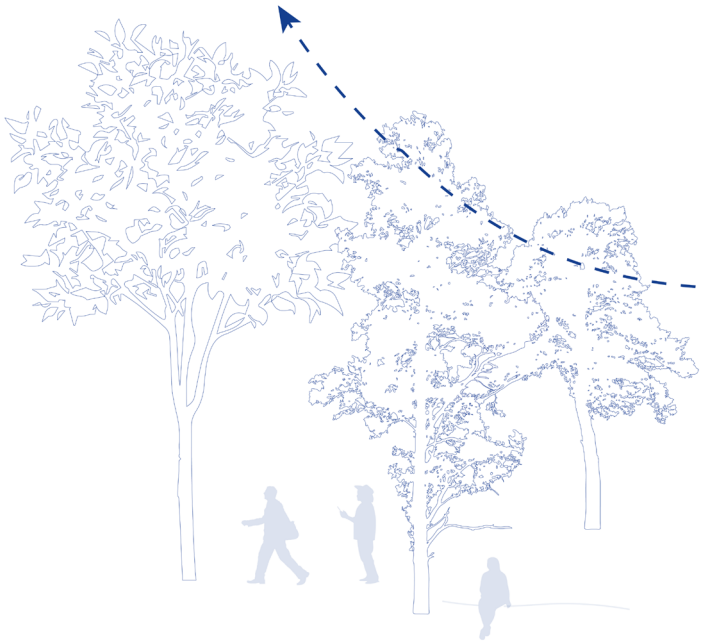
slow grounds

a layered architecture of time and stay



Acelya Ocalan

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a layered architecture of time and stay

AR4AP120 Public Building – Graduation Studio 2025/2026
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Abstract

Mobility hubs are usually designed to move people quickly and efficiently. Speed and transfer are often more important than the experience of staying. As a result, little attention is given to how time is experienced in these spaces. In a rural context like Ter Apel, this creates a contrast between fast infrastructure and a slow, layered landscape.

This graduation project explores how a mobility hub can become more than just a place to pass through. The project focuses on how architecture can influence the experience of time and support staying, waiting, and engaging with the landscape. The main research question asks how a mobility hub can contribute to slow tourism and regional identity.

The project is based on literature research, theoretical studies on time and duration, spatial analysis, and case studies. These studies are combined with a research-by-design approach to test ideas in a spatial way. The research shows that mobility infrastructure rarely supports different experiences of time. By organizing movement and stay in a layered way, fast movement and longer stays can exist together. The project proposes a mobility hub that also functions as a public space, encouraging people to stay longer and experience the landscape.

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1. introduction

1.1 Context

Mobility infrastructure plays an increasingly important role in shaping contemporary travel patterns and regional development. Mobility hubs are typically designed as efficient systems that prioritise speed, transfer and accessibility. Within these environments, time is often understood as a measurable resource that should be optimised, resulting in spaces primarily focused on movement rather than staying. As a consequence, activities such as waiting, resting or lingering are frequently treated as secondary functions with limited spatial quality (Sheller & Urry, 2006).

In rural regions such as Ter Apel, this logic differs significantly from the character of the surrounding landscape. The area is characterised by a slower pace, a layered rural environment and a strong cultural and historical identity, including its agricultural landscape and monastic heritage. Despite these qualities, existing mobility infrastructure mainly supports efficient travel through the region rather than encouraging engagement with it. Visitors are often directed towards arrival, transfer and departure, reinforcing short visits and limited interaction with the local context (European Commission, 2021).

At the same time, tourism practices are changing. Alongside conventional transit-oriented travel, there is growing interest in forms of tourism that emphasise longer stays, local experiences and stronger connections to place. Slow tourism has increasingly been recognised as a more sustainable approach to travel, particularly in rural and peripheral regions, as it encourages immersion, environmental awareness and meaningful engagement with local landscapes and communities (Dickinson et al., 2011; UNWTO, 2018). These forms of tourism are associated with different experiences of time, where gradual movement, seasonal rhythms and extended stays become part of the travel experience.

However, contemporary mobility hubs rarely accommodate these alternative temporal experiences. Their spatial organisation continues to prioritise efficiency and throughput, leaving limited room for visitors who wish to pause, explore or remain longer in a place.

This tension between fast mobility infrastructure and the slower character of rural landscapes forms the starting point of this research. It raises the question of how a mobility hub can support both efficient travel and longer experiences of place, while contributing to slow tourism and regional identity.

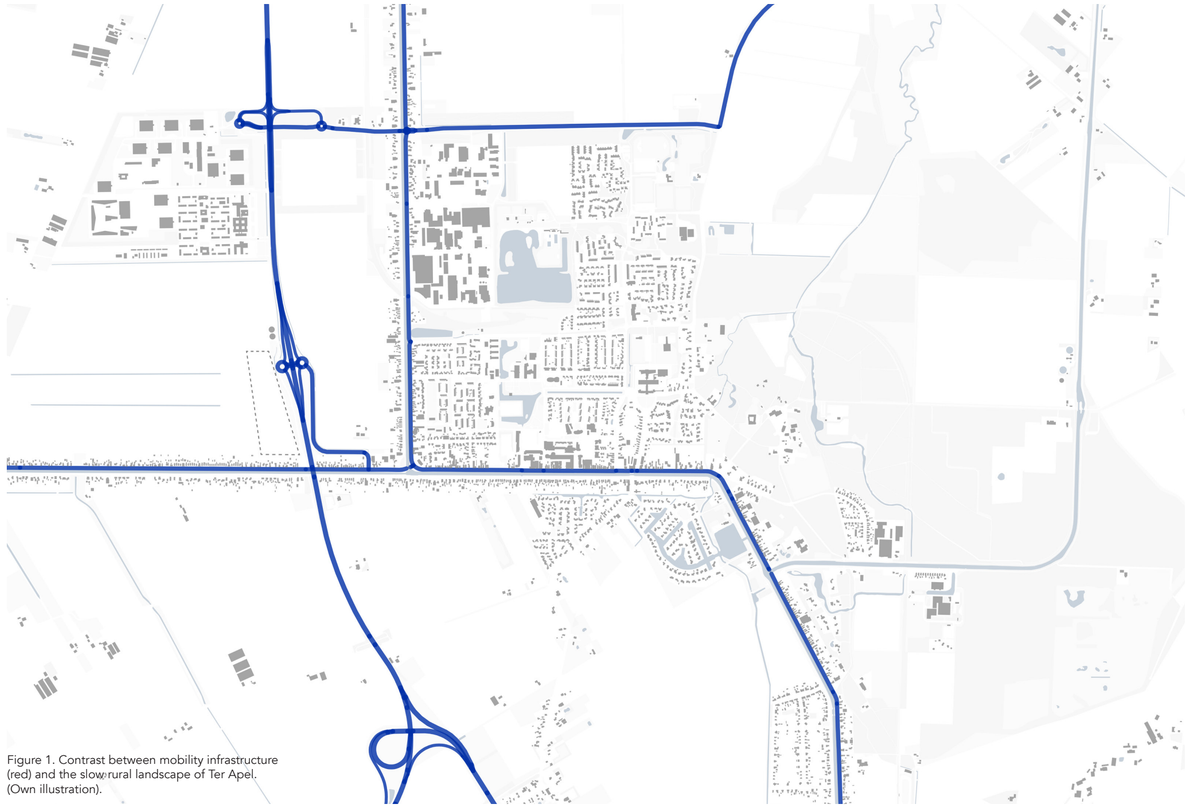


Figure 1. Contrast between mobility infrastructure (red) and the slow rural landscape of Ter Apel. (Own illustration).

1.2 Problem Statement

Mobility hubs are mainly developed as efficient infrastructure systems that prioritize speed, transfer and accessibility. Within these environments, time is often treated as a measurable resource to be optimised, resulting in spaces that primarily support movement rather than staying. Waiting and staying are usually reduced to functional needs with limited spatial or experiential quality.

In a rural context such as Ter Apel, this approach contrasts with the character of the surrounding landscape. The region is defined by a slower pace, a layered agricultural landscape and a strong cultural and historical identity. Despite these qualities, existing mobility infrastructure mainly facilitates passing through the area rather than engaging with it. Visitors are encouraged to arrive, transfer and depart efficiently, while opportunities to experience the landscape and local identity remain limited.

At the same time, tourism practices are changing. Along with traditional transit-oriented travel, there is a growing interest in slow tourism, which encourages longer stays, immersion, and meaningful involvement with the location.

However, modern mobility hubs rarely accommodate these alternate modes of transport and time perception. This project explores how the efficiency of mobility infrastructure can be combined with the potential of rural mobility hubs to become places for staying, experiencing and connecting with the landscape.

The aim of this graduation project is to explore how a mobility hub in Ter Apel can become more than a point of transit. Through a research-by-design approach, the project investigates how architectural design can create a balance between movement and stay by introducing spatial conditions that encourage waiting, slowing down and longer engagement with place.

By integrating transport, hospitality, culture and public space, the project seeks to strengthen slow tourism and regional identity while maintaining the functional requirements of mobility infrastructure. In doing so, it explores how a mobility hub can support different experiences of time and contribute to a richer relationship between travel, landscape and place.

1.3 Research Question

How can a mobility hub contribute to slow tourism and regional identity, rather than fast consumption and short-term stay?

sub-questions

- How can a public infrastructure hub in Ter Apel be designed as a place of stay and experience, rather than solely as a point of transit?
- How can architecture introduce slowness within a context that is primarily designed for speed, logistics, and mobility?
- How can the rural landscape of Ter Apel function as a layered architectural framework that slows down movement and structures stay?

1.4 Design Hypothesis

This project assumes that a mobility hub can become more than just a place of transit. Through architectural design, it can also function as a place where people stay, wait and experience their surroundings. By carefully organising routes, public spaces and programs, movement and stay can be integrated into one continuous spatial experience instead of being treated as separate functions. The hypothesis is that spatial elements

The hypothesis is that spatial elements such as layering, transitions, routes and topography can influence how people move through and spend time in the building. Different speeds and lengths of stay can coexist within the same mobility hub, allowing both efficient transfer and longer experiences of place. Through a research-by-design approach, ideas of time, duration and slowness are translated into architectural principles that connect mobility infrastructure with the rural landscape of Ter Apel.

1.5 Theoretical Framework

Duration, Time, and Spatial Experience

This graduation project draws on Henri Bergson's ideas about time. Bergson distinguishes between measured time and lived time. Measured time refers to the way we organise daily life through clocks, schedules and fixed units such as hours and minutes. It helps structure systems and activities and is therefore widely used in infrastructure and transport networks (Phipps, 2004).

Bergson argues that time is not only something that can be measured with clocks and schedules. He believes that people experience time in a much more personal way. To describe this, he introduces the concept of duration (la durée). Duration refers to how time is felt in everyday life, where experiences, memories and perceptions are constantly connected. According to Lipsanen (2023), this experience of time is influenced by the interaction between people and their surroundings. As a result, the spaces we move through can affect how quickly or slowly time seems to pass.

Contemporary mobility infrastructure is largely organised around measured time. Routes are optimised, transfers are shortened and waiting is often treated as something that should be minimised. While this promotes speed and accessibility, it provides little opportunity for the experiential aspects of travel and how people perceive time inside a certain location.

This becomes particularly relevant in tourism, as travel is frequently linked to experience, exploration, and interaction with place. Whether a location feels urgent, quiet, or appealing is determined not only by its program, but also by how it influences movement, perception, and memory. When infrastructure is planned mainly for efficiency, opportunities for reflection, immersion and longer experiences of place are often reduced.

Duration and Tourism

In this project, Bergson's concept of duration is used to explore how architecture can influence the experience of time within a mobility hub. Instead of focusing only on movement and efficiency, the design considers how spatial organisation can encourage people to slow down, wait and stay longer. In this way, architecture plays a role in shaping both movement and the experience of being in a place.

The concept of duration is translated into architectural design through connected spaces, gradual transitions and layered routes. Elements such as changes in level, indirect paths and spaces for waiting create opportunities for different experiences of time. Waiting is therefore treated as an active part of the spatial experience rather than simply time spent between arrival and departure. As a result, the mobility hub can accommodate different speeds, activities and lengths of stay within the same environment.

Some users may only pause briefly as they move through the hub, while others are given the opportunity to stay longer and engage more deeply with the landscape. When both measured time and lived time are present, the mobility hub becomes more than an efficient transport space and can function as a public place that supports different types of touristic experiences. In this way, Bergson's concept of duration, as discussed by Phipps (2004) and Lipsanen (2023), forms the conceptual basis for examining how architecture can move beyond efficiency-focused design and shape how time is experienced.

Slow tourism is strongly related to this idea, because it focuses on spending longer time in one location and engaging with the local culture and nature rather than traveling quickly between places (Dickinson et al., 2011). The research investigates how a mobility hub might facilitate both efficient transit and slower place experiences.

1.5 Theoretical Framework

Hybrid Buildings

This project is also informed by the concept of the hybrid building. Hybrid buildings combine different functions, users and activities within a single architectural structure. Rather than separating programs, they create relationships between mobility, public life, tourism and local activities. According to This is Hybrid (Arpa et al., 2011), hybrid buildings generate interaction between different programs, allowing them to strengthen one another. In the context of this project, the concept provides a framework for combining transport infrastructure with hospitality, culture and public space.

Link to the Layered Landscape Diagram

The Layered Landscape Diagram illustrates how different experiences of movement and stay are organised within the project. It distinguishes between direct infrastructural routes that support efficient travel and public spaces that encourage longer and more open-ended stays. By combining movement, waiting and transition, the diagram demonstrates how the mobility hub can accommodate both efficient travel and more experiential ways of engaging with the space.

Instead of organizing the site only through program, the diagram treats architecture as a ground condition that influences how time is experienced. Layering is therefore not just a spatial strategy, but also a temporal one. Each layer relates to time in a different way, from speed and efficiency to openness and staying. This diagram provides the starting point for the design explorations, where the architectural layers are further developed in relation to different tourist experiences.

Layered landscape diagram

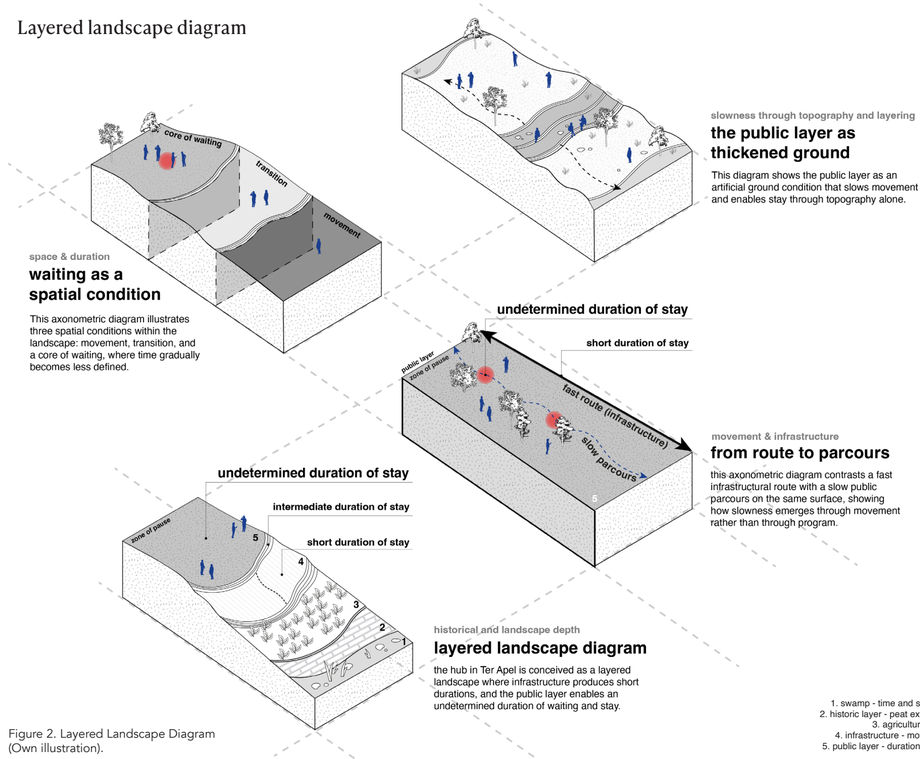


Figure 2. Layered Landscape Diagram (Own illustration).

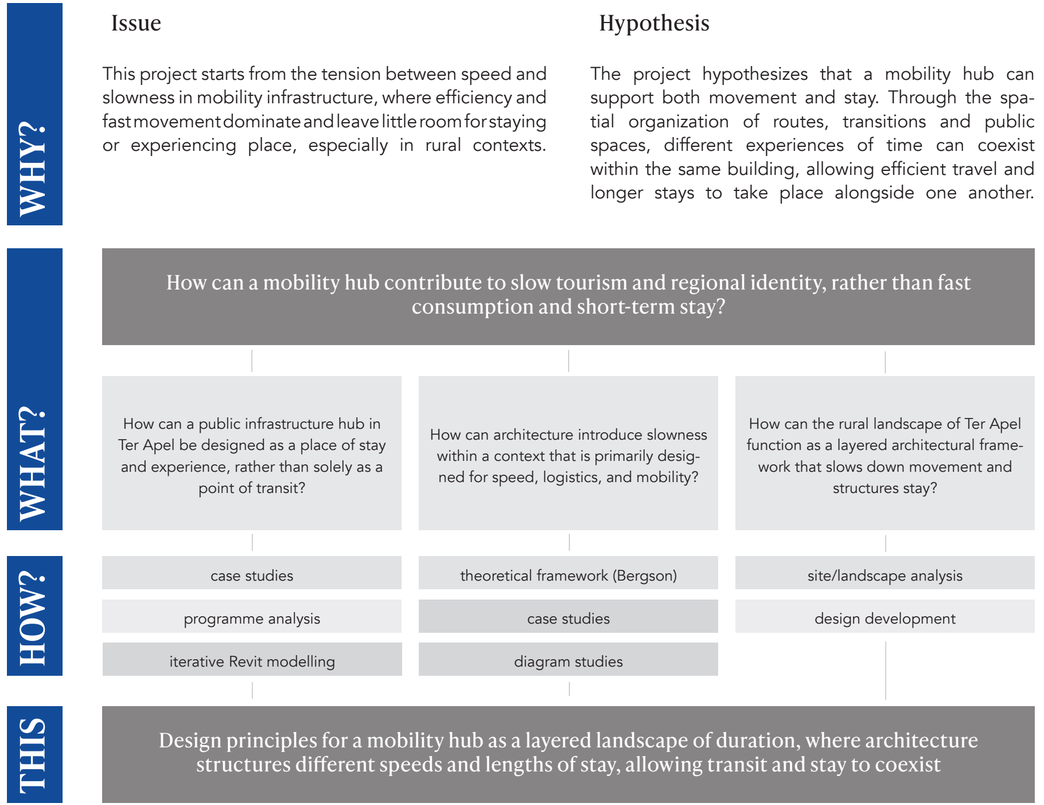
1.6 Methodology

Research Scope

This research examines how architecture can influence the experience of time within a mobility hub. The focus is on the spatial conditions that shape movement, waiting and staying in a rural context. Rather than improving transport efficiency or mobility systems, the project investigates how architectural elements such as routes, spatial layering and landscape relationships can support different experiences of time. Although the research is situated in Ter Apel, the findings may also be relevant for other rural mobility hubs.

Research Methodology

The project follows a research-by-design approach. Literature on time, duration and mobility was combined with site and landscape analysis, case study research and a series of design explorations. The insights gained from these studies were translated into spatial principles and tested through diagrams, drawings and iterative design development. This process allowed research and design to continuously inform one another throughout the project.



1.7 Layers and Experience of Time

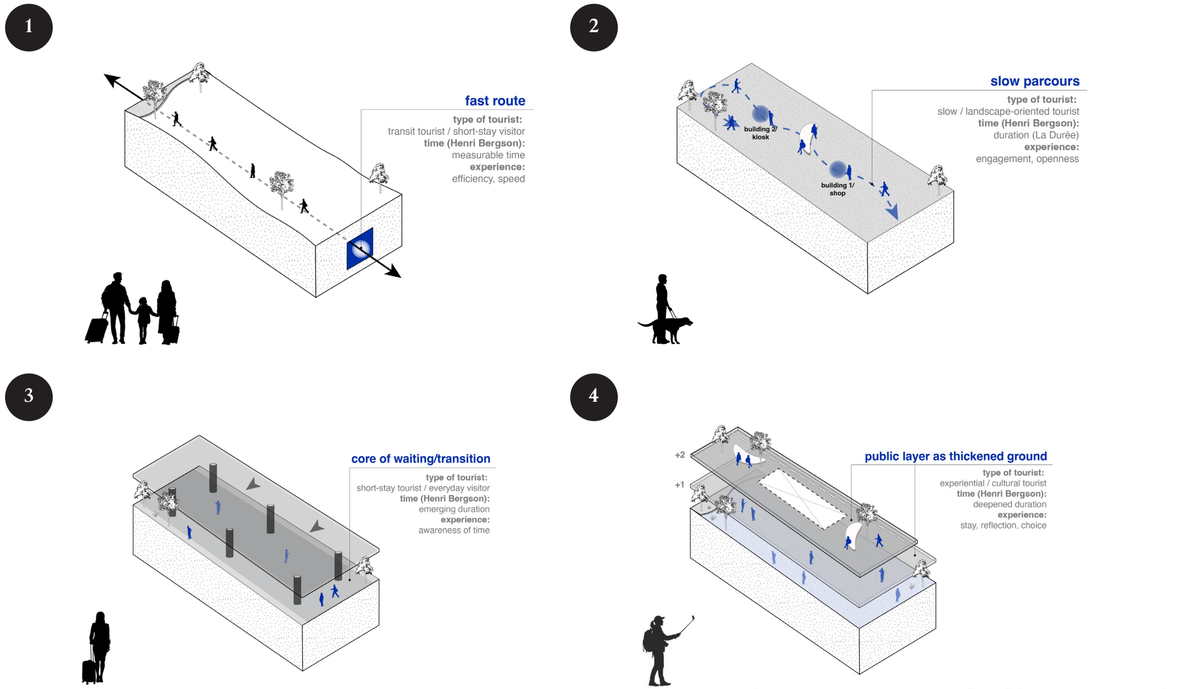


Figure 3. Layers and experience of time (Own illustration).

1.6 Layers and Experience of Time

1. fast route - measured time

type of tourist: **transit tourist / short-stay visitor**
time (Bergson): measurable time
experience: efficiency, orientation, speed

The fast route is intended for visitors who mainly use the mobility hub as a place of transit. It provides a direct connection between the different transport functions, allowing users to move through the building quickly and efficiently. Movement is clear and uninterrupted, reflecting the logic of schedules, transfers and travel.

2. slow parcours - lived duration

type of tourist: **slow / landscape-oriented tourist**
time (Bergson): duration (la durée)
experience: engagement, continuity, openness

The slow parcours is designed for visitors who want to spend more time within the hub and engage with the surrounding landscape. Through indirect routes, moments of pause and visual connections, movement becomes more gradual and exploratory. Rather than focusing on efficiency, this route encourages a slower experience of time and place.

3. core of waiting - perceived duration

type of tourist: **short-stay tourist / everyday visitor**
time (Bergson): emerging duration
experience: waiting, awareness of time

The core of waiting acts as a transition between these two conditions. Instead of treating waiting as a leftover activity, it becomes an integrated part of the spatial experience. Seating areas, views and public functions create opportunities to pause and become more aware of the passing of time.

4. public layer - open-ended duration

type of tourist: **experiential / cultural tourist**
time (Bergson): deepened duration
experience: stay, reflection, choice

The public layer brings together spaces for longer and less defined stays. Through spatial layering, level differences and connections to the landscape, visitors are encouraged to remain in the building for longer periods of time. This layer supports activities such as meeting, relaxing, eating and exploring, creating a stronger relationship between the mobility hub, its users and the surrounding context.

2. approach

2. Approach

2.1 Design Approach

This graduation project follows a research-by-design approach. Rather than separating research and design into two independent phases, both developed simultaneously throughout the project. The design process was used as a tool to investigate how a mobility hub can support different experiences of time and contribute to slow tourism within the rural context of Ter Apel.

The project began with theoretical research into the relationship between mobility, tourism and the perception of time. Henri Bergson's concept of duration provided the main theoretical framework and introduced the distinction between measured time and lived time. This theory was combined with literature on mobility infrastructure, slow tourism and hybrid buildings to establish the conceptual foundation of the project.

In addition to duration, the project is based on the concept of the hybrid building. According to Arpa et al. (2011), hybrid buildings combine different functions within one structure and create relationships between programmes that are usually separated. In the Impulse Hub, transport, hospitality, culture and public space are brought together, allowing the building to function both as infrastructure and as a destination.

At the same time, the site of Ter Apel was analysed to gain a better understanding of its spatial qualities, cultural context and existing infrastructure. Particular attention was given to the relationship between the existing mobility network, the surrounding landscape and the region's touristic identity. This analysis revealed a contrast between the fast logic of mobility infrastructure and the slower rhythms of the rural landscape.

The findings from the theoretical research and site analysis formed the basis for several design explorations. Using sketches, diagrams and spatial studies, different ideas were explored to understand how movement, waiting and staying could be combined within a mobility hub. Instead of working towards a fixed solution from the start, the design process was used to test, evaluate and gradually improve the concepts throughout the project.

2.2 Case studies

This project includes a comparative study of two precedents that represent different approaches to mobility infrastructure and the experience of time. The selected case studies were analysed to understand how architectural design can influence movement, waiting and staying within public transport environments.

Arnhem Central Station was studied as an example of infrastructure primarily organised around efficiency, orientation and fast movement. Gare Maritime, on the other hand, was analysed as a project that combines mobility, public life and longer forms of stay. Together, these case studies illustrate the contrast between infrastructure as a transfer space and infrastructure as a destination. The analysis focused on circulation, programme organisation, the role of waiting, the perception of time and the relationship between movement and stay. The findings from these case studies informed the development of the design principles used in the final proposal for Ter Apel.

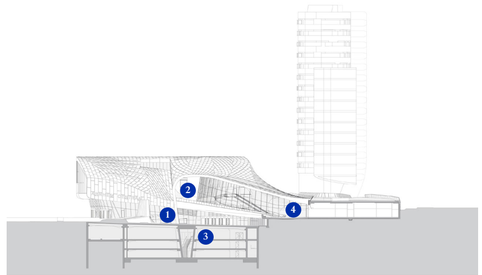


Figure 4. Arnhem Central Station, section.
Source: UNStudio, via ArchDaily (2015).

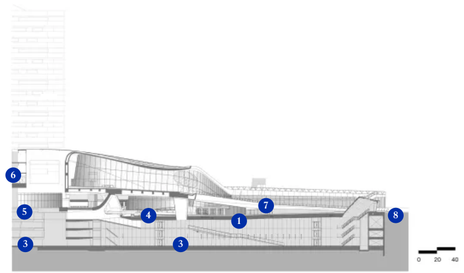


Figure 5. Arnhem Central Station, section.
Source: UNStudio, via ArchDaily (2015).

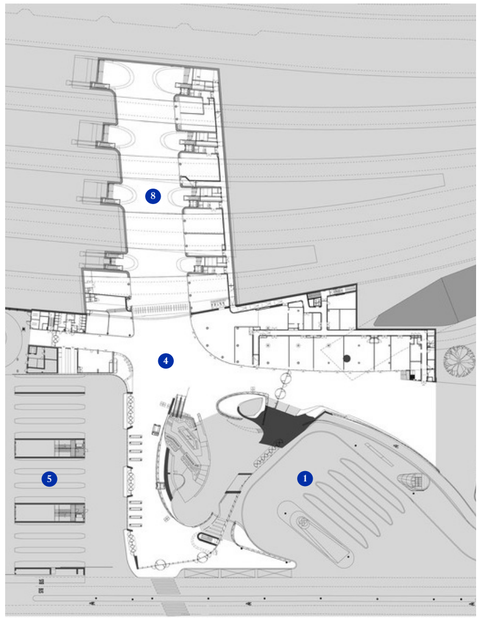


Figure 6. Arnhem Central Station, floor plan.
Source: UNStudio, via ArchDaily (2015).

2.2 Case Studies

UNStudio, Arnhem Central Station
fast infrastructure

1. bus square (local busses)
2. walking area
3. underground parking garage
4. public transport terminal
5. bus terminal (regional busses)
6. offices
7. outdoor space (shops)
8. outdoor space (restaurants) & elevator to parking garage

Type of movement: fast
Movement is predominantly fast and directed, optimized for efficient transfers between trains, buses, and the city, with limited opportunities to slow down.

Treatment of time: measured
Time is experienced as linear and measurable, structured by schedules and transfers, reinforcing efficiency over experiential duration.

Role of waiting: residual
Waiting occurs mainly as a functional requirement of transit and is not spatially articulated as a place of stay or reflection.

Tourist type: commuter / short-stay visitor
The station primarily addresses commuters and short-stay visitors, supporting transit rather than touristic engagement.

Programme and relevance for Ter Apel
The program is largely limited to transport functions, with few meeting or stay-oriented spaces and a relatively restrained number of shops. This reinforces the station's role as fast infrastructure and highlights an approach to avoid in Ter Apel, where prolonged stay and experiential duration are central.

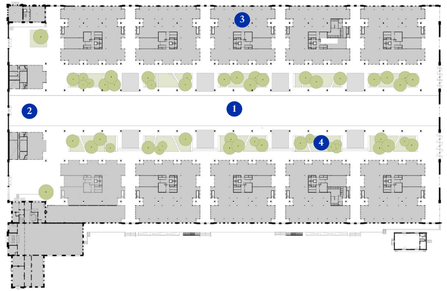


Figure 7. Gare Maritime, ground floor plan.
Source: Neutelings Riedijk Architects & Bureau Bouwtechniek, via ArchDaily (2021).



Figure 8. Gare Maritime, section.
Source: Neutelings Riedijk Architects & Bureau Bouwtechniek, via ArchDaily (2021).

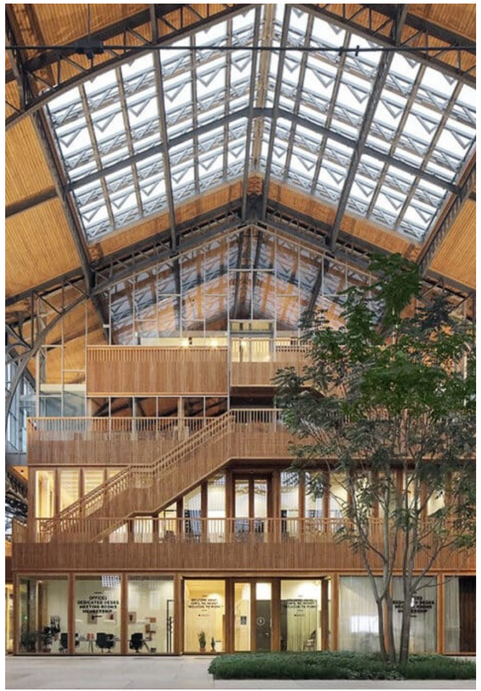


Figure 9. Gare Maritime, interior.
Source: Neutelings Riedijk Architects & Bureau Bouwtechniek, via ArchDaily (2021).

2.2 Case Studies

1. hallway
2. foodhall
3. music groups, workspaces & other social functions (on both sides)
4. green indoor spaces
5. offices
6. cultural/event spaces
7. food & restaurants

Neutelinngs Riedijk Architects, Gare Maritime
infrastructure as destination

Type of movement: slow/mixed
Movement is predominantly slow and exploratory, unfolding through a large central hall where circulation paths overlap and encourage wandering rather than direct passage.

Treatment of time: open-ended
Time is experienced as open-ended and qualitative, as movement is not structured by transport schedules but by choice, presence, and duration of stay.

Role of waiting: experiential
Waiting becomes an experiential condition, embedded in the spatial quality of the hall, where pausing, observing, and gathering are integral to the architectural experience.

Tourist type: experiential / cultural tourist
The project primarily addresses experiential and cultural tourists who visit intentionally to stay, explore, eat, or participate in events rather than to transit.

Programme and relevance for Ter Apel
Although architecturally resembling a historic railway station, Gare Maritime contains no platforms or perrons. Instead, the large hall and cultural, social, and food-related programs turn infrastructure into a destination, demonstrating how prolonged stay can emerge through program and spatial scale rather than movement efficiency. movement efficiency.

2. Approach

2.3 Research-by-Design Process

The design development was primarily carried out through iterative modelling in Revit. Throughout the graduation process, the digital model functioned as the main research instrument. Spatial configurations, circulation routes, programme distribution and relationships between fast and slow areas were continuously tested, evaluated and adjusted.

Weekly supervision sessions played an important role in this process. Feedback from tutors was used to evaluate design decisions and identify new directions for exploration. As a result, the project evolved through a continuous cycle of designing, reflecting and redesigning.

Diagrams were used alongside the Revit model to clarify and test specific design themes. These included programme organisation, circulation, public and private relationships, landscape connections and local and touristic value. The diagrams made it easier to turn abstract ideas like duration, slowness, and layered movement into spatial principles that could be used in the architectural design.

As the project progressed, the design was developed across multiple scales. Initial explorations focused on overall spatial organisation and the relationship between infrastructure and landscape. Later stages addressed programme distribution, architectural epression, material atmosphere and technical integration. The final proposal emerged through the gradual refinement of these interconnected aspects.

By constantly testing ideas through drawings, models and feedback, design decisions were shaped by both research and practical design exploration. The final mobility hub is therefore not only the end result of the project, but also the outcome of an ongoing process in which research and design informed one another. The expected outcome of this process was not a fixed architectural form from the beginning, but a set of spatial principles that could guide the development of the final design.

Through iterative testing, these principles evolved into a proposal that combines mobility, tourism and public functions within one integrated building. The final design therefore represents both the result of the research and the instrument through which the research questions were explored. The insights gained from the theoretical framework, case studies and design explorations formed the basis for the final proposal. The following chapter presents the architectural results of this process and explains how the research findings were translated into the design of the Impulse Hub.

3. results

3. Research and design results

3.1 Fast and Slow

This chapter presents the architectural results of the research-by-design process. The project began with the question of how a impulse hub can contribute to slow tourism and regional identity, rather than only supporting fast consumption and short-term stay. Through theoretical research, case studies and design testing, the final proposal developed into a layered mobility hub in which movement, waiting and staying are organised as different experiences of time.

The main result of the project is the transformation of the impulse hub from an infrastructural object into a public building of duration. Instead of designing the station as a place where people only arrive, transfer and leave, the design creates a spatial sequence in which different users can move at different speeds. Some visitors can pass through the building quickly, while others are invited to slow down, wait, meet, eat, watch, rest or stay overnight. In this way, the building supports both measured time and lived time.

Measured time remains present in the fast parts of the project. The train platform, bus connection, bike rental, parking and fast transfer hall are organised to support orientation and direct movement. These spaces respond to the functional reality of a mobility hub, where users need clarity, speed and efficiency. However, the project does not allow this logic to dominate the whole building. Alongside the fast route, slower spatial conditions are introduced, creating a balance to the speed of infrastructure.

The slow side of the building is organised around programs that extend the duration of stay. The restaurant, shared kitchen, cinema, exhibition route, hotel, seating areas and public roof garden create reasons to remain in the building beyond the moment of transfer. These programs are not placed as separate functions, but are connected through routes, thresholds and visual relations. The result is a building that functions as a continuous spatial landscape rather than a collection of isolated rooms.

A key design result is the creation of a clear relationship between fast and slow. The fast side is oriented towards the road, parking, bikes, bus stop and train access. It is more direct, practical and connected to movement. The slow side is oriented towards the landscape and contains the programs related to staying, tourism and local public life. Between these two sides, the atrium acts as a threshold. It is not only a circulation space, but a place where users can choose whether to continue moving, pause or enter the slower parts of the building.

3.2 Duration and Hybridity

In conventional mobility hubs, waiting is often treated as leftover time: a passive moment between arrival and departure. In this project, waiting becomes a spatial condition. Seating areas, views, exhibition walls, warm public interiors and the connection to the roof garden make waiting part of the building's experience.

The project translates Henri Bergson's concept of duration into architecture by creating different experiences of time within one building. The fast transfer hall supports efficient movement, while the atrium, restaurant, roof garden, cinema and hotel provide conditions for a slower experience of time. Together, these temporal layers coexist within a single architectural structure.

Another result is the integration of multiple programmes within the Impulse Hub. While the station function facilitates movement and arrival, additional programmes extend the duration of stay. The hotel encourages longer trips to Ter Apel, while the restaurant and common kitchen provide chances for social contact between visitors and locals. The cinema and exhibition route contribute cultural value and strengthen the connection to local identity.

The roof garden extends the public interior towards the surrounding landscape and introduces a slower rhythm to the building. Together, these programmes transform the mobility hub from a place of transit into a place of stay and experience. As a result, the building operates both as mobility infrastructure and as a destination within the region.

3. Research and design results

3.3 Design Outcome

Urban sections and axonometric view

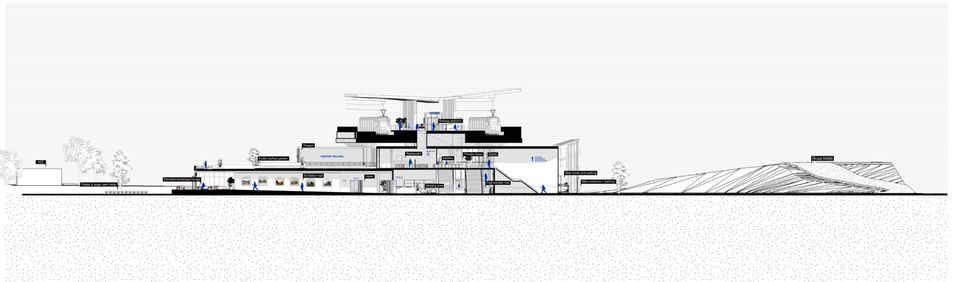


Figure 10. Urban section A–A: from road to landscape.
(Own illustration)

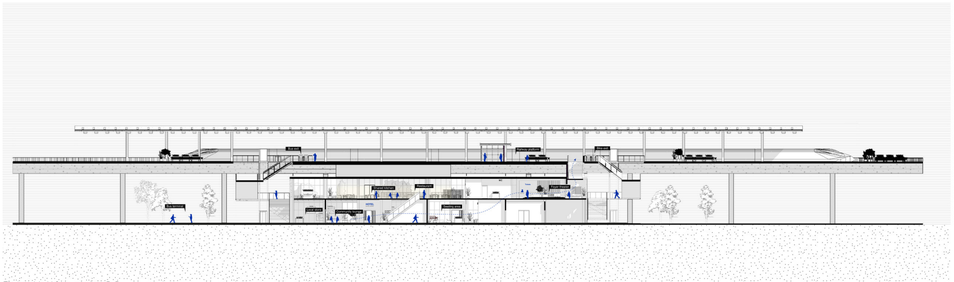


Figure 11. Urban section B-B
(Own illustration)

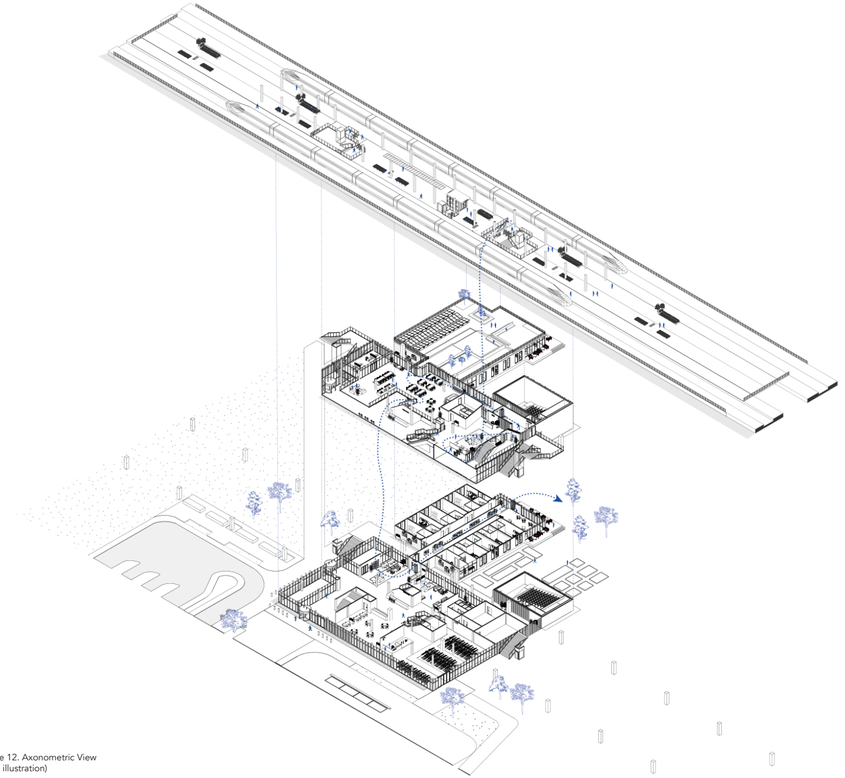


Figure 12. Axonometric View
(Own illustration)

3. Research and design results

3.3 Design Outcome

The urban sections further demonstrate how the project mediates between infrastructure and landscape. They show the elevated platform and train canopy, the public interior beneath it, and the relationship between the building, road, outdoor spaces and rural surroundings. These sections are important because they reveal the project's main spatial ambition: the mobility hub is not only placed next to the landscape, but tries to extend the landscape into the building. The slow side, public roof garden and outdoor spaces create a gradual transition from movement to stay.

The sections also show how different speeds are embedded in the architecture. The fast route is connected to stairs, escalators, platform access and the road. The slower route moves through interior public spaces, cultural programs and landscape-oriented areas. By placing these routes in relation to each other, the project avoids a strict separation between infrastructure and public life. Instead, it creates moments where they touch, overlap and influence each other.

The architectural organisation reinforces the distinction between fast and slow use. It communicates movement and orientation, but still includes moments of pause. The slow spaces, such as the restaurant and shared areas, have a softer and warmer atmosphere. Daylight, views, seating, materiality and human presence are used to create spaces that feel more inviting to stay in. These qualities demonstrate how the contrast between fast and slow is not only functional, but also atmospheric. The axonometric drawing and sections demonstrate how the design translates the research findings into architecture. The project combines infrastructure, public space and hospitality within one building, creating a clear relationship between movement and stay. Rather than separating fast and slow users, the design accommodates different speeds and lengths of stay within the same spatial system.

As a result, the impulse hub functions as more than a transport facility. It provides space for travel, waiting, meeting, recreation and overnight stay, while maintaining a strong connection to the landscape of Ter Apel. The project shows how a mobility hub can support both efficient movement and longer experiences of place through a layered architectural organisation.

4. conclusion

4. Conclusion and Discussion

4.1 Conclusion

This research explored how an impulse hub can contribute to slow tourism and regional identity rather than functioning solely as an efficient transport facility. Through theoretical research, case studies and a research-by-design approach, the project investigated how different experiences of time can be translated into architecture.

The final design demonstrates that a mobility hub can support both movement and staying by combining fast and slow spatial conditions within one architectural system. Fast routes are organised around transport-related functions such as the train platform, bus connections, bike facilities and transfer spaces, while slower routes are connected to programs that encourage longer stays, including the restaurant, shared kitchen, cinema, exhibition route, hotel and roof garden.

A key outcome of the project is the transformation of waiting from a functional necessity into a spatial experience. Rather than treating waiting as leftover time between arrival and departure, the design provides spaces where visitors can pause, meet, rest and engage with the surrounding environment. In this way, the project translates Henri Bergson's concept of duration into architecture by allowing different experiences of time to coexist within the same building.

The project also demonstrates the value of hybridity within mobility infrastructure. By combining transport, hospitality, culture and public space, the hub functions as both a destination and a point of transit. This creates opportunities for visitors to experience Ter Apel beyond the station itself and strengthens the relationship between mobility, landscape and local identity.

The research therefore concludes that a mobility hub can contribute to slow tourism and regional identity when it is designed as more than an efficient transfer machine. Through the integration of multiple programs, layered circulation and spaces for waiting and staying, infrastructure can become a meaningful public place that supports different users and different experiences of time.

4.2 Implications and Recommendations

The project suggests that mobility hubs in rural and peripheral regions can play a broader role than simply facilitating transportation. By integrating public, cultural and hospitality-related programs, these buildings can contribute to local identity, tourism and social interaction while maintaining their infrastructural function.

For regions such as Ter Apel, where tourism is closely connected to landscape and local character, mobility infrastructure can act as a gateway rather than only a point of arrival. This approach may offer opportunities for other regional stations that seek to attract visitors and strengthen their connection to the surrounding context.

At the same time, the project remains a conceptual design proposal. Further research would be required to evaluate its practical implementation. Future studies could investigate the economic feasibility of combining hospitality and cultural functions within mobility hubs, the operational requirements of such a hybrid building, and the long-term behaviour of users within these environments. Additional research could also explore how similar principles may be applied to other regional locations with different landscapes, tourism profiles and mobility networks.

4. Conclusion and Discussion

4.3 Reflection

The graduation project provided an opportunity to explore the relationship between mobility, time and architecture through a research-by-design process. One of the main challenges was translating Henri Bergson's concept of duration into a spatial and architectural proposal. While the theoretical concept was initially abstract, the design process gradually revealed how different experiences of time could be expressed through circulation, program and spatial organisation.

Throughout the project, the design evolved from a relatively conventional station proposal into a hybrid mobility hub that combines infrastructure with public, cultural and hospitality functions. The development of the relationship between fast and slow routes became a central design theme and helped structure many design decisions.

The process of testing plans, sections, circulation diagrams and spatial relationships proved valuable in refining the concept. The urban sections and axonometric drawing made it easier to see how different programs, levels, and routes could fit together in one system. As I worked on the project, I improved my Revit skills and felt more comfortable using a 3D design model.

I also liked making diagrams because they turned theoretical ideas into clear spatial principles. One of the biggest challenges was maintaining a strong link between the main concept and the design, which required continuous testing and refinement throughout the process.

Looking back, one aspect that could have been explored further is the position of the railway infrastructure. Right now, the train platform sits above the hub, which separates the transport area from the public building underneath. Another option could have been to put the railway infrastructure lower down, so it would connect more directly with the rest of the building. This could potentially have resulted in different spatial relationships, circulation patterns and roof forms, while strengthening the connection between the station and the public functions. Further investigation would be needed to determine whether such an approach would be technically and spatially feasible.

This project shows how theoretical research can shape architectural design and how mobility infrastructure can be reconsidered as a public and experiential environment. The process strengthened my understanding of the relationship between architecture, movement, landscape and time, while highlighting the potential of hybrid buildings in today's mobility networks.

References

ArchDaily. (2015, November 26). Arnhem Central Transfer Terminal / UNStudio. https://www.archdaily.com/777495/arnhem-central-transfer-terminal-unstudio

ArchDaily. (2021, June 3). Gare Maritime Workspace / Neutelings Riedijk Architects + Bureau Bouwtechniek. https://www.archdaily.com/949630/gare-maritime-offices-neutelings-riedijk-architects-plus-bureau-bouwtechniek

Arpa, J., Fernández Per, A., & Mozas, J. (2011). This is hybrid: An analysis of mixed-use buildings. a+t Architecture Publishers.

Dickinson, J.E., Lumsdon, L. & Robbins, D. (2011). Slow travel: Issues for tourism and climate change. https://www.researchgate.net/profile/Janet-Dickinson/publication/233145432_Slow_travel_Issues_for_tourism_and_climate_change/links/55e6a54908aec74dbe74eeb6/Slow-travel-Issues-for-tourism-and-climate-change.pdf

European Commission (2022). Transition Pathway for Tourism. https://ec.europa.eu/docsroom/documents/49498/attachments/1/translations/en/renditions/native

Lipsanen, Katariina. “Temporal Nature of Philosophy and the Concept of Duration in the Philosophical Method of Henri Bergson.” Acta Philosophica Fennica 99 (2023): 185–202.

Phipps, John-Francis. “Henri Bergson and the Perception of Time.” Philosophy Now, no. 48 (October/November 2004). https://philosophynow.org/issues/48/Henri_Bergson_and_the_Perception_of_Time.

Sheller, M. & Urry, J. (2006). The New Mobilities Paradigm. https://mobilistiek.nl/assets/new-mobilities-paradigm-sheller-urry.pdf

UNWTO (2018). Tourism and Culture Synergies (PDF). https://interaccio.diba.cat/sites/interaccio.diba.cat/files/9789284418978.pdf

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