depth’ of the site and how architectural interventions interact with the liminal threshold of the International Date Line and temporal influence of the natural world. Developed Design Stage experiments can explore representations of the temporal depth of spaces, visualising their past, present and future identities. Secondly, *darkness* can be used to manipulate the perceived *depth* of a render, drawing, or representation of an iterative allegorical process or spatial design, placing it in a threshold state. All designed experiments that are a representation of development can be presented on darkened pages to represent the contents of the thesis as the *rites of passage* of this research. Finally, *edge* can be used to manipulate architectural form to either deconstruct, augment, or challenge one’s perception of the physical boundary conditions of the liminal threshold of the research site – the International Date Line. These methods provide ways that the liminal conditions within the thesis investigation can be represented, spatialised, and manipulated. and thereby challenging the experience of temporal conditions across and between states along the International Date Line.
2.4.1

Raimund Abraham’s architectural drawing *House with Two Horizons* is a case study that suggests ways to interpret Casey and Mazis’s propositions for spatially representing liminality via depth, darkness, and edge into a design outcome. Although Abraham’s title reflects two horizon lines within the house, the drawing suggests four: past, present, future and ‘forever’ horizon lines. The ‘past’ horizon line is within the dark basement; the ‘present’ is at ground level where the surrounding site is accessible; the ‘future’ looks out from the upper stair to the distant landscape; and the ‘forever’ condition is situated at the dissolution of the stairwell into the earth (a temporal allegory of nature always reclaiming itself over the built environment).

In this case study, *depth* is suggested by presenting the house in an overlay of section, plan, and perspective. It spatialises the architecture’s engagement with the temporal allegory of coexisting with the natural world. Here, *depth* establishes the pre and post-liminal states that define the liminal conditions between them. *Darkness* is suggested by the ‘past’ space. Here, darkness allows depth to enfold the occupant and viewer, establishing its true depth in its forced perspective state – as well as defining the edge conditions within it. Finally, *edge* is represented by each spatial and liminal space within the house that occurs as the inhabitant progresses up ever re-orientating stairwells. *Edge* contains the *depth* and *darkness* of the liminal.

Fig. 2.4.3. Raimund Abraham, *House with Two Horizons*, 1973.

Off axis implies that it is a transition to something unknown and in motion.

Orderly layout implies it is in the past as recorded history.

Could be argued that there are 4 horizons.

Liminal gateway out of intervention.

Bleeding of Horizons

Vessel that allows one to see the horizon of the future.

Grid = Humanized and Architectural.

Exposed, underground symbols the past = Nature claiming land.

Disengagement = Human claiming land.

Park of past/nature transgresses to the present/future.

Threshold Condition

Changing edge conditions

2.5 FRAGMENTATION

Section 2.5 explores theorists and case studies related to liminality, the principal device in RO3:

RO3 To investigate how architectural theory relating to fragmentation can help to spatially re-present temporal conditions in ways that challenge and augment our normative understanding of time.

PRINCIPAL THEORISTS

FRAGMENTATION

Peter Bürger (1936-2017)
Professor in the Department of Romance Studies at the University of Bremen.

Jane Rendell
Architectural historian, cultural critic, and art writer.

Mila Mojisilović & Vladimir Milenković
Research Assistant and Vice-Dean in the Faculty of Architecture at the University of Belgrade.

CASE STUDIES

FRAGMENTATION

Fragmentation is integral to Walter Benjamin’s theory of allegory, with Benjamin outlining how “in the field of allegorical intuition the image is a fragment, a rune. Its beauty as a symbol evaporates when the light of divine learning falls upon it. The false appearance of totality is extinguished. For the eidos disappears, the simile ceases to exist, and the cosmos it contained shrivels up” (176). In his (1984) book *Theory of the Avant-Garde*, Peter Bürger discusses a four-part framework for Benjamin’s allegorical fragmentation:

1. The allegorist pulls one element out of the totality of the life context, Isolating it…
2. The allegorist joins the isolated reality fragments and thereby creates meaning… posited meaning; it does not derive from the original context of the fragments. 3. Benjamin interprets the activity of the allegorist as… melancholy… [4.]

Alllegory, whose essence is fragment, represents history as decline… The category combines two production-aesthetic concepts… one relates to the treatment of material (removing elements from a context), the other to the constitution of the work (the joining of fragments and the positing of meaning) with an interpretation of the processes of production and reception… (69, 70).

More recently, in her book *Art and Architecture: A Place Between*, Jane Rendell discusses the temporal nature of Benjamin’s allegorical fragmentation, in particular:

the fragment as ruin… the ruin that features… in terms of decay and disintegration, and as a site for a melancholic reflection on the transience of human and material existence… through isolating fragments and recombining them to create new meanings… [Allegory is] representing history as ruin… (90, 100).

A three-part version of the framework as suggested by Bürger, with its temporal qualities suggested by Rendell, will be applied to this thesis’s design experiments:

1. Identification of allegorical architectural fragments (designed experiments) that explore temporality;
2. Isolation of fragments from their context (i.e., Wrangel Island or their iterative development processes);
3. Exploration of how fragments can be recombined and reintroduced as a developed (and unified) approach, strengthening engagement with the Research Agenda.

In their article "The Concept of Fragmentation: Between Form and Formless", Mila Mojsilović and Vladimir Milenković discuss the fragment in contemporary architectural terms:

the contemporary concept of fragments and fragmentation diverges from romantic ideas of fractions, cracks, separated and broken pieces, ruins, regret for the past, and it conceptualizes the idea of incompleteness as the essential potentiality of form, imagination, and contingency, where the fragment is determinate, projected, and conscious intention to leave things, concepts and forms open to new interpretations and readings… [T]his view sees and interprets the fragment, although essentially unfinished and incomplete, as a well-rounded form and not its part or residue… [where] in order to be a fragment, and not just a detached broken piece, [the fragment] carries in itself all the information of the whole (518).

For Mojsilović and Milenković, the fragment is not bound as allegorical ruin or decay, but rather possesses its potentiality for being an individual within a wider narrative, whilst still possessing the blueprint of it. Mojsilović and Milenković also discuss the fragment in terms of temporality:

[As the] fragmentary experience of time in the
era of post-digitization… can be addressed as a temporal and ontological problem of space… to exist at the same time with something else… a relation-reflection, a temporal determinant rather than a historical position… setting the concept of time as a central one in relation to the dynamic continuity of architecture, in which time as the context becomes a condition for the contingency of architecture… what characterizes… [this] new temporal digital paradigm is the fragmentation of the homogenous linear (flow of) time… providing displacement and new mechanisms for (apparent) control and experience of time – that is, space and time become the contingencies that shape our experience or are shaped by them… (519, 521).

Mojsilović and Milenković provide a foundation that suggests when applying the device of allegorical fragmentation to this thesis investigation, the fragments do not need to be limited to just ruin or decay. This establishes an avenue for integrating Benjamin, Bürger, and Rendell’s discussions and frameworks for fragmenting an allegory into a contemporary architectural context. To apply fragmentation to this allegorical architectural project on temporality, this thesis investigation will build on Benjamin’s theory of allegory by using Bürger’s theoretical framework for allegorical fragmentation, drawing from Rendell’s discussion as support for exploring theories of temporality with allegory and fragmentation. By interpreting the designed experiments as fragments that each seek to act as whole forms, and which fragment and displace the linear flow of time discussed by Mojsilović and Milenković, Bürger’s framework can be supported by critically integrable speculative architectural explorations. This allows the identification, isolation, and recombination of fragments into a unified developed approach more critically substantiated. Additionally, this framework of fragmentation interlinks with the thesis’s Conceptual Design Stage proposition to explore repetitive (allegorical) architectural forms along the International Date Line, using its known (real) data to inspire placement and discovery of unexpected design opportunities, by proposing that each architectural intervention can act as a unique whole within a larger connected system. This also establishes a speculative approach that represents a journey towards a future for its Dasein (users).

Daniel Libeskind’s (2001) Jewish Museum of Berlin is a case study that suggests ways that Bürger, Rendell, Mojsilović and Milenković’s propositions for fragmenting can be applied to a powerful narrative to spatially challenge and augment our understanding of it into a design. In his article “Daniel Libeskind’s Jewish Museum in Berlin: The Uncanny Arts of Memorial Architecture”, James Young discusses how “in its series of complex trajectories, irregular linear structures, fragments, and displacements, this building is on the verge of unbecoming—a breaking down of architectural assumptions, conventions and expectations” (10). By using the fragmentation of major and minor forms, as well as spatial programming, Libeskind’s work suggests how a powerful narrative can apply Bürger’s framework of identification (of narrative fragments), isolation, and recombination to create a unified allegorical depiction of the Jewish people’s experience with past times within Berlin.

Fig. 2.5.1. Denis Esakov, "Libeskind's Jewish Museum Extension", n.d.
Fig. 2.5.2. Hufton + Crow, "Scale within the Jewish Museum", 2018.

Denis Esakov, "Libeskind's Jewish Museum Extension", n.d.

Angled columns disturb traditional perception of an otherwise defined form.

Each fragment of the past exists in both its singularity and as a blueprint for the larger narrative.

Interplay of "semi-defined" forms of the larger massing.

Form & Formless

General Massing

Narrative is fragmented in layers.

Libeskind fragmented the Star of David.

Libeskind fragmented the common place.

'*

Large scale manipulates perception of one's movement and rhythm within the fragmented space.

"Semi-defined" space

"Semi-defined" donkey.

Spaces the past through successive interpretation.

Authors: Analysis of Jewish Museum Extension, 2022.
The problems are solved, not by coming up with new discoveries, but by assembling what we have long been familiar with.

To investigate how architectural theory relating to multiplicity, dualities, and oppositions can help to spatially re-present temporal conditions in ways that challenge and augment our normative understanding of time.

**PRINCIPAL THEORISTS**

**MULTICLICITY, DUALITIES AND OPPOSITIONS**

**Andrew Gleeson**
Associate teaching Professor of Architecture at Iowa State University College of Design.

**Angus Fletcher**
Professor of Story Science at Ohio State University’s Project Narrative.

**Roland Barthes (1915-1980)**
French literary theorist, essayist, philosopher, critic, and semiotician.

**CASE STUDIES**

**MULTICLICITY, DUALITIES AND OPPOSITIONS**

**Léon Krier & Massimo Scolari, Le désespoir de Janus, 1975.**
Within this thesis investigation, fragments of spatial, temporal, and theoretical concepts that exist in duality and opposition with one another, such as fiction and reality, past and present, present and future (and so forth). Each temporal context is understood through duality, as the past cannot exist without the present.

Andrew Gleeson discusses in his book *Resolution and Tension* how:

> Architecture… is [also] a complex mix… expressed either in resolution or tension…. Intentional exploitation of these fundamental dualities to achieve either balance or imbalance – ultimately deconceals an inherent power within architecture… [and] an architect with knowledge of this duality… can manipulate the compromises to achieve reconciliation, or keep the duality unresolved and exploit inherent tensions… (9).

The concept of battle and journey Haralambidou introduces is outlined in Angus Fletcher’s book *Allegory: the Theory of a Symbolic Mode*. Fletcher compares the two, explaining that:

> Progress… involves a sequence of steps in one main direction, and… when minor irregularities are the norm, an overall regularity is equally the norm and at last overrides the smaller irregularities… [whereas] battle form… is rather an effect of symmetry and balance... conflicts can be symmetrically duplicated and repeated within a work. As one side takes a swipe, so the other side takes one… the symmetrical presentation of first the argument on one side, then the argument on the other… the debaters of the debate are presented in an equality, so that each side gets its fair share of the action. In many poems of the kind, single alternating stanzas are allotted to each side, as they argue back and forth. The symmetry of form here also may be employed for a mixed formal effect. (159).

This thesis investigation can integrate Fletcher’s notions of progress as a wider framework for a speculative architectural approach in the Preliminary and Developed Design Stage experiments. By approaching a design outcome as a physical journey of progress, there is the potential to explore a speculative architecture that exists in a series of linked (resolved tension) and unlinked (unreconciled tension) fragments along a spatialised site (International Date Line), allowing visitors to experience a continual experience of non-linear time through the
lens of architecture (an allegory of temporality through architecture). Battle can be integrated within moments of unlinked (unreconciled tension) fragments. For example, alternative identities of future architectural fragments may be introduced (such as a Baroque architecture reflecting on the 17th-century setting of Umberto Eco’s \textit{IDB}). While developing a past identity that reflects a general formal symmetry with its opposing identity, battle can be used to establish an allegory between individual fragments of the wider narrative of time.

Roland Barthes outlines a theoretical framework (the Semantic Code) that establishes/explores plural meaning in texts (multiplicity) through connotation (double meaning/duality). In his book \textit{S/Z}, Barthes explains how “connotation is a secondary meaning, whose signifier is itself constituted by a sign or system of primary signification, which is denotation” (7). This suggests a similarity with the concept of dualities and oppositions explored by Gleeson, Haralambidou, and Fletcher. For Barthes:

Connotation… [is] a determination, a relation, an anaphora, a feature which has the power to relate itself to anterior, ulterior, or exterior mentions, to other sites of the text… except that we must not confuse connotation with association of ideas: the latter refers to the system of a subject; connotation is a correlation immanent in the text, in the texts, or again, one may say that it is an association made by the text-subject within its own system… connotations are meanings which are neither in the dictionary nor in the grammar of language in which a text is written. Analytically, connotation is determined by two spaces: a sequential space, a series of orders, a space subject to the successivity of sentences, in which meaning proliferates by layering; and an agglomerative space, certain areas of the text correlating other meanings outside the material text and, with them, forming “nebulae” of signified (8).

Barthes discusses how connotation can be determined by:

1. Sequential spaces, series of orders, spaces which successively develop meaning through layering; and 2. Agglomerative spaces, or spaces clustered together within the text which draws meaning from outside the text to form a network of signified meaning” (8). Here, “each connotation is the starting point of a code… the articulation of a voice which is woven into the text…” (9).

Barthes’s theory suggests an approach that can identify plural meanings hidden within fragments of the allegorical architectural project, exposing potentially new avenues for design experiments. By establishing a speculative architectural outcome that is a spatial \textit{journey}, which also engages in unreconciled tensions through battle, the method of connotation can be applied to: 1. The “sequential spaces” of the physical and theoretical journey; and 2. “[the] agglomerative spaces, or spaces clustered together” (Barthes 8) through moments of battle (unreconciled tension) across the International Date Line. Applying connotation, or double-meaning to the design experiments of this thesis exposes wider and plural meanings of the allegory of temporality, ultimately delineating its argument into an interwoven “nebulae” of signified” (8).

Léon Krier and Massimo Scolari’s architectural drawing \textit{Le désespoir de Janus} is a case study that suggests ways to spatially represent a temporal dialogue that challenges and augments normative understandings of time through duality, opposition and multiplicity. The drawing depicts dual allegorical architectural interventions of past and future facing each other across a strait, placing Janus (the occupant of the boat) in temporal despair – stuck between the past and future (Mollard, 2015). Krier & Scolari’s work suggests that leaving unreconciled tensions between contexts invites the exploration of a contemporary allegory of temporality. It engages in a battle (unreconciled tension) between architectural forms. It can be argued that the \textit{journey} is also present, as the two
forms are suggested as being in the same, yet different, contexts. The drawing is plural in its potential meanings, with connotations implied by the replication, mirroring and inversing of certain material and formal moves across both past and future. This suggests a potential double meaning in an allegory of temporality, with both past and future seeking and holding their own identity. However, each also integrates similar fundamental architectural traits, intertwining them.

Fig. 2.6.1. Leon Krier & Massimo Scolari, *Le Deseoir de Janus*, 1975.
Leon Krier & Massimo Scolari, 
Le Désespoir de Janus, 
1975.

Author: Analysis of Le Désespoir de Janus, 2022.
2.7 CONCLUSION

Section 2.7 considers opportunities and directions for Conceptual Design Stage experiments in the following chapter, for depicting an allegory of temporality in ways that challenge or augment normative conceptions of time.

One opportunity that the Conceptual Design Stage can explore is the establishment of a potential dwelling-place for time on Wrangel Island through speculative cartography (Benjamin 1928, Cowan 1981):

RA + RO1 + RO3

By engaging Haralambidou’s method of allegory as an interpretive research tool, the Conceptual Design experiments can explore artefacts from within the literary provocateur, Umberto Eco’s IDB. Given that a principal narrative of the novel is cartography, and cartography deals with the measurement of longitude (temporality), a range of cartographic spatial devices could be identified from the provocateur. Once identified, these can be iteratively developed in a speculative architectural context that challenges and augments their normative engagement with temporality through allegorical architectural processes. In this sense, an exploration of the (speculative) interdependency between architecture and cartography can be explored in terms of cartographic devices that are influenced by chronometric imaginary’s (timekeeping) (Hurni & Sell 2009, Barrows 2016). Additionally, in using ‘known’ conditions of the provocateur, ‘unknown’ spatial outcomes can be explored through speculative cartographic modelling approaches (Kulper 2013). Ultimately, it is important that each design experiment explores the speculative cartographic (temporal) devices in ways that can be later identified, isolated, and recombined into a larger narrative, while still possessing a well-rounded potential form for exploring the allegory of temporality. This ultimately prepares an avenue for Conceptual Design experiments that apply theories of allegory, temporality, speculative cartography, and fragmentation.

Another opportunity is to also explore the liminal conditions at the International Date Line as follows:

RA + RO2 + RO3

By using insights drawn from Helen Haverstick’s Twin House as a foundation for spatialising liminal architecture, Conceptual Design experiments can explore how architecture may occupy the International Date Line, existing across and between temporal conditions in a condition of “communitas” (Turner and Abrahams 96). In achieving this, architecture that manipulates an inhabitant’s comprehension of depth, darkness (or conversely lightness), and edge (Mazis 2013, Edwards 2013) will be explored through the architectural tools of scale, orientation, mirroring, and displacement. This will produce a range of isolated liminal fragments to suggest a spatial experience that interweaves multiple temporal contexts, which can then be applied to Wrangel Island to develop a further layer of contextualisation and representation of a new dwelling-place for time, and for the spatialisation of the in-between conditions of temporality.

Benjamin’s proposition of “continual pausing for breath…the mode most proper to the process of contemplation…” (28) will aid critical reflection upon the strengths and weaknesses of each experiment, evaluating the future direction for the following iteratively developing experiments.
In the sublime way man has but one weapon

Benjamin de Casseres
ur against reality, upon, the imagination.

W.B. Yeats, “Forty Mortals”, 1926.
CONCEPTUAL DESIGN
This design-led research investigation uses Umberto Eco’s allegorical novel The Island of the Day Before as a literary provocateur for an allegorical architectural project, interrogating how Eco’s literary devices of allegory, temporality, cartography, liminality, fragmentation, multiplicity, dualities and oppositions can be used to ‘spatialise’ time, by applying those devices to architecture. The Conceptual Design Stage explores the allegorical architectural project through the literary devices of: RA (Allegory and Temporality), RO1 (Cartography), and RO2 (Liminality).

The Conceptual Design chapter applies theoretical insights drawn from the Literature and Project Review chapter, developing a series of speculative architectural outcomes that act as chronometric cartographic devices, spatially re-presenting the implied temporal conditions on Wrangel Island. It explores how architecture can spatialise the intersection of temporal contexts along the International Date Line, in turn spatially re-presenting them through an alternative voice of non-linear time.

This chapter develops conceptual design experiments that specifically implicate speculative cartography and temporality. The chapter culminates in critical reflection about its accomplishments, strengths, and weaknesses in relation to addressing the research objectives, and a glance into the future. The first series of 7-8 experiments focuses on addressing RO1, while the second series of 7-8 experiments focuses on addressing RO2.

In the Preliminary Design Stage, theoretical considerations relating to fragmentation will be applied, and in the Developed Design Stage, the allegorical literary devices of multiplicity, dualities and oppositions will be critically examined.
3.2.1  CONCEPTUAL DESIGN EXPERIMENT 1

**FOCUS:**  R.A

**INFLUENCE:**  Umberto Eco' (1994) *IDB* and Penelope Haralambidou.

**EXPERIMENT:**  CDE 1 applies Penelope Haralambidou’s proposition for an allegorical architectural project as a critical method in the generation of conceptual sketch experiments. It begins by applying extracts from *IDB*, seeking to spatially represent a speculative context for the thesis investigation.

(+)

- Application of Haralambidou’s proposition for an allegorical architectural project as a critical method through analogue sketches.

(-)

- Initial sketches are diagrammatic; they would strengthen by applying them onto the real site of Wrangel Island.

**REFLECTIONS:**  CDE 2 should explore the translation of sketch-work into a real-world site to rectify limitations of their diagrammatic nature.
He was alive, awake, and an island lay over there, harboring a continent. What it was he did not know.

Hand westward, he looked once more at the island, of which the spyglasses revealed to him only war and circumstances had added. But like those images seen in convex mirrors, which, reflecting a single side of a small room, suggest a spherical endless expanse of space and time.

How would the island seem to him if he were to reach it one day? To judge by the landscape he saw from his vantage point, and by the specimens which he had found on the ship, was it perhaps Eden, where milk and honey flowed in streams and abundant trophies of fruit and flocks of meek animals roamed the fields?

And, in fact, while to the left of the two hills was a large room, and to the right a small one, in the center was a door. It was then, but larger than the Amaryllis flower, almost to a hatchway, as if something had once passed through that tiny portal. He could see, as if through a microscope, a number of plants, some of which were known to him, others of which were not.

He had just seen the light, and yielded, abandoning themselves above the peaks, while on one side they adhered to the slopes, curling and settling like cream, soft, where it trickled only a little more compact at the summit, forming a glacier, and on the other side making snow at the top, a single saw of ice, a curling in the air or in the shape of a mushroom, an equinox rising in a land of Cockaigne.
3.2.2 CONCEPTUAL DESIGN EXPERIMENT 2

**FOCUS:** R.A


**EXPERIMENT:** CDE 2 applies CDE 1’s findings onto the real site of Wrangel Island by iteratively developing its representation, seeking to affirm contextual conditions for future designed experiments.

(+)

Wrangel Island was selected as the research site because it is intersected by the International Date Line, providing a real site that can engender allegorical narrative about the knowledge and experience of temporality.

(-)

- *IDB* mentions a distinct channel bisecting the island, which is not the case for Wrangel Island.
- *IDB* hints that the novel’s island exists in the South Pacific, rather than the Arctic.

**REFLECTIONS:** Although a good foundation, certain traits are missing when compared to *IDB*. CDE 3 should engage with Kulper’s (2013) theory to find alternative unknown spatialisations through the sites known conditions.
3.2.3 CONCEPTUAL DESIGN EXPERIMENT 3

FOCUS: RO1

EXPERIMENT:
CDE 3 explores how the ‘known’ “Time of the World” (as discussed by Leatherbarrow 17) of Wrangel Island can establish ‘unknown’ spatialisations of them to augment temporal conditions, as described by Kulper.

(+)
• Spatially the experiment looks to re-present the ‘known’ (Time of the World) (Leatherbarrow 17) temporal conditions in an augmented way by using ‘unknown’ conditions, as described by Leatherbarrow (17).

(−)
• This approach could benefit from drawing insights from Kulper and Cantley to explore conditions not visible in a digital satellite image.

REFLECTIONS:
To apply insights drawn from Kulper, Cantley and Spiller, speculative drawing should be explored as a tool to quickly manifest alternative ‘unknown’ conditions of Wrangel Island.
FOCUS:
RO1

INFLUENCE:
Umberto Eco's (1994) IDB, Perry Kulper, and David Leatherbarrow.
3.2.4 CONCEPTUAL DESIGN EXPERIMENT 4

**FOCUS:** RO1


- Drawn medium enhanced manifestation of findings.
- Identifies the (unknown) potential for the I.D.L to be a literal and metaphorical “tear” in linear time, which could then engage with “Time of the World” (Leatherbarrow 17) by allowing (known) tidal change or topographic change to change the spatial conditions of it, as described by Kulper.

- The drawing is limited to an isolated Wrangel Island without yet examining the implications of adding architecture.
EXPERIMENT:

CDE 4 draws inspiration from Cantley’s (2016) *Early Native Topography 15:7* by first rotating his drawing 90° and imagining it as a drawing of Wrangel Island. Next, a speculative architectural drawing was created which applied Kulper’s proposition of using known drawn conditions to find unknown spatial possibilities. This was applied using known architectural/cartographic notation devices, and spatial/temporal site conditions to allow an exploration of what happens when these conditions enter the ‘erratic’.

REFLECTIONS:

Although successfully establishing various unknown conditions for later manipulation, the drawing is limited by the lack of architectural intervention, meaning experiments should shift to speculative architectural modelling.
3.2.5 CONCEPTUAL DESIGN EXPERIMENT 5

FOCUS: RO1

EXPERIMENT:

CDE 5 identifies cartographic artefacts from *IDB* through metaphor, artefacts which have association with the calculation of longitude – chronometric cartography. These experiments represent speculative chronometric and cartographic devices.

(+)

- Applies Haralambidou’s (2007) proposition for the allegorical architectural project by using metaphor to identify cartographic devices from *IDB* through metaphor.
- Devices invite reinterpretation in response to Tambling’s (2009) propositions about chronometric cartography.
REFLECTION

Isolation from Wrangel Island ultimately limits critical integrability by having no context against which to assess success; CDE 6 should transpose these experiments onto Wrangel Island.

(-)

- Decontextualised experiments, without referencing Wrangel Island it limits interrogability.
3.2.6 CONCEPTUAL DESIGN EXPERIMENT 6

FOCUS: RO1
INFLUENCE: Perry Kulper.

EXPERIMENT:
CDE 6 transposes the speculative (chronometric) cartographic devices onto Wrangel Island by using the devices’ ‘known’ conditions on a map as a foundation, seeking to explore ‘unknown’ spatial arrangements from this foundation, as discussed by Kulper.
FOCUS: RO1

INFLUENCE: Perry Kulper.

- Kulper’s proposition of using known conditions to find unknown spatial opportunities is applied by placing interventions according to their location on a literal map, then iterating from this point to find alternative opportunities.
- Challenges and augments the devices’ original temporal qualities.

REFLECTIONS:

Some cartographic devices overlap in their literal purpose, meaning C.D.E 7 should explore how a unified speculative architectural cartographic device can be developed as a “machine for slowing down time” (Carr 109).

• inclusion of Specula Melioration and Armillary Sphere and stitching follows contours
• more accurate homage to allegory stitching more dynamic than prior experiments
• Armillary sphere causing conflict between forms

(+)

- Some speculative cartographic devices overlap in purpose.
3.2.7 CONCEPTUAL DESIGN EXPERIMENT 7

FOCUS: RO1

INFLUENCE: Walter Benjamin, Bainard Cowan, Penelope Haralambidou, Dr Lorenz Hurni & Gerrit Sell, Jeremy Tambling, and Andrew Carr.

EXPERIMENT:

CDE 7 develops a unified speculative architectural cartographic intervention by iteratively augmenting, layering, and ‘fictionalising’ their original purpose, by translating speculative chronometric and cartographic ‘devices’ into architectural structures.

(+)

• Continues to follow iterative representation methods (as discussed by Benjamin 1928, Cowan 1981, Haralambidou 2007).

• Explores how cartography and architecture’s relationships inverse between reality and fiction (as discussed by Hurni & Sell 2009).

• Develops a chronometric cartographic architectural intervention on site (as discussed by Tambling 2009).

• Engages the language of “architecture as a machine for slowing down time” (as discussed by Carr 109).

(-)

• Approach limited by lack of exploration of liminal conditions at I.D.L.

REFLECTIONS:

CDE 7 successfully culminates explorations relating to RO1; however, its weakness is in not addressing the International Date Line and its liminal conditions (RO2). CDE 8-15 should privilege the integration of liminality into the cartographic explorations to develop a spatial language for these conditions.
CONCEPTUAL DESIGN EXPERIMENT 7

FOCUS:
RO1

INFLUENCE:
Walter Benjamin, Bainard Cowan, Penelope Haralambidou, Dr Lorenz Hurni & Gerrit Sell, Jeremy Tambling, and Andrew Carr.

removal of armillary sphere and theodolite, developing the 'compass' intervention.
+ more unified dialogue between elements.
- lack of varied dialogues with loss of additional architectural forms.

this experiment reintroduced the Theodolite into the compass, in which notions of temporality were brought in by allowing the theodolite to temporality slip into two, with one representing yesterday and one inhabiting the 180th meridian as if to allow one to look directly between yesterday, tomorrow, the never and the always.

* introduction of Theodolite and addressal of temporality theory and fractures.
+ much stronger architectural intervention.
- Specula Meliannis feeds displaced, yet it can't be moved as it holds true to its placement in the allegory.

this experiment focused on establishing relationships between the Specula Meliannis and the 'compass' intervention by bridging them and altering the Specula's scale. It also introduced a more 'buildable' form for the compass itself in order to start to ground the design in some level of reality.

* making the 'compass' intervention 'buildable' and rescaling and incorporating the Specula Meliannis into the intervention.
+ significantly stronger forms and dialogues between elements as the design now feels more 'buildable', as well as the Specula Meliannis no longer being a separate entity.
- theory and input from elements of temporality needs to be significantly stronger.
3.2.8 CONCEPTUAL DESIGN EXPERIMENT 8

FOCUS: RO1
INFLUENCE: Umberto Eco's (1994) IDB, Penelope Haralambidou and Peter Bürger.

EXPERIMENT:

CDE 8 identifies the developed speculative cartographic interventions, isolating them from both development and Wrangel Island to recombine them to visualise their original foundation a quote within IDB.

(+)
- Begins to explore Bürger's theoretical framework for fragmenting an allegory by identifying, isolating, and recombining speculative cartographic fragments.
- Explores Haralambidou's proposition for the allegorical architectural project as a critical method for unravelling another work by drawing from the literary provocateur to produce the experiment.

(-)
- Mainly just a visualisation experiment, providing context to the cartographic devices.
it was, then, but larger than the Amaryllis, yet with a deck reduced, almost, to a single hatchway, as if the captain had been anxious to ship water at every over-lively wave.

In any case, it was a good thing the Daphne was a fluke. Roberto could move about with some knowledge of how the space was divided. For example, in the center of the deck there was a plain bunk at the end, but otherwise arranged as a work space.

The table was cluttered with maps, more numerous than those a ship normally requires for navigation. This room seemed a scholar’s study. Among the papers he saw a survey of light, an armillary sphere fastened to the surface of the table, more papers covered with calculations, and a parchment with circular drawings in red and black which he recognized as a reproduction of the Ephemerae of Regiomontanus.

The papers he saw some spyglasses lying, a handsome copper noctolabe that cast tawny glints as if it were itself a source of light, an armillary sphere fastened to the surface of the table,
The table was cluttered with maps, more numerous than those a ship normal navigation. The room seemed a scholar's study. Among the papers he saw a source of light, an armillary sphere, a reproduction of the Ephemerides of Regiomontanus. More papers covered with calculations, and a parchment with circular drawn black, which he recognized. Umberto Eco, *IDB*, 1994, 9.
Figures:
3.1.7. Hendrick Donker, Map of Early New Zealand, 1660.
3.1.9. Johann Müller, Kalendarium of Regiomontanus, 1474.
3.3.0 CONCEPTUAL DESIGN EXPERIMENT 9

FOCUS: RO2

EXPERIMENT:

CDE 9 explores Research Objective 2 (Liminality) by manipulating Haverstick’s (2022) *Twin House* to explore how to speculatively spatialise the concept of “communitas” (as discussed by Turner & Abrahams 96) through Casey’s (2013) discussion of *edge*.

(+)
- A range of iterative concepts explore manipulation of *edge* (as discussed by Casey 2013).
- Concepts speculatively represent architecture in “statelessness” (as discussed by Turner 360).
- Subjective perception of temporal forms is beginning to appear (as discussed by Merleau-Ponty 1945).

(-)
- Not contextualised to I.D.L.

REFLECTIONS

Although a successful range of speculative liminal architecture was explored, none engage with the I.D.L., the liminal threshold of Wrangel Island; therefore, CDE 10-15 should.
FIGURE(S) LEFT TO RIGHT:

**A**

**B**

**C**

**D**

**E**

**F**

**G**

**H**

**I**

**J**

**K**

**L**

**M**

**N**

**O**

**P**

**Q**

**R**

**S**

**T**

**U**

**V**

**W**

**X**

**Y**

**Z**

**ORIENTATION**

**MIRRORING**

+ **DISPLACEMENT (X)**

**MIRRORING**

+ **ORIENTATION**

**MIRRORING**

+ **MIRRORING**

+ **DISPLACEMENT (Y)**

**MIRRORING**

+ **SCALE**

---


---

**CONCEPTUAL DESIGN EXPERIMENT 9**
3.3.1 CONCEPTUAL DESIGN EXPERIMENT 10

FOCUS: RO2

INFLUENCE: Edward Casey, Maurice Merleau-Ponty and Martin Heidegger.

EXPERIMENT:

CDE 10 applies the site-less forms from CDE 9 to Wrangel Island by applying augmentation of scale, mirroring, orientation, and displacement of edge (as discussed by Casey 2013) to explore how architecture can occupy interwoven temporal contexts at the I.D.L.
CONCEPTUAL DESIGN EXPERIMENT 10

FOCUS:
Edward Casey, Maurice Merleau-Ponty and Martin Heidegger.

- Contextualises experiments onto Wrangel Island.
- Spatially re-presents the intersection of temporal contexts (as discussed by Merleau-Ponty 1945, Heidegger 1962).

The ‘final’ resultant is tame in manipulation of edge, limiting its challenge of spatial/temporal norms (as discussed by Casey 2013).

REFLECTIONS

Due to the relatively tame approach, CDE 10 requires further spatial manipulation to enhance perception of the “communitas” (Turner & Abrahams 96) state and the blurring of temporal edge for users within it.

(+)

- The fact that it was not there suggested the crew was elsewhere. But this did not reassure Roberto: an entire crew never leaves the ship unmanned at the mercy of the sea, even if that ship is at anchor in a calm bay. That morning he had casually added on the altitudes and

(-)

opened the人人都能城堡, as if the crew had asked somebody’s personal secret. Next to the chart the compass told him that the ship was near the Arcturus. But stretches of land ran from south to north. The wind found itself in what today is the command cabin, from which another door admitted him to the officer’s quarters, with its large porthole over the compass, access to the gallery. On the armillary there was a so-called connected to the cabin where the Lowie had been before it looked as if they had

tried to save something or make room for something else.

And, in fact, while the far left of the wardroom there were

a little cubbyholes for junior officers, on the right another

cabin had been added almost with the captain’s, with a plain screen between, otherwise changed as a work

If more numerous, it usually requires for navigation. Among the papers he saw a nocturnal turlabe that, like a touchstone, became a source of light, an armillary sphere that on the scale of the table,
3.3.2 CONCEPTUAL DESIGN EXPERIMENT 11

FOCUS: RO2
INFLUENCE: Edward Casey and Andrew Carr.

EXPERIMENT:
CDE 11 enhances its manipulation of *edge* within its interior by using displacement techniques; it also seeks to contextualise the interwoven state by mirroring the original form across past and present.
• Speculative spatial representation of liminal relationships between temporal contexts.

• Engages with Carr’s (2017) discussion of *successive* architecture by engaging with the change/disruption occurring due to temporal processes at the I.D.L.

• Spatialises the pre-liminal and post-liminal references for the existence of the liminal threshold.

**REFLECTIONS:**

The limited perspective reduces the perceived *depth* (Mazis 2013) of the approach, C.D.E 12+ should explore alternative perspectives to show a more ‘lived-in’ perspective.
EXPERIMENT:
CDE 12 and 13 enhance depth of the approach by exploring an alternative perspective. They seek to visualise the inhabitability (or lack thereof), and manipulation of edge of the liminal architecture by placing them in paintings by Wolfgang Bloch, with one manipulating darkness (as discussed by Mazis 2013). The view attempts to highlight the existence of multiple horizon lines interwoven, reflecting on the use of multiple horizon lines that explore depth and darkness with the perspective of Raimund Abrahams (1973) House with Two Horizons.

- Perspective develops depth of liminal approach (Mazis 2013).
- Uses perspective to visualise the liminal interweaving of horizon lines, depth, and darkness, suggested in Raimund Abrahams (1973) House with Two Horizons.
- Augmentation of darkness (and lightness) challenges normative perception of depth and edge of the liminal space (as discussed by Casey 2013, Mazis 2013).
- Distorted forms successfully visualise Turner's (1969) concept of "communitas" (96).

REFLECTIONS:
The concept of liminal conditions is limited within the purely architectural expression, so CDE 14-15 should explore speculative drawing approaches to challenge and augment the current approach further.
it was, then, but larger than the Amaryllis, yet with a deck
reduced, almost, to a single hatchway, as if the captain had
been anxious to ship water at every over-lively wave.

Rolled space, short crew, else news if the
opened somebody's permission... Set next to the tiller, the compass
told him that the channel between the two stretches of land
ran from south to north. Then he found himself in what today
would be called the wardroom, where, with the ladder of another
large gallery, cabin tried
And, two hours in the cabin a place to
The

seemed navigation. This room seemed a scholar's study. Among the
papers he saw some spyglasses lying, a handsome copper nock-
turtle that cast tawny glints as if it were itself a source of
light, an armillary sphere fastened to the surface of the table,
3.3.3

investigating temporal architecture

3.1.10. WOLFGANG BLOCH, UNTITLED NO. 1171-20, 2020. (BACKGROUND PAINTING OF COMPOSITION)
CONCEPTUAL DESIGN EXPERIMENT 12
WOLFGANG BLOCH, UNTITLED NO. 1171-20, 2020. (BACKGROUND PAINTING OF COMPOSITION)

investigating temporal architecture
3.3.4 CONCEPTUAL DESIGN EXPERIMENT 13

investigating temporal architecture

3.1.11. WOLFGANG BLOCH, UNTITLED NO. 1174-20, 2020. (BACKGROUND PAINTING OF COMPOSITION)
CONCEPTUAL DESIGN EXPERIMENT 14

FOCUS:  RA + RO1 + RO2
INFLUENCE:  Penelope Haralambidou, Walter Benjamin, Glenn Mazis, and Edward Casey.

EXPERIMENT:

CDE 14 explores how speculative architectural drawing can spatially re-present interwoven cartographic, temporal, and liminal conditions through allegorical processes by iteratively layering and blurring representations of each Research Objective (the temporal conditions of Wrangle Island, cartographic notation devices and liminal architecture).

(+)

• Use of quote from IDB establishes foundation for drawing to develop (as discussed by Haralambidou 2007).

• Intertwines concepts from the R.A, RO1, and RO2, culminating the Conceptual Design explorations into a singular representation of a dwelling-place for truth of time on Wrangel Island (Benjamin).

(-)

• Blurring of edge and darkness could be enhanced (Mazis 2013, Casey 2013).

REFLECTIONS:

Although CDE 14 successfully intertwines the RA, RO1, and RO2 into a singular representation of truth for time on Wrangel Island, perhaps further augmentation would be beneficial to exaggerating the augmentation of temporal conditions on Wrangel Island.
There had been only two periods in which he learned something of the world and of the ways of inhabiting it... now he was going through and he was trying to decipher its secret message, seeing the past as a figure of the present.
3.4.6 CONCEPTUAL DESIGN EXPERIMENT 15

FOCUS: RA + RO1 + RO2
INFLUENCE: Penelope Haralambidou, Victor Turner & Roger D. Abrahams, Andrew Carr, Maurice Merleau-Ponty, Glenn Mazis and Edward Casey.

EXPERIMENT:

CDE 15 explores enhanced augmentation of the representation of the iterative liminal experiments thus far by layering, blurring and distorting elements. It seeks to find a ‘final’ exploration of depth, darkness, edge, and “communitas” (as discussed by Mazis and Casey 2013, Turner & Abrahams 96) for this avenue of Conceptual Design research.

(+)  

- Literary quote contextualises approach of experiment (as discussed by Haralambidou 2007).
- Drawing is unstructured, reflecting "communitas" and engagement with temporal change (as discussed by Turner & Abraham 96, Carr 2017).
- The blurring of depth, darkness and edge spatially re-presents an interwoven temporal state (as discussed by Merleau-Ponty 1945, Mazis 2013, Casey 2013).
- Uses cartographic notation devices to help ground the drawing into levels of reality.

(-)  

- Architectural intervention becomes somewhat lost within the drawing.
The Conceptual Design Stage initiated the designed experiments of this thesis investigation reasonably successfully by generating relevant architectural forms and a framework for contextualising them in the literature, as well as upon the site of Wrangel Island. The iterative approach of exploring RO1 (Cartography) and then RO2 (Liminality) through individual experiments proved fairly successful, with the range of unique and unexpected architectural outcomes.

Haralambidou’s proposition for the allegorical architectural project as a critical method was tested, critically unravelling the literary provocateur effectively through iterative allegorical processes. Each Conceptual Design experiment followed such processes, engaging with a broader narrative with respect to challenging traditional presumptions and augmentation of the experience of time to establish a conceptual place relating to non-linear time on Wrangel Island (as discussed by Benjamin 1928, Cowan 1981, Tambling 2009).

The identification of Wrangel Island as a site intersected by the International Date Line provided a successful context for applying and testing Merleau-Ponty’s temporal propositions, by deconstructing the linear construct of time across the island. Applying the spatial re-presentation and manipulation of “Time of the World” (as discussed by Leatherbarrow 17) to speculative cartographic drawing experiments proved to be an effective way to exaggerate temporal processes on Wrangel Island, as well as spatialising the I.D.L into a physical timekeeper of temporal processes through tidal change; however, “Time of the Body” (17) lacked significant exploration. The engagement with durational architecture was primarily explored within RO1 (Cartography) experiments, while successive architecture was primarily explored in the RO2 (Liminality) experiments, establishing speculative outcomes that sought to be a “machine for slowing down time” (as discussed by Carr 19).

Cartographic imagery was identified from Umberto Eco’s (1994) *IDB* through quotes such as:

> the table was cluttered with maps, more numerous… than those a ship normally requires for navigation. The room seemed a scholar’s study. Among the papers he saw… a source of light, an armillary sphere fastened to the surface of the table, more papers covered with calculations, and a parchment with circular drawings in red and black, which he recognised… as a reproduction of the Ephemerides of Regiomontanus (9).

This invited exploration of RO1 (Cartography) to interplay between real (Wrangel Island, architecture) and fictional (IDB) processes, allowing architecture to act as an integrative tool to develop a speculative approach (as discussed by Hurni & Sell 2009). Additionally, by allowing ‘known’ elements from the book, in conjunction with their real cartographic purpose, to develop into ‘unknown’ spatial opportunities, Kulper’s (2013) speculative cartographic theory was explored. These interventions underwent iterative augmentation of their original purpose in calculating longitude (temporality), essentially developing a speculative architectural approach that reflected an inhabitable chronometric cartographic device—intertwining RO1 with an
allegory of temporality (as discussed by Barrows 2019).

Shifting to RO2 (Liminality), a range of design experiments utilised manipulation of edge (as discussed by Casey 2013) by engaging with the augmentation of spatial re-presentation through scale, displacement, mirroring and orientation. This established rudimentarily structured speculative architectural outcomes, representing Turner’s (1969) concept of “Communitas” (96). Ultimately, depth and darkness lacked significant exploration, with depth a concept that requires more lived perspectives, which will be pursued more fully in the Developed Design Stage. I

Internal reviews held in May (2022) provided critical commentary on the opportunities this research could engage in the Preliminary Design Stage to strengthen its further. Daniele Abreu e Lima, Lecturer at the Wellington School of Architecture, discussed how these experiments could be further augmented by exploring RO4 (Multiplicity, Dualities, and Oppositions). She was interested one of the literary themes of duality in IDB, remarking how “the idea that everything you do is okay, but you have this evil twin in your head that does bad things without your knowledge… [It is] not just the idea of time, but the idea of dual things, contrary things that happen, and they do not face each other… [where] what one does, the other does not know… [where] one would look in one way, and the other would look in the other way” (19:00-19:55).

Mark Southcombe, Associate Professor at the Wellington School of Architecture, proposed that this research would benefit from more direct addressing the spatial conditions at the International Date Line. As existing experiments imply it is imaginary, Southcombe remarked how “time is a line that we think of as a straight line, but maybe it's not, maybe it's not a thin line, [maybe] it's a thick line, a smudgy line” (24:35).

The Preliminary Design Stage will continue the methodology by next applying theory relating to fragmentation (RO3) to the research, integrating it within the conceptual design outcomes relating to RO1 (Cartography) and RO2 (Liminality). Southcombe’s suggestion reflects that the International Date Line could also be integrated into aspects of fragmentation, allowing it to become a physical entity for spatially re-presenting temporal conditions in ways that challenge or augment our normative understanding of time.

Position for Future of Research

NEXT STEPS

Internal reviews held in May (2022) provided critical commentary on the opportunities this research could engage in the Preliminary Design Stage to strengthen its further. Daniele Abreu e Lima, Lecturer at the Wellington School of Architecture, discussed how these experiments could be further augmented by exploring RO4 (Multiplicity, Dualities, and Oppositions). She was interested one of the literary themes of duality in IDB, remarking how “the idea that everything you do is okay, but you have this evil twin in your head that does bad things without your knowledge… [It is] not just the idea of time, but the idea of dual things, contrary things that happen, and they do not face each other… [where] what one does, the other does not know… [where] one would look in one way, and the other would look in the other way” (19:00-19:55).

Mark Southcombe, Associate Professor at the Wellington School of Architecture, proposed that this research would benefit from more direct addressing the spatial conditions at the International Date Line. As existing experiments imply it is imaginary, Southcombe remarked how “time is a line that we think of as a straight line, but maybe it's not, maybe it's not a thin line, [maybe] it's a thick line, a smudgy line” (24:35).

The Preliminary Design Stage will continue the methodology by next applying theory relating to fragmentation (RO3) to the research, integrating it within the conceptual design outcomes relating to RO1 (Cartography) and RO2 (Liminality). Southcombe’s suggestion reflects that the International Date Line could also be integrated into aspects of fragmentation, allowing it to become a physical entity for spatially re-presenting temporal conditions in ways that challenge or augment our normative understanding of time.

Position for Future of Research

NEXT STEPS
PRELIMINARY DESIGN
The Conceptual Design Stage explored the allegorical architectural project through the literary devices of: RA (Allegory and Temporality), RO1 (Cartography), and RO2 (Liminality). Chapter 4, the Preliminary Design Stage, explores theoretical considerations relating to the literary device of fragmentation (RO3), integrating these considerations with the discoveries derived from the Conceptual Design Stage. While fragmentation is privileged in the preliminary design experiments, all of the experiments implicate all the RA and four ROs to some degree.

This chapter applies theoretical insights drawn from the Literature and Project Review chapter, developing a series of speculative architectural outcomes that act as chronometric cartographic devices, spatially re-presenting the implied temporal conditions along the International Date Line on Wrangel Island. It explores how architecture can spatialise the intersection of temporal contexts along the International Date Line, in turn spatially re-presenting them through an alternative voice of non-linear time.

The chapter culminates in critical reflection about its accomplishments, strengths, and weaknesses in relation to addressing the research objectives, and a glance into the future.
4.2.1 PRELIMINARY DESIGN EXPERIMENT 1

FOCUS: RO3 + RO4

EXPERIMENT:

PDE 1 explores the designing of abstract architectural forms to then identify its three key contributors to its identity; the core structure, the cover façade, and its context. These are isolated in two experiments within each row, with the third being a recombination into their original, form, reflective of Bürger’s theoretical framework for fragmentation. Additionally, each architectural form has an alternative form established which could represent its past or future temporal identity, presenting the forms through Fletcher’s concept of battle. Libeskind’s *Jewish Museum of Berlin* influences PDE 1 by fragmenting major (i.e., structure, context) and minor forms (i.e., façade).

(+) Speculatively applies Bürger’s theoretical framework for fragmentation by identifying three key layers of form, then isolating and recombining them.

(-) Integrates fragmentation theory with Fletcher’s theory of duality (through battle) by creating an alternative temporal identity for each form.

REFLECTIONS:

PDE 1 highlighted how theoretical propositions relating to fragmentation need to be applied at this stage, as isolated experiments fail to generate fragments, which are necessary for allegorical expression relating to the literary generator.
PRELIMINARY DESIGN EXPERIMENT 1

FOCUS:
RO3 + RO4

INFLUENCE:
4.2.1 PRELIMINARY DESIGN EXPERIMENT 2

FOCUS: RO4


EXPERIMENT:

PDE 2 explores Gleeson’s (2013) concept of exploiting tensions and resolutions by creating a thesis and antithesis state for rudimentary forms. It also explores Barthes’s (1970) theory of multiplicity through connotation, as each form is open to connotation due to its lack of contextualisation, this also reflecting upon the connotative interrogability of the two similar, yet individual architectural forms within Krier and Scolari’s (1975) *Le désespoir de Janus*.

• Begins to explore the creation of dualities/oppositions which could be exploited for tension or resolution (suggested by Gleeson 2013).

REFLECTION AND NEXT STEPS:

PDE 2 is limited by the application of theory to individual, undeveloped experiments. PDE 3 should apply both the theory of fragmentation, and theory relating to multiplicity, dualities, and oppositions.
it was, then, but larger than the *Amaryllis*, yet with a deck reduced, almost, to a single hatchway, as if the captain had been anxious to ship water at every over-lively wave.

In any case, it was a good thing the *Daphne* was a flute. Roberto could move about with some knowledge of how the ship was divided. For example, in the center of the deck there should have been a room big enough to contain the entire crew, the table, etc., but there suggested the crew was elsewhere. But Roberto: an entire crew never leaves their ship at the mercy of the sea; even if that ship is at anchor, it is in a calm bay.

That evening he promptlywent to the captain's quarters and opened the door of the case shyly. Then he sat down on the floor and asked somebody's permission. A spot next to the compass told him that the channel between the two sections ran from south to north. As he found himself in the wardroom, an L-shaped cabin, from which you could look out into another one and admit him to the captain's quarters, with its own little bed, a table and lateral access to the gallery.

The wardroom was not connected to the cabin quarter, but here it looked as if they had tried to save space and use the room for something else. And, in fact, while the wardroom there were two little cubbyholes for just another cabin had been created, almost wide enough for the hank's, with a plain bunk at the end, but otherwise it was as a work space.

The table was cluttered with maps, more seemed to Roberto, than those a ship normally carries for navigation. This room seemed a scholar's study. Among the papers he saw some spyglasses lying, a handsome copper nocturnal that cast tawny glints as if it were itself a source of light, an armillary sphere fastened to the surface of the table,
IDENTIFYING A UNIFIED APPROACH

This phase of the Preliminary Design Stage marks the point where layers of the research can explore Bürger’s (1984) theoretical framework for fragmentation, drawing from Rendell (2006) and Mojsilović and Milenković’s (2019) discussions and propositions. The following framework and integration will be applied and tested:

1. Identification + Isolation:
Two key allegorical generators, and two devices for spatialising time (collectively named allegorical voices) of the research have been identified as:

- **Allegorical Generator (Fragment 1): The Literary Provocateur**
  *A provocateur for all designed experiments.*

- **Allegorical Generator (Fragment 2): Wrangel Island**
  *A context for the allegory of temporality.*

- **Allegorical Device for Spatialising Time (Fragment 3): Cartography**
  *An approach to binding fragment 1 and 2 through mapping.*

- **Allegorical Device for Spatialising Time (Fragment 4): Liminality**
  *An approach to binding fragment 2 with deconstructed temporality.*

2. Recombining and Reconfiguring the Fragments:

By identifying and applying isolated reflection upon the four allegorical voices of the research, the following approach to recombining the voices has been established:

The literary provocateur *The Island of the Day Before* has provided the foundation underpinning the design experiments thus far, and, with the thesis title in homage to the novel, the iterative processes, experiments, and reflections of the research will ultimately be bound within its literal and metaphorical covers. In this sense, a metaphor for the unified approach of recombining the research fragments presents itself, where the physical construct of a book could be fragmented to allow architecture to stitch - both literally and metaphorically - *The Island of the Day Before* - this thesis, back together.

Through this metaphor, the thesis, the novel as provocateur, and Wrangel Island are bound together along the spine of the book/research. This spine be interpreted as a metaphorical International Date Line. In reading a book, the left-hand page of a spread represents the past (what has already been read), and the right-hand page of a spread represents the future (what is about to be read). Liminality is represented by the spine of the book, the threshold between these two temporal states.

Principles of cartographic representation can be applied to metaphorically stitch the spine of the book along the International Date Line (the spine). The repetitive fragmented stitches reflect Benjamin’s (1928) discussion of the repetitive essence of allegory. Allegorically, Wrangel Island becomes the ‘book’, the IDL becomes the ‘spine’, and architectural interventions can be designed to represent the ‘stitches’ holding the spine together. The architectural interventions—as allegorical fragmented stitches—inhabit the liminal zone between the past and the future. They form a collective journey of projection towards the future for the Dasein (users) of the speculative architectural intervention, and invite the temporal propositions of Heidegger’ to be added to the outcomes from Conceptual Design Stage.
4.3.1 THE BOUND ALLEGORY
the Day Before
4.3.2 DESIGN MATRIX

The Design Matrix takes onboard critic Mark Southcombe’s (2022) reflections about the possibility of exploring the spatial re-presentation of the International Date Line. When interrogating the physical location of the International Date Line passing through Wrangel Island, there are numerous topographical shifts from low-lying terrain to rugged mountains to ocean shores. By applying Leatherbarrow’s proposition for the “Time of the World” to Wrangel Island (in the form of its topographic conditions), three key zones can be located: Compression (between ocean and mountain), Disruption (mountains), and Stretching (low-lying terrain). These ‘known’ topographical zones are intersected by ‘known’ latitudinal conditions of Wrangel Island. This helps to identify organised locations for a series of repeated architectural ‘stitches’ along the IDL.
4.4.1 PRELIMINARY DESIGN EXPERIMENT 3

FOCUS: RO3
INFLUENCE: Peter Bürger and David Leatherbarrow.

EXPERIMENT:

PDE 3 identifies a sketch approach to the application of speculative architectural cartographic stitches along the IDL, exploring how the ‘architectural stitches’ might compress, fragment, and stretch according to the Design Matrix.

(+)
• The experiment begins exploring the recombination of the allegorical voices which was outlined by using Bürger’s theoretical framework for fragmentation.
• The placement of forms are influenced directly by Wrangel Island’s topography, a natural temporal process of the site, hence being affected by “Time of the World” (Leatherbarrow 17).

(-)
• Rudimentary forms limit findings.

REFLECTIONS

PDE 3 is limited by its rudimentary forms, although critical as a foundation for the next series of experiments in the Preliminary Design Stage. PDE 4 should seek to establish an architectural stitch that can be repeated along the IDL.
PRELIMINARY DESIGN EXPERIMENT 3
FOCUS: RO3
INFLUENCE: Peter Bürger and David Leatherbarrow.
4.4.2 PRELIMINARY DESIGN EXPERIMENT 4

FOCUS: RO2 + RO3 + RO4.
INFLUENCE: Martin Heidegger, Andrew Carr, Andrew Gleeson, Angus Fletcher and David Leatherbarrow.

EXPERIMENTS (4 - 7):

PDE 4, 5, 6, 7, 8, 9 and 10 explore the development of an architectural stitch intervention that diverges from rudimentary massing, developing a type of ‘futural’/sci-fi language, identified as a design opportunity within Section 2.2.2. This language intends to evoke a sense of trepidation about the future, or “being-toward-death” (Heidegger 277). Each form explores durational architectural design, acting as “a machine for slowing down time” (as discussed by Carr 109), avoiding influence of change from temporal processes thus far. Forms are designed with an intention of repetition along the International Date Line, reflective of the Design Matrix.

Additionally, the stitches seek to act as a conglomerative journey, with intermittent moments of battle through resolved or unresolved tension/resolution seen as oppositions across the IDL, reflecting on the theoretical propositions of Gleeson (2013) and Fletcher (1965). Additionally, each iterative stitch experiment intends to explore architectural forms, and broader systems, which could act as a series of ‘urban neighbourhoods’ repeated along the latitudinal lines of the I.D.L. This identifies a broader speculative programme for both the Preliminary Design and Developed Design phases of this research (although detailed programme is outside of this research’s scope). Each ‘urban neighbourhood’ would therefore allow its users to either transiently, or more permanently, inhabit a spatial re-representation of augmented temporal conditions on Wrangel Island.

(+)
- Language designed as ‘futural’ to evoke “being-toward-death” within the conglomerative architectural journey (as discussed by Heidegger 277, Fletcher 1965).
- Potential of singular, dual, and opposing pairs reflects Gleeson’s (2013) theory.
- Architecture at a scale more suitable for reflecting spaces that invite, recall, or suggest pause through “Time of the Body” (as discussed by Leatherbarrow 17).
- Development of durational “architecture as a machine for slowing down time” (as discussed by Carr 19).
- Identifies a broader speculative programme, with each stitch intending to be used as a form of repeated temporal ‘urban neighbourhood’ along the I.D.L.

(-)
- Current approach not clearly reflecting transitory systems/journey potential which could allow spaces to imply invitation, recall or pausing of movement (“Time of the Body” as discussed by Leatherbarrow 17).

REFLECTIONS:

PDE 4, 5, 6, 7, 8, 9 and 10 are extremely successful in beginning the exploration of a unified approach to the Preliminary Design Stage; however, with intentions of being an architectural journey, the circulatory systems need substantial development, allowing clearer transition between the newly proposed ‘urban neighbourhoods’ along the I.D.L. Therefore, PDE 11 should explore an alternative approach to the Preliminary Design Stage.
"ARCHITECTURE AS A MACHINE FOR SLOWING DOWN TIME"
(CARR 19).

ARCHITECTURE THAT LITERALLY AND METAPHORICALLY SEWS THE LATTITUDINAL AND LONGITUDINAL LINES OF THE ISLAND OF THE DAY BEFORE.
4.4.5  PRELIMINARY DESIGN EXPERIMENT 7
DEVELOPING AN ARCHITECTURAL MACHINE II

Author, Developing a Machine Stitch, 2022.
PRELIMINARY DESIGN EXPERIMENT 8
stitch development

architecture which acts to sew the fracture of time at the 180th meridian, using the chapters of the allegorical provocateur as thread.
4.4.7 PRELIMINARY DESIGN EXPERIMENT 9
4.4.8  PRELIMINARY DESIGN EXPERIMENT 10

THE BINDERS OF ALLEGORY

THE BINDERS OF ALLEGORY
4.5 STITCH DEVELOPMENT II [PDE 11]

FOCUS: RO2 + RO4
INFLUENCE: Eric Owen Moss's (2011) Samitaur Tower; David Leatherbarrow, Andrew Gleeson, Edward Casey

EXPERIMENT:

PDE 11 and 12 further develops the urban scale vertical and horizontal scale ‘circulation systems’ initiated in PDE 4-10 by designing a new speculative architectural stitch approach that implies clear vertical and horizontal circulation systems. These are intended to represent rail and roadway systems, such as high-speed-rail or automobile roadways. This integrates the augmentation of temporal flow into the circulatory systems by offering invitation for movement through various speeds between each stitch’s ‘urban neighbourhood’, augmenting perception of Leatherbarrow’s proposition for building for time through the framework of “Time of the Body” (17). The vertical circulation systems draw upon Eric Owen Moss’s (2011) Samitaur Tower for inspiration.

(+)

• Begins to evident circulation systems more clearly which visualise potential spatial invitation, recall, and moments of pause between ‘urban neighbourhoods’ reflective of Leatherbarrow’s “Time of the Body” (17).

• The mirroring of architectural form evokes a ‘natural’ duality within each modular stitch design, reflective of Gleeson’s proposition of architecture always existing in duality.

• Architectural forms frame the International Date Line as an edge condition acting as a liminal threshold between temporal contexts (as discussed by Casey 2013).

• The forms metaphorically resemble physical book stitches.

(-)

• Approach acts only in resolution regarding its inherent architectural duality, this limits any opportunity to explore tension or battle (as discussed by Gleeson 2013, Fletcher 1965).

• The intended repetition of these modular forms will become an issue towards the coastlines of Wrangel Island due to their raised circulatory system.

• Design weaker in reflecting an ‘urban neighbourhood’ programme due to its emphasis on verticality.

REFLECTIONS:

PDE 11 and 12 are ultimately affected by the limitation of exploiting architectural tensions; additionally, PDE 13 should seek to explore how this proposed design can transition its’ modular form down into the coastal conditions of Wrangel Island, which are essentially the physical markers of the pre-liminal (west), and post-liminal (east) states that the International Date Line intersects.
FOCUS: RO2 + RO4

4.5.1  PRELIMINARY DESIGN EXPERIMENT 12
PDE 11 and 12 identified the need for an architectural ‘end condition’, a design which transitions the modular stitch design established in PDE 11 and 12 down into the coastal boundaries of the International Date Line on Wrangel Island. Such a design also acts as a containment for the journey through the spatial re-presentation of temporal conditions on Wrangel Island. As a solution, the end condition has been designed, marking a way for Dasein to project themselves ‘futurally’ through the speculative architectural intervention(s) (as discussed by Heidegger 277). Additionally, the end condition establishes a boundary between the pre- and post-liminal states on Wrangel Island, a gateway into a “moment in and out of time… [and] in and out of secular social structure” (as discussed by Turner & Abrahams 96).
4.6.1 **END CONDITION DEVELOPMENT [PDE 14]**

**FOCUS:** RO2 + RO4

**INFLUENCE:** Léon Krier and Massimo Scolari’s (1975) *Le désespoir de Janus*, Edward Casey, Maurice Merleau-Ponty, Martin Heidegger, Andrew Carr, and David Leatherbarrow.

**EXPERIMENT:**

PDE 14 establishes an architectural end condition by developing a series of mirrored forms that transition across the *edge* conditions of the circulation systems down to the surrounding ocean, architectural forms which demarcate the pre-liminal and post-liminal states and temporal experiences on Wrangel Island. PDE 14 draws inspiration from Léon Krier and Massimo Scolari’s (1975), *Le désespoir de Janus* by posing two mirrored architectural forms against each other to suggest users who arrive at these end conditions are within a spatial and temporal purgatory state.

(+)

- Acknowledgement of *edge* to transition architectural form from the mountains to lower coastline helps to spatially re-present end conditions as a transitional liminal gateway (as discussed by Casey 2013).

- Mirrored duality immediately challenges/augments users’ perceptions of what is past and what is present, rather than explicitly presenting one as past and one as future (as discussed by Merleau-Ponty 1945, 1968).

- Marks beginning of Dasein’s journey, a foundation for future-orientation (as discussed by Heidegger 1962).

(-)

- Black and white representation limits expression of concepts of *successive* or *durational* architecture by not engaging with materiality (as discussed by Carr 2017 and Leatherbarrow 2020).

**REFLECTIONS:**

PDE 14 represents significant and successful iterative processes of development; however, future depictions of the ‘end conditions’ should explore approaches to augmenting the mirrored design through materiality (“Time of the World”, Leatherbarrow 17 and Carr 2017).
END CONDITION DEVELOPMENT [PDE 14]

FOCUS:
RO2 + RO4

INFLUENCE:
Léon Krier and Massimo Scolari's (1975) Le désespoir de Janus, Edward Casey, Maurice Merleau-Ponty, Martin Heidegger, Andrew Carr, and David Leatherbarrow.
4.7

PRELIMINARY MASTER PLAN AND SECTION [PDE 15 AND 16]

This experiment establishes a preliminary master plan and section, visualising the current layout and conceptual architectural stitch fragments on Wrangel Island, establishing the fragments and their overall narrative whilst also highlighting the transitory systems between each ‘urban neighbourhood’ stitch. PDE 16 additionally highlights the concept that, as users move vertically down the I.D.L, time flows backwards, with fragments of the past beginning to appear.
4.7.1 PRELIMINARY MASTER PLAN [PDE 15]
Fig. 4.7.1 William Faden & Thomas Jefferys, Asia. London, 1775. (Background)
This section creates speculative architectural renders of the Preliminary Design Stage, beginning to explore how “Time of the World” (Leatherbarrow 17) can be augmented through exploration of weathering and natural phenomena (s4.8.3), and concepts of successive and durational architecture by either engaging with temporal processes of the natural environment (s4.8.2, 4.8.3, 4.8.4), or evoking the sense that an architectural intervention had existed for an infinitude of time (s4.8.1, 4.8.4). Additionally, PDE 17 and PDE 20 reflect a speculative visualisation of the ‘urban neighbourhoods’ along the I.D.L and transit systems bridging these.
4.8.1 COMPRESSED ZONE I [PDE 17]

Author, *A View through the International Date Line*, 2022.
4.8.2 **COMPRESSED ZONE [PDE 18]**

*Author, A View through the International Date Line II, 2022.*
4.8.3 DISRUPTIVE ZONE [PDE 19]

Author, A Stitch Overcome by Natural Temporal Processes, 2022.
4.8.4 STRETCHED ZONE [PDE 20]

Author, "Stitches Bridging a Desolate Past and Thriving Future, 2022."
4.9 CRITICAL REFLECTION
REFLECTING ON CHAPTER 4

ACCOMPLISHMENTS

The Preliminary Design Stage successfully applied theories relating to fragmentation (RO2) to the design experiments initiated in the previous stage. Although it did not explicitly transfer architectural outcomes from the Conceptual Design Stage, it identified broader approaches, which resulted in a more successful series of outcomes.

Haralambidou’s (2007) proposition for the allegorical architectural project as a critical method was applied and tested, as the research method for identifying the allegorical approach of stitching the thesis together, literally and metaphorically. Each allegorical Preliminary Design experiment followed iterative processes, engaging with a broader narrative with respect to challenging traditional knowledge and augmenting the experience of time through architectural interventions that allow one to inhabit intermittent occupations of the International Date Line. These provide a new dwelling-place for non-linear time (as discussed by Benjamin 1928, Cowan 1981, Tambling 2009) on Wrangel Island.

The application of Bürger’s (1984) theoretical framework for the fragmentation of allegorical elements was critical to the success of the Preliminary Design Stage. Its application proved beneficial in identifying two speculative architectural approaches that integrated the general findings from the Conceptual Design explorations of RO1 (Cartography) and RO2 (Liminality), as well as more providing a cohesive introduction of temporality theory as a manipulative tool for both Wrangel Island, and the architecture situated upon it. It achieved this by applying Leatherbarrow’s proposition for “Time of the World” (17) to fragment the site into zonal areas, identifying how architecture can intertwine itself with the existing allegory of temporality on the site. In this sense, the Preliminary Design Stage outcomes act firstly to spatially re-present temporal conditions in ways that challenge or augment our normative understanding of time by first acting as a cartographic machine at each latitudinal line along the IDL, seeking to calculate latitude as well as longitude (temporality). Secondly, it provides a physical entity between pre- and post-liminal states of temporal contexts along the International Date Line, allowing the threshold to exist between opposing architectural interventions. Thirdly, these oppositions can be exploited for their tension or resolution due to this opposition across the International Date Line – either defying or accepting temporal processes. Fourthly, the identification of the broader programme of each stitch, acting as ‘urban neighbourhoods’ allows a direction for Developed Design experiments to explore, also experimenting with how these are connected by circulatory systems such as high-speed-rail or automobile roadways.
In the September (2022) Preliminary Design Review, critics Nick Strachan, Principal at Athfield Architects, and Marc Woodbury, Senior Principal at Studio Pacific Architecture, discussed how the fragmentation of Umberto Eco’s *IDB* (1994) and the Research Investigation as a whole were highly successful due to the clarity and cohesiveness in engaging each element of research.

The principal talking point for both critics was the similarity between the past and present on either side of the chasm, as suggested by the architectural renders. Strachan discussed how the similarity between architectural form across both temporal contexts ultimately limits the perception of the existence of other temporal contexts—even though this research proposes them as being intertwined as the ‘contemporary condition’; only one architectural language exists. Woodbury discussed how the IDL perhaps needed further speculative manipulation to allow the architectural stitches to feel like they were machines for bringing the landscapes back together again, rather than a continual separation throughout. Both critics remarked on the success of the language of the original six architectural stitch concepts, and on the success of the circulation system approaches of the Preliminary Design outcomes.

Ultimately, Strachan and Woodbury provided a significantly beneficial discussion on the Preliminary Design Stage and opportunities to explore in the next stage. In the Developed Design Stage, the successful applications of allegory and liminality (RA), cartography (RO1), liminality (RO2, and fragmentation (Ro3) will need to implicate RO4 (Multiplicity, Dualities, and Oppositions) to address the discussions by the critics about achieving clearly readable temporal opposition between the architectural ‘stitches’ on one side of the IDL versus the other.

---

**NEXT STEPS**

Position for Future of Research

- - - - -
5.1 DEVELOPED DESIGN APPROACH

This design-led research investigation uses Umberto Eco’s allegorical novel The Island of the Day Before as a literary provocateur for an allegorical architectural project, interrogating how Eco’s literary devices of allegory, temporality, cartography, liminality, fragmentation, multiplicity, dualities, and oppositions can be used to ‘spatialise’ time, by applying those devices to architecture.

The Conceptual Design Stage explored opportunities for integrating concepts relating to allegory and temporality (RA), and cartography (RO1) in addressing the Research Question. In the Preliminary Design Stage, theoretical considerations relating to fragmentation (RO2) and liminality (RO3) were applied, and in the Developed Design Stage, the allegorical literary devices of multiplicity, dualities, and oppositions (RO4) will be critically examined.

The Developed Design Stage marks the beginning of the end for this Research Investigation’s allegory of temporality on Wrangel Island. Following on from the successful approach of the Preliminary Design Stage, the Developed Design Stage will apply Bürger’s (1984) theoretical framework of fragmenting an allegory to the outcomes of the Preliminary Design research, seeking to identify a developed approach combining the successes of each – reflective of Nick Strachan and Marc Woodbury’s critique and discussion in the Preliminary Design review.

Chapter 5 applies theoretical insights drawn from the Literature and Project Review and proposes a speculative architectural outcome in the form of speculative architectural renders. These renders seek to visualise a unified voice for the allegory of non-linear time on Wrangel Island, and for the wider research. In doing so, this allegorical architectural project will provide a final, clear understanding of how architecture can spatially re-present temporal conditions in ways that challenge and augment our normative understanding of time.
5.2.1 DEVELOPED DESIGN EXPERIMENT 1

FOCUS: RO3
INFLUENCE: Peter Bürger.

EXPERIMENT:
DDE 1 applies Bürger’s (1984) theory of fragmentation to the Preliminary Design Stage outcomes by identifying and isolating individual successful elements that could influence forms within the Developed Design Stage, specifically the circulatory systems which could be used to link ‘urban neighbourhoods’.

REFLECTIONS:
DDE 1 identifies how the bridging nodes at the centre of this approach were weak in form and execution; future experiments should seek to use the entire architectural stitch as a unified temporal bridging device, rather than literal bridging forms.
The experiment clarifies the successful (and weaker) circulation systems that the second avenue of Preliminary Design research explored, a reflection on Leatherbarrow’s discussion of “Time of the Body” (17).

Successfully applies fragmentation theory by identifying individual systems, isolating them, and then recombining them, generating a new understanding of the original form (Bürger 1984).

The central bridging nodes are weaker design choices compared to the other more ‘structured’ systems.
5.2.2 DEVELOPED DESIGN EXPERIMENT 2

FOCUS: RO3
INFLUENCE: Peter Bürger, Mila Mojsilović & Vladimir Milenković, and Andrew Carr.

EXPERIMENT:

DDE 2 applies Bürger’s (1984) theory of fragmentation to the first avenue of the Preliminary Design phase by identifying two successful forms which reflect on Carr’s proposition for “architecture as a machine for slowing down time” (109). Additionally, these forms are both ‘well-rounded individuals’, reflecting on Mojsilović and Milenković’s proposition of the contemporary architectural fragment holding its own identity within a larger narrative.
DEVELOPED DESIGN EXPERIMENT 2

FOCUS:
RO3

INFLUENCE: Peter Bürger, Mila Mojsilović & Vladimir Milenković, and Andrew Carr.

• Highlights the ‘machine’ language that Preliminary Design critics favoured, reflective of Carr’s proposition of architecture becoming a “machine for slowing down time” (109).

REFLECTIONS:

DDE 2 clarifies the two successful approaches of the Preliminary Design Stage; however, it raises issues as to the language compatibility of the two approaches. Therefore, DDE 3 should explore an iterative development of both transitory focused stitches, and transitory ‘machine’ stitches.

(+) 
- Forms seem somewhat incompatible currently due to the vastly different circulatory systems.

(-) 
- Forms seem somewhat incompatible currently due to the vastly different circulatory systems.
5.2.3 DEVELOPED DESIGN EXPERIMENT 3

FOCUS: RO3
INFLUENCE: Peter Bürger, David Leatherbarrow, and Mila Mojsilović & Vladimir Milenković.

EXPERIMENT:

DDE 3 applies Bürger’s (1984) theory of fragmentation to both avenues of the Preliminary Design research, identifying and isolating the ‘machine’ of the first avenue, and circulation systems of the second. It then recombines them and iteratively develops them into new speculative architectural interventions which can be modularly linked as ‘urban neighbourhoods’ through high-speed-rail and automobile roadways.
DEVELOPED DESIGN EXPERIMENT 3

FOCUS:
RO3

INFLUENCE:
Peter Bürger, David Leatherbarrow, and Mila Mojsilović & Vladimir Milenković.

• Ensures successful transitory systems are integrated, allowing future spatial recall through “Time of the Body” (Leatherbarrow 17).

• Successes of both languages are integrated towards the ‘final’ iterations of the experiment.

• Begins to evidence a unified approach which is more reflective of a potential ‘urban neighbourhood’.

REFLECTIONS:

D.D.E 2 clarifies the two successful approaches of the Preliminary Design phase; however, it raises issues as to the language compatibility of the two approaches. Therefore, D.D.E 3 should explore an iterative development of both transitory focused stitches, and transitory ‘machine’ stitches.

• Issue could arise when placing stitches into disruptive zones and avoiding the fragment as ruin due to the rigid forms not responding to changing topography (Mojsilović and Milenković’s 2019).

NEW TRANSITORY + MACHINE ITERATIONS
5.2.4 DEVELOPED DESIGN EXPERIMENT 4

FOCUS: RO1 + RO3 + RO4
INFLUENCE: Roland Barthes, Walter Benjamin, Bainard Cowan.
EXPERIMENT:

DDE 4 applies further fragmentation to DDE 3, identifying a ‘final’ futural architectural language for the stitch interventions which possesses two inherent identities, an internal dialogue of duality, opposition and multiplicity by allowing each identity to be connotative of various potential programmes and circulation (as discussed by Barthes). This design is more explicitly reflective of a language which could potentially be inhabited as an ‘urban neighbourhood’, with high-speed-rail lines and automobile roadways integrated to bridge each architectural stitch.

DEVELOPING A STITCH OF MULTIPLICITY

REFLECTIONS:

D.D.E 2 clarifies the two successful approaches of the Preliminary Design phase; however, it raises issues as to the language compatibility of the two approaches. Therefore, D.D.E 3 should explore an iterative development of both transitory focused stitches, and transitory ‘machine’ stitches.
DEVELOPED DESIGN EXPERIMENT 4

FOCUS:
RO1 + RO3 + RO4

INFLUENCE:
Roland Barthes, Walter Benjamin, Bainard Cowan.

• Establishes a developed temporal dwelling-place for the truth of time on Wrangel Island, using iterative representation of allegorical processes to do so (discussed by Benjamin 1928, Cowan 1981).

• Designing architecture with two inherent identities is successful in allowing Barthes proposition of connotation to evoke a plurality of potential use-cases/implied meaning.

• Stronger language that implies potential for acting as an ‘urban neighbourhood’ by developing more detailed forms, as well as allowing users to live in the interwoven temporal contexts at the liminal zone of the I.D.L.

REFLECTIONS:

DDE 4 introduces a significant development with its inherent plural identities (RO4: multiplicity, dualities, and oppositions), as well as its stronger language of acting as a repeatable ‘urban neighbourhood’ which allows users to occupy the liminal zone of the I.D.L.; however, the fragment needs recombining with Wrangel Island for exploration of depth of engagement with liminality (Mazis 2013).

• Experiment requires contextualisation on Wrangel Island.

(+) -x- (+)

(-) -x- (-)
EXPERIMENT:
DDE 5 and 6 translate DDE 4’s established speculative architectural outcome onto two zones of Wrangel Island, DDE 5 first places the stitch within a stretched zone of Wrangel Island (per Design Matrix in Section 4.3), highlighting how the form can become mirrored to establish a ‘hybrid’ temporal identity, expressing a resolution of tension across the I.D.L by existing as a connected form (Gleeson 2013). DDE 6 then explores placing the alternative identity of DDE 4’s speculative architectural outcome within the disruptive zone of Wrangel Island, exploiting tension across the I.D.L by placing forms in ways that do not touch one another, establishing a fracture in the journey through Wrangel Island, consequentially, a battle (Fletcher 1965).
Ultimately DDE 5 and 6 visualise two different ‘urban neighbourhood’ identities, connected by the high-speed-rail lines and automobile roadways, with DDE 5 occupying the liminal zone, and DDE 6 allowing occupation of different temporal states.

• These experiments successfully explore the exploitation (and not) of Gleeson’s proposition of using tensions and resolutions to manipulate architectural form and experience.

• Begins to explore moments of temporal battle within the larger journey by disconnecting architectural forms and circulation across the I.D.L (Fletcher 1965).

• DDE 6 explores potential for users to also occupy the non-liminal temporal space on Wrangel Island.

REFLECTIONS:
DDE 5 and 6 successfully contextualise DDE 4 onto Wrangel Island, showing how the Design Matrix (Section 4.3) can influence the plural identities of the speculative architectural stitch. However, the similar language across both sides of the I.D.L should now be fragmented into a Baroque language, drawing inspiration from Susan Marais’s discussion of how “by engaging with the historical context of its main protagonist, Eco revises the past and integrates it with the present to reinterpret 17th century representations of space, time, boundaries and identity from a 20th century perspective” (566).
it was, then, but larger than the Amaryllis, yet with a deck reduced, almost, to a single handseye, as if the captain had been anxious to ship with a lively wave.

In any case, it was a flute. Roberto could not see how the space was there, if the entire crew, if there was never to be elsewhere, if that was.

That opened, somebody told him ran from would be another, the compass of land, of today, which with its galley to the they had nothing else, there were another, with work the, it was for the table, and.
5.2.6  HYBRID STITCH [DDE 5]
5.2.7 DISRUPTIVE STITCH [DDE 6]
5.2.8 DEVELOPED DESIGN EXPERIMENT 7

FOCUS: RO1 + RO2 + RO2 + RO3


EXPERIMENT:

DDE 7 draws from Umberto Eco’s (1994) *IDB* to identify a ‘past identity’ for the futural stitch, using a 17th-century (Baroque) context as a platform to revise the past and integrate it with, in this case, a 21st century perspective. This ultimately exploits tensions between temporal contexts at battle against one another (as discussed by Gleeson 2013, Fletcher 1965). It also identifies a new potential ‘urban neighbourhood’ identity in doing so.
• Extremely successful Baroque language establishes an alternative temporal identity for the futural stitch, allowing exploitation of tension between past and future (as discussed by Gleeson 2013). This also results in identities being at battle within the wider journey (as discussed by Fletcher 1965).

REFLECTIONS:

DDE 7 is a significant step forward, identifying a rich Baroque ‘past identity’ for the futural stitch, allowing Gleeson (2013) and Fletcher’s (1965) theories of duality and opposition to be integrated into the previous design experiments; however, the scale of the representation lacks clarity, hence, DDE 8 should provide a more in-depth analysis at a larger scale.

• Experiment lacks clarity of specific elements designed in opposition.
5.2.9 DEVELOPED DESIGN EXPERIMENT 8

FOCUS: RO3 + RO4

INFLUENCE: Léon Krier & Massimo Scolari’s (1975) *Le désespoir de Janus*, Peter Bürger, Andrew Gleeson, Angus Fletcher, David Leatherbarrow.

EXPERIMENT:

DDE 8 develops further upon DDE 7, enhancing the clarity of the ‘past identity’ that has been established for the futural stitch by identifying and isolating individual architectural fragments (as discussed by Bürger 1984). It draws inspiration from Léon Krier & Massimo Scolari’s (1975) *Le désespoir de Janus* by translating similar architectural forms into different temporal identities.
DEVELOPED DESIGN EXPERIMENT 8

• DDE 8 clarifies oppositions, and a *battle* between individual architectural fragments (as discussed by Gleeson 2013, Fletcher 1965).

• Reached point where materiality is crucial to development as it could be used to augment temporal perception of both the past and futural identities (“Time of the World”, Leatherbarrow 17).

**REFLECTIONS:**

DDE 8 clarifies the integration of Gleeson (2013) and Fletcher’s (1965) theories into the ‘past identity’ of the futural stitch; however, future experiments need to explore materiality and speculative inhabitation of fragments to visualise their spatial re-presentation of temporal identities in ways that challenge or augment them further.
5.2.10 DEVELOPED DESIGN EXPERIMENT 9

FOCUS: RO2
INFLUENCE: Umberto Eco's (1994) IDB, Penelope Haralambidou and Roland Barthes.

EXPERIMENT:
The literary device of duality and opposition appears numerous times in Umberto Eco's (1994) *IDB*. One of many temporality dualities and oppositions in the book is that it is written in the twentieth century by someone reading Roberto's journals, while the fragments of storyline occur in the Baroque period. One of the most notably expressions of the literary device of duality and opposition is the main character Roberto, who is conveyed as having a mythological identical twin brother Ferrante:

as a young boy, he [Roberto] created a fictional identical twin brother, Ferrante, whom he uses as a scapegoat for all his misdemeanours... he never outgrows this childish quirk... [and] it becomes clear that Roberto gradually blurs the distinction between reality and fabrication with regards to Ferrante's existence (Marais 565).

DDE 9 explores how duality and opposition can be translated into a connotative architectural language, as drawn from *IDB*. It situates architectural elements from the Baroque onto the edge of the IDL to represent 'past identity' and elements of futuristic architecture onto the opposite edge to represent 'future identity'. Each architectural intervention faces its doppelgänger from an opposing era of time.

Fictional Baroque statues, telamons, and caryatid's act as both literal and metaphorical structures to hold the (literal and metaphorical) weight of the established 'past identity'. This implements Roland Barthes's proposition of plural meaning/multiplicity through connotation—with the statues, telamons, and caryatids implying Roberto's (and the author's) fictional intervention to keep the 'past identity' afloat while reaching towards the spatial/temporal chasm of the IDL.

(+)
- Engages with Haralambidou's proposition of the allegorical architectural project as a tool for unravelling *IDB* through architectural allegory, allowing an enhanced integration of *IDB* into the Developed Design phase of the research by spatialising the inherent duality of Roberto, the novel’s protagonist.
- Baroque statues, telamons, and caryatids engage with Roland Barthes's proposition of plural meaning through connotation.

(-)
- Lack of clarity as to how a 'futuristic' architecture might be represented, when being conceived by the thesis author in the present.
EXPERIMENT:

DDE 9 is extremely successful in integrating the literary device of Multiplicity, Dualities, and Oppositions from Umberto Eco’s (1994) *IDB* into the Developed Design phase; however, the experiment somewhat limits understanding of this approach in regard to the entire ‘past identity’ and ‘future identity’ of the speculative architectural outcome. Future experiments should explore this in closer detail.
5.3.0

SITE PLAN
[DDE 10]

The Site Plan acts as a final speculative cartographic map, identifying the location and organisation of speculative architectural ‘stitch’ fragments on Wrangel Island, with insight into the types of stitches provided as reference to the large scale of the principal map. It also acts to clarify the circulation systems which connect each ‘urban neighbourhood’.
5.2.1

ZO3
STRETCHED

ZO2
DISRUPTED

ZO1
COMPRESS

3 MAJOR AXES
A + B + INTERNATIONAL DATE LINE

INTERNATIONAL DATE LINE
THE LIMINAL THRESHOLD

184
5.3.1 SITE PLAN [DDE 10]

EXAMPLES OF ZONAL STITCH COMPOSITION

FUTURE

HYBRID FORMS AS TEMPORAL BRIDGING

PAST

FRAGMENTED FORMS FACING OFF

FUTURE

FULL BUT NOT CONNECTED

END CONDITIONS

SITE PLAN
The following pages exhibit Speculative Architectural Renders of the Developed Design Stage outcome, visualising the various ‘stitches’ on the site. Each intends to highlight their altering temporal identities from both exterior and interior vantage points, speculatively visualising the ‘urban neighbourhood’s’ and their temporal transit systems. The renders represent “Time of the World” (Leatherbarrow 17), “Time of the Body” (17), and successive and durational architecture by manipulating the temporal processes associated with the natural environment, architectural material, and interior spatial recall (as discussed by Carr 2017). They are presented as a journey through the speculative architectural outcome.
SPECULATIVE DEVELOPED RENDER
FRAGMENT 0 [END CONDITION] ZONE 1 | ARRIVAL
SPECULATIVE DEVELOPED RENDER
FRAGMENT 21 ZONE 3 | UNDERGROUND TRANSIT
STRIPPED EVEN OF THE ROPE, WHICH WOULD NO

SPECULATIVE DEVELOPED RENDER
FRAGMENT 41 ZONE 4 | AN ALLEGORICAL ENDING
LONGER PERMIT HIS VOYAGE, HE DESCENDED INTO THE SEA.
The literary provocateur *The Island of the Day Before* by Umberto Eco offers an allegorical narrative whose overarching theme explores the idea that time is not always linear, re-presenting the past, present, and future as interwoven. Stranding the protagonist Roberto across the other side of the International Date Line, Eco uses the narrative imagery of cartography, and literary devices of liminality, fragmentation, multiplicities, dualities, and oppositions to spatialise alternative constructs of time within his novel.

This design-led thesis investigation follows this literary narrative construct, exploring a similar story about Wrangel Island. It uses the theory of temporality, a concept bound within the construct of the International Date Line, to deconstruct the linear flow of time, presenting Wrangel Island as a temporal purgatory. It identifies how architecture can then engage in an allegory of temporality, using constructs from cartography to map the unknown and unexpected experience of time physically and metaphorically along the International Date Line. It explores an allegory of temporality to challenge and augment our normative understanding of time by exploring different re-presentations of the past, present and future.

The outcome for the Developed Design stage was a series of Speculative Architectural Renders, each created to reflect the identity of different speculative architectural ‘stitch-like’ fragments along the International Date Line. This stitches allegorically once linked the future with the past; although most are now broken, some remain intact. The broken stitches are located in Wrangel Island’s most highly disrupted mountain region, while the intact stitches reside within the low-lying terrain. faces, reminiscent of the earliest architectural monuments. In this way, time appears to move backwards as one descends through the I.D.L.

Each exterior identity and interior spaces depict an allegory of temporality. The renders provide a final clarity to the thesis, establishing how interventions within each zone of Wrangel Island engage with “Time of the World” (Leatherbarrow 17) and concepts of successive and durational architecture, either by engaging with material weathering (or not), or through changing architectural forms. Each render provides a differing perspective of the broader ‘urban neighbourhood’ programme of each stitch and their transitory systems connecting them together, visualising how users inhabit an experience of interwoven temporality by living within the present – the liminal threshold between past and futural stitch identities. The organisation of renders depicts a journey, and anticipation towards a future, one that ends in the death of the stitch (Heidegger 1962). Each stitch’s identity represents a chronometric cartographic intervention, mapping and recording the temporal processes that occur along the International Date Line. Every stitch is located at a latitudinal line; their interplay across this spatialised threshold establishes a dance of tension and resolution between past, present and future, with the mirrored pairings of certain renders establishing the implied connotations, dualities, and oppositions between the battles of these temporal identities (Gleeson 2013, Fletcher 1965).
Barthes 1970). These renders iteratively establish a dwelling-place for the truth of time on Wrangel Island, an allegory of the experience of time and its processes, a voice free from linear restraint (Benjamin 1928, Tambling 2009, Haralambidou 2007).

The iterative development leading up to these renders was crucial to their success. With the return to the engagement with speculative cartographic approaches as a means of literally and metaphorically mapping the International Date Line, the architectural language strengthened its resolve by returning to the initial Preliminary Design Stage’s exploration of ‘machine-like’ architecture. The interplay of the liminal threshold was explored through the representation of varying states of architectural intervention; whether it be a hybrid stitch that bridges the threshold, or a fragmented stitch that visualises the opposing states. Additionally, each stitch was designed with intention to act as a ‘urban neighbourhood’ which occupied this liminal threshold, allowing its inhabitants to live within temporal contexts, of which they could enter circulatory systems such as high-speed-rail or automobile roadways in order to continue their journey to the next ‘urban neighbourhood’. With continual application of fragmentation, a strengthened speculative architectural outcome was developed that engaged with each Research Objective to a greater degree than any prior design experiment or design phase. The most significant success for the Developed Design approach was the exploration of fragmented ‘past identities’ for the proposed futural stitch, drawing from Umberto Eco’s (1994) *IDB* and its 20th century revision of a 17th-century Baroque context, whilst also exploring its protagonist Roberto’s internal duality and opposition with his imaginary brother, Ferrante. The architectural spatialisations of these opposing temporal identities were key to spatially re-presenting an interwoven experience of time, where moments of *battle* between linear time could finally occur, an expression of *tension* that was neglected thus far.

Each render provides a differing perspective of the broader ‘urban neighbourhood’ programme of each stitch and their transitory systems connecting them together, visualising how users inhabit an experience of interwoven temporality by living within the present – the liminal threshold between past and futural stitch identities.
CONCLUSION & CRITICAL REFLECTION
6.1 THE PAST

For this allegorical architectural project, Umberto Eco’s (1994) *The Island of the Day Before* was engaged as a literary provocateur to help to establish a speculative context for the exploration of non-linear time, engaging the real site of Wrangel Island as this Research Investigation’s metaphorical speculative site. The goal was to actively engage Wrangel Island’s intersection with the International Date Line to allow the deconstruction and delineation of the temporal contexts of past, present and future that can be conceived as originating from it, and in turn allowing a speculative allegorical architectural outcome to spatialise these suggested temporal conditions in ways that challenge or augment the users of the space. *The Island of the Day Before* was employed as a toolbox for identifying an approach to a concept that is arguably difficult to visualise outside of philosophical literature, using the novel’s story-telling capability to do so. The provocateur proved to provide an ambitious and unexpected range of avenues for architectural exploration at early states of the thesis, allowing it to blossom into a unique approach to spatialising concepts more broadly associated with time such as cartography, and in turn challenging their original purpose within their individual allegory of time.

Through iterative design experiments, both foundational (as discussed by Benjamin 1928) and contemporary (as discussed by Tambling 2009, Haralambidou 2007) theories of allegory were explored through digital modelling and representational tools, establishing a dwelling-place for non-linear time on Wrangel Island. A range of relevant theorists and associated case studies were used to address the four Research Objectives. These provided frameworks and methods that could be directly applied to design experiments and tested in the Conceptual and Preliminary Design Stages. Concluding the Developed Design Stage, a connected collection of architectural stitch fragments maps the International Date line, engaging with its interwoven temporal experience.
The very idea that our engagement with time - our temporal experience - can be considered as anything other than the normative linear construct we perceive on a day-to-day basis is a difficult proposition to fathom outside of philosophical literature. This research sought to bridge this gap by using design as a common-ground language, establishing a visualised spatial experience that explores non-linear time, something that the tools of metaphor and plurality of meaning of an allegorical architectural project could support achieving.

The allegorical architectural framework of this research was crucial to the successful explorations that arose throughout. The focus on iterative processes of representation allowed a rich exploration of unexpected and unique speculative architectural outcomes; each possessed within themselves an allegory about temporality, as well as an allegory about the wider research. The critical integrability of each fragmented stage of the research ultimately allowed productive development throughout, beginning from the allegorical interrogation of Umberto Eco’s *The Island of the Day Before*. The ultimate weakness of the Research Methodology was its assertion of its own temporal boundaries, such that oftentimes specific design experiments found themselves stuck in their own cyclical experience of temporality through development, discarding, and more development.

The ‘final’ speculative allegorical architectural outcome of the research reflected successfully upon the Research Aim and Objectives by presenting itself as a unified composition of individual, well-formed, architectural fragments occupying the International Date Line in all of its spatial, temporal and liminal contexts. The entire ‘blueprint’ of fragments presents itself both as a journey and battle through time, offering moments of both lineation and delineation to ground the user within it at each ‘urban neighbourhood’. Ultimately, its depiction of itself as a speculative cartographic time-keeper is limited to its metaphorical implication, one weakness of the speculative architectural outcome.

The sheer multiplicity of potential designed approaches was revealed in exploring speculative architecture that began as repurposed cartographic time-keeping devices, rudimentarily structured forms in the liminal space between temporal contexts, repeated fragments of temporal architectures along the International Date Line, and the duality and oppositions within an architecture and its temporal identity. In its familiar constructs of past, present and future, the interweaving of time and its temporal experience seems like a readily approachable issue through architecture. However, this research ultimately exemplifies the vast range of architectural, experiential, metaphorical, philosophical, literary, and literal influences on building for time. Although the speculative and allegorical methodology of this research allowed freedom to explore unique and unexpected
design outcomes, it became clear that if one was not careful, one’s own knowledge of temporality could interweave with the speculative.

With Wrangel Island and its intersection by the International Date Line, a speculative context of vast scale, the research was limited in its ability to design detailed internal programmes. Were the thesis to extend its scope and advance further in the future, such exploration would ultimately ‘complete’ the augmented temporal experience for its users, as well as a more well-rounded exploration for the author. Although speculative renders of internal spaces were explored in the Developed Design, a more ‘scalable’ composition was a primary limitation for the research. Additionally, its constraint by digital modelling limited hands-on engagement with perceiving formal design choices, with the design process sometimes getting lost in its own cyclical experience of time.

If this thesis was to progress further beyond its current scope, the research could be enhanced through a more detailed exploration of internal programme to explore how it could work in conjunction with the current thesis approach to further challenge and augment temporal conditions for its users. While the Developed Design Stage outcomes present as a metaphorical cartographic machine for slowing down time, future research could develop further upon the translation of cartographic devices as literal machines for augmenting spatial experiences and therefore their temporal implications.


Haralambidou, Penelope. "Dr. Penelope Haralambidou." UCL https://www.ucl.ac.uk/bartlett/architecture/people/dr-penelope-haralambidou. 2022.


Fig. 2.2.1. Haralambidou, Penelope. "The Fall, Sketchbook." Routledge, 1998 2007, 229. The Fall: The Allegorical Architectural Project as a Critical Method, general editor, Penelope Haralambidou.

Fig. 2.2.2. Haralambidou, Penelope. "The Fall, Model." Routledge, 2004 2007, 229. The Fall: The Allegorical Architectural Project as a Critical Method, general editor, Penelope Haralambidou.

Fig. 2.2.3. Bonner, Tom. Eric Owen Moss Architects, 2010, Elevation of Samitaur Tower. http://ericowenmoss.com/project-detail/samitaur-tower/##&gid=1&pid=3


Fig. 2.2.5. Norsworthy, Scott. "Yale Center for British Art - Louis Kahn." Flickr, 23/05/2013 2013. https://www.flickr.com/photos/scottnorsworthy/10811780033/in/photostream/.


Fig. 2.3.2. Cantley, Bryan. "Early Native Topography 15:7." Bartlett School of Architecture, 12/11/16 2016. https://twitter.com/bartlettarchucl/status/797031503892975617.

Fig. 2.4.1. Haverstick, Helen. "Deep Space - First Structure." Instagram, 02/04/2022 2022. https://www.instagram.com/p/Cb0Z5CVOSiA/.

Fig. 2.4.2. Haverstick, Helen. "Twin House." Instagram, 02/04/2022 2022. https://www.instagram.com/p/Cb0Z3VCu4UB/.


Fig. 2.5.2. Hufton + Crow, 2018, p. Scale within the Jewish Museum. https://www.huftonandcrow.com/projects/gallery/jewish-museum/.


Fig. 3.1.2. Google. Google, 2022, p. Wrangel Island Nature Reserve. https://www.google.com/maps/place/Wrangel+Island/@71.229372,-179.2768861,9z/.

Fig. 3.1.3. Ptak, John F. JF PTAK Science Books, 180123 n.d, p. A Specula Melitensis Machine. https://longstreet.typepad.com/.a/6a00d83542d51e69e2010535f99dbc970b-pi.


Fig. 3.1.5. Te Papa Tongarewa. "Theodolite." Te Papa, 180123 n.d. https://collections.tepapa.govt.nz/object/259760.


Fig. 3.1.9. Müller, Johann Mathematical Association of America, 180123 1474, p. Kalendarium of Regiomontanus https://www.maa.org/press/periodicals/convergence/mathematical-treasure-kalendarium-of-regiomontanus.


Fig. 4.4.1. Mirzaei, Arezoo. 16 June 2022, p. Stitch Inspiration. https://www.instagram.com/p/Ce05miXsrfK/.

Stories are also a mechanism for transcending the limits of human perception, extending our experience beyond the here and now into the past or the future, to places unvisited and people unknown.