

Walking the path



5 Concept Development

LIMINALITY AS SPATIAL THEORY

From a linked theoretical framework to a spatial theory

The application of the theoretical approach and liminal theory on the site identified four liminal relationships for the architecture to resolve, namely:

- The ecological connection between the Silverton Cemetery and the Moreleta Spruit industrialising the traditional burial process.
- The industrial connection between the existing linen store and the proposed leather dyeing facility reframed through an ecological lens.
- The liminal relationship between natural process, and nature itself, and industrial processes, and the industrial context.
- The internal tension between the two main programmes (Resomation route and the leather dyeing facility) creating a third condition that needs to be defined and articulated.

In defining the use of liminality in this project, two broader spatial conditions were identified, namely: transition spaces and mediating spaces.





Transition Spaces

In transition spaces, two opposing or conflicting spatial conditions are directly connected, with the transition space sharing qualities from both of the conditions simultaneously. Transition spaces can further be differentiated into threshold spaces and connecting spaces.

Threshold Spaces

Threshold spaces is singular points between two conditions. For example, a door between outside and inside. Threshold spaces also carry the associated meaning that it condenses both opposing conditions in such a manner that the experience lies in the juxtaposition of the two conditions rather than the transition between the conditions (Ng & Lim 2018).

Figure 5.6: Permeable barrier as threshold (Author November 2021)





Figure 5.7: Gap acting as a threshold (Author November 2021)



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Figure 5.8: Wall blocking movement (Author November 2021)



Figure 5.9: A singular point between two conditions (Author November 2021)

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Connecting Spaces

In connecting spaces, the condensed threshold is elongated to create a space that can be experienced in itself. Although it carries qualities from both the conditions a new third space is created connecting both the conditions. Here the emphasis is on the newly created spatial condition rather than the juxtaposition between the two conditions.



Figure 5.10: A circulation route acting as a connecting space (Author November 2021)

Figure 5.11: A connecting space can be merely experiential (Author November 2021)



Figure 5.12: A vertical connection point between two conditions (Author November 2021)



Figure 5.13: A space between nature and industry where mediation can take place (Author November 2021)



Where threshold spaces created a third space to connect two conditions, mediating spaces are spaces that is created when two conditions interact with each other. Occupying space and overlapping space are examples of mediating space that can be utilised in this project.

Occupying Space

Two conditions that exist in close proximity requires a mediating third space to either facilitate the spill out of the programme or to create a space for the users of the conditions to pause and reflect before further engaging with the conditions.

In this sense the occupying space is generally not programmed but gains a programme as a result of people occupying the space between the two conditions. As an extension of a threshold space, the occupying space has the potential to create new programmes and qualities or borrow from the conditions that it mediates between.

> Figure 5.15: A new programme can also be created between two vertical conditions (Author November 2021)

Figure 5.14: A new programme can be created between two conditions

(Author November 2021)



Overlapping Space

With the direct interaction between two conditions, an overlap in function/spatial qualities occur, creating a new third conditions that is inherently part of both the conditions. In this manner, the overlapping space creates an opportunity to cross-programme the conditions, in turn enabling new possibilities and spatial qualities.



Figure 5.16: Overlapping conditions creating new spaces (Author November 2021) Figure 5.17: These new spaces act as a connecting space between the two conditions (Author November 2021)



Figure 5.18: Overlapping industry and nature conditions allow for mediation to occur (Author November 2021)



Figure 5.19: Conceptual plan and section depicting the relationship between nature and architecture (Author November 2021)

CONCEPT

Design Concept

The concept of this project is to allow natural processes found on the site and industrialisation found in the context, to inform one another, creating a third, liminal condition that mediates between both the established conditions. The third condition would facilitate the transition from one condition to another by including aspects of both conditions into the third space. It is through the creation of this new third space that the processes of the industrial context can be changed to suit the natural processes found on the site (Figure 5.19).

Figure 5.20: First iteration of applying the concept to site (Author April 2021)

With the first attempt at applying the concept to the site, the result focussed on created a route from the Silverton Cemetery to the Moreleta Spruit with various spaces emerging in-between (Figure 5.20).

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The second iteration of the concept investigated how spaces in the landscape can be designed through architecture. The maquette also allowed the exploration of position programmatic organisation and their interaction with the landscape (Figure 5.21).



Constructing the path



Design Development and Technological Integration

As the design concept proposes the investigation of liminal space existing between industrial and natural processes, the technological concept strives to translate this concept further into a technological concept and intent. It is to act as a criterion for decision making and later reflection and critique.

Technological Concept

The design concept of this project attempts to focus on points of change between multiple overlayed and overlapping conditions. Applying this design concept to a technological concept illuminates the liminality that exists between any two elements or conditions that is to be either joined, separated or mediated. The technological concept thus explores the inherent relationship between two elements or conditions that is to be mediated by a third, liminal space. The mediating element however, allows change and transition to occur from one element or condition to the next.

Technological Innovation

In the process of translating design concept into technology, it is clear that two main innovations are present in this project. Firstly, the technological design attempts to move past the formal reference of the surrounding industrial context towards understanding the underlying reason for the formal language of industry in Silverton. Secondly, the translation of the theoretical framework into an appropriate technological language that aims to functionally and experientially serve the spaces and programmes of the intervention.

Technological Contribution

As an extension of the technological innovation, the contribution lies in developing methodologies of alternatively responding to contextual languages and typologies past the formal and superficial. Secondly, the contribution lies in developing a suitable framework that is appropriate to the industrial context of Silverton that can help facilitate the technological design of an architectural project. Lastly, the entire scheme is situated in a changing industrial Silverton, necessitating the need for the technological design to also respond to the general theme of future change.

Technological Intent

Analysing the typology of the surrounding industrial warehouses and light industrial factories, it is clear that the technology used is to facilitate the functional and efficient nature of industrialisation. Therefore, financially and structurally efficient steel structures are predominantly employed to cover large areas that can be easily moulded and added on. Learning from this, the technological intent is to develop a structural system that is both poetic and structurally adaptable, allowing for future expansion and use.

Extending the initial concept of a mediation between nature and industry, the structural system used replicates the symbiotic nature of the natural processes found on the site by being comprised of smaller individual structural elements that together create the structural system.