

Lochau(AT)

Lochau rural (h)arbours

“Today’s models and development strategies are not suitable for responding to current challenges, as they are mostly static over a long period of time and thus not very capable of change.” Scherer, Roland (hrsg.), Bodensee 2030- ein Blick in die Zukunft der Region. (Universität St. Gallen), 2016 p. 111

Reflection Site - Lochau Plains

The overall strategy articulates itself over small and niche-based tactics (agglomerations), which will be inserted through specific times and areas. The insertions uncover forgotten and unfulfilled civic desires such as walking along the river, walking in the forest, biking around the village and the lake, enjoying the rivers of Lochau and experiencing – directly - Lochau’s wild environments within its cultural rural fabric. The agglomerations outline new contact lines, hidden beauties, and reconfigured maintenance aspects and weave together into a new understanding of Lochau as a generous rural space for many. The key ideas are divided into several chapters:

A new rural generosity (urban concept)

The urban concept for Lochau tries to create solid cores and quarters, new relations to the lake, ring networks and paths and generous plains within this sequence of time-based spaces. We understand Lochau due to its growth throughout its different historical periods as a poly-centric rural space. This polycentricity could become a valuable instrument to define Lochau within the vast biodiverse landscape of the Leiblachtal. To achieve this, we need to mark centres as a first step. Knowing a public place’s centre is necessary to understand its exact location. Moreover, in that sense, we are immediately confronted with the bigger question: what happens at the very centre of a place? When do we meet there and what do we do? Precisely the moment where the demos of the public come in. After defining the centre, we, at the exact moment, can determine our relation to the lake. The lake of Constance is not the end but one situation of a water drop’s path. Therefore, a new small-scale network of routes is mapped out to understand better the rivers and small streams and their meandering through the landscape to end in the lake finally. These water arteries of Lochau are precious rich biodiverse pockets. It is necessary to experience conceptually revisit these situations even more in times of climatic catastrophes. We create minor selected points next to the newly mapped paths to experience the rivers’ hidden beauty on their way to the lake. After defining the centre and the existing water arteries, it is necessary to outline Lochau. Not with a line but with experience. Where does Lochau end, and where does it begin? Where are the contact zones, and what could be experienced along these zones? A ribbon defining Lochau’s potential in the question of development is created. A walkable set of paths could create a network around Lochau. This is thought of as another strategy to define Lochau as a rural situation with polycentric quarters. By defining a temporary outline, the very inner – the Lochau plains- becomes graspable, defined and enjoyable spaces. We understand these strategies as the creation of a new rural:

1. The centre of the cores.
2. The water arteries, their division of the land, and their relation to the lake.
3. The ribbon as a future backbone and temporal walkable limit, which defines the very Inner of rural Lochau.

These notions define the project’s conceptual framework as a ruralism defined as a sequence of time base spaces.

To achieve this urban concept, we apply several strategies and processes:

Active Densified Band - A civic ribbon for Lochau - Remix, Rebuild, Add on - Future Development Scenario

NO new sealing of meadows and green areas anymore. Only densification or reuse if needed in the band region. Usage of existing¹ infrastructures and a remix of housing types (existing networks of streets, lighting etc...) Further creation of centres with a good connection throughout Lochau within the ring creates a higher quality of active life and explicit activation of ground floor zones due to the higher density of users — better public transport due to higher use.

Sustaining Lochaus rural generosity - Green is cool!

By thinking of Lochau as an active band surrounding a garden, the centre or better, the “Lochau meadows “are a crucial spatial quality to be maintained. Keeping the perspectives between the band of houses is very important. No densification in these areas is needed — the creation of quarter cores in the band. The inner region is a valuable instrument for green connection, urban life, rural wildlife and care in different dimensions.

Civic Node Centres creating moments of togetherness

Productive node centres, as a consequence of an active civic band, are all connected. These node centres are highly productive and livable areas throughout Lochau, creating smaller pockets of denser city life. Node centres have a high degree of civic quality and are in direct connection with each other. Throughout Lochau, we can already see 4 of them existing. By intensifying in these areas, Lochau focuses more on the existing situation.

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The end of traffic - car-reduced scenario

Pedestrian landscapes and a scenario for a car-reduced traffic situation: The train frequency at Lochau station will increase. This could lead to a change in Lochau's mobility behaviour. Reducing car traffic within the core and the band of new urban spaces with better public transport could initiate a better life. In addition, experiencing Lochau through its extensive network of paths could become a new spatial experience. Walking through meadows, along the rivers, along the ribbon and the coast. A public traffic spine connecting Lindau, Bregenz and Hörbranz will be kept.

Caring for the Lochau meadows as green corridors

New and existing infrastructure are expanding the already existing network of protected green spaces. Lochau is a link in a web of precious green spaces. This situation must be broadened and emphasised. The maintenance aspect includes maintenance cycles and social interactions. New jobs and responsibilities are created. Maintaining the land becomes a key in the fabrication of identity within Lochau.

Strategic interventions – Infrastructures

Clearance Areas in Lochau Plains – how to treat the land and how to be useless

Maintaining green areas becomes a vital point in the yearly seasonality. Machine and human actors are coming together to celebrate the maintenance of the feuchtmahd lawns. Geometric layouts could become temporary spaces within the rural region. The last mowing of the land, which is no longer used for farming, is a fascinating moment of uselessness. The grass of the wet meadow will remain on the field and rot under the snow. Mowing the land becomes an integral part of the communal identity of Lochau, which brings together all generations.

Contact lines - biophilic noise landscapes

Infrastructural expansions will also be significant for the future of Lochau. Due to more increased traffic of rail lines and the integration of the industrial area in the south biophilic walls out of rammed earth could be an exciting hybrid to, on the one hand, protect against noise and, on the other hand, create pockets and niches for other species to nest in. Reuse of excavation material and greenconnection along the train lines. Selected views allow us to still look beyond. These elements work similarly to fruit walls. They become porous and simultaneously multilayered. The biophilic noise landscapes can act as a living encyclopedia of seasonality.

Qualified infrastructures - Following the path of the raindrop

The rivers, which are not always present in Lochau, could become a fascinating moment where rivers, vegetation and civic life could intermingle. Benches, flat elements and other objects which sustain flooding could become spots for a different porosity of the fabric of Lochau. Thus, the connection to the lake is rethought. Following the raindrop towards the lake becomes an integral part of life in Lochau. These elements could also generate better flood prevention in the coming years. Living by the rivers becomes new zones of being together. These water hybrids will be available throughout Lochau's territory.

Projectsite – Lochau (H)arbour

On the project site, the new building replaces the old ferry in the port of Lochau on Lake Constance. All functions are combined in a single compact volume. The structure is positioned parallel to the existing harbour master building and forms a kind of square or alley situation with it. Towards the harbour basin, another terrace is created, allowing a view of the ships and the lake. The entire building is passable all around, and every room has direct access to the outside and in; the only corridor is the main central space, a shared space. Within this space is a large sliding wall separating the sailing school's multifunctional room and the restaurant's dining room or connecting them by sliding into one large room. The sliding wall could be moved outwards to create an interior, exterior space for the inhabitants of Lochau.

Overall concept

A building thought as the intensity of uses, composited through notions of the natural in the artificial, the landscape in the architectural, the urban in the wild, and the universal in the local. The old ferry will be replaced with a new structure. The project initiates a process which starts with dismantling the ferry and the cycles of uses after the building is completed. Thus, the old ferry will not be demolished and thrown away but will be carefully celebrated and partly reused.

Inclusion

What brings us together in times of total individualisation, where the urgency starts to look beyond the smooth surface of our screens? Public space could bring people together. Ultimately raising the question: What are the activities, festivities and events

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full of futuristic, funny, historical and wrong-seeming things? The Lochau (h)arbour will be thought of as a process that tries to create several festivities around creating new public buildings. How to create spaces that promote inclusive action and confront normative thinking; spaces that create incentives to enter into different perspectives and positions that may not correspond to one's own. The project shelters areas that manage to foster individual development in a community and solidarity with others. Within this framework, demounting the old will be the starting point to include a new space within the diverse community.

Old Ferry - Civic Engagement

Amidst the construction of the new Lochau Harbour building, a grand project unfolds, incorporating the essence of creating cherished memories. The project orchestrates numerous festivities, making sure every milestone is a moment to cherish. The demounting process needs to be understood to generate civic celebrations. Furthermore, the steps of the dismantling include the following: All the areas containing hazardous materials are identified and marked. The next step involves removing all loose items from the ship before ship recycling takes place. The non-metal parts of the boat are dismantled first, then the metal parts are cut off using oxy-acetylene flame-cutting tools. The whole cutting process is categorised into primary cutting and secondary cutting. All hazardous materials are systematically and safely removed from the ship, securely packed in bags, brought down, stored in specifically marked hazardous areas and then disposed of to authorised agencies. After the first cutting phase, the Ferry Farewell celebration is one of the highlights, bidding adieu to the old ferry. The sight of the departing ferry stirred nostalgic emotions, yet everyone embraced the winds of change. It marked one of the first public engagements of the demounting process. Watching the sun go down through a precise cut through the ship is one of many steps in creating a new civic building. Locals, various members of the associations such as the music band, the school with its students and teaching staff, officials, stakeholders and guests should be involved in the process with all its program points. It should celebrate public space and all its human and non-human actors who occupy and influence it. After this celebration, the steel plates are cut into smaller sizes as would be required for sales. One part of the hull will remain as a public planting pot. It will find a new place in the garden of the coast.

About Care, Culture and Community

An integral part of the municipality of Lochau is its people and, moreover, all its living creatures. The new site aims to serve as a catalyst for interaction and a good life for all here. The Lochau arbour becomes the backdrop for this new commonality. With the help of Joan Tronto's ethics of care, we considered its five qualities with great attentiveness towards given resources, social organisations, and local needs such as the schools with their public library, the music band, charitable organisations, etc. to understand their significance in forming the overall community of Lochau and how these actors can play a role at the new site. From a farewell party to the opening of the building, to introduce a new place for the bbq spots, kitchen gardens, a public bookshelf, boule areas or new niches at the fishing spot at the mole. New bike stands and usage of PV are all elements where the civic merges together. We aim to work together with the people and establish a culture of caring by learning about the biodiversity of the landscape and the cultural opportunities of the place to create a public space with its actors at heart, involved with knowledge and responsibility to generate a long-lasting connection. In that process, competence is developed, which is continued with workshops and events beyond the opening. Hence, we consider care for materiality and immateriality as an element deeply woven into its genetic code to be learned and relearned over time and time again.

Spatial Organisation of the (h)arbour building

All needed spaces are organised under one big roof open to all sides, thus eliminating corridors. The outside perimeter of the building becomes the space of transition. The rooftop of the building is open to the public, providing new views of the lake. The main rooms, which are the dining room of the restaurant and the multifunctional room of the sailing school, are not considered two separate entities but as spaces that could be temporarily connected. This makes the building usable for many celebrations and situations within the year. The simple gesture of moving a wall out creates new possibilities which were previously unthought of. Furthermore, the Lochau arbour is considered a public building - the gastronomy and the yacht club are tenants of the public. Spatial use and resulting protocols may be embodied in the tenancies. We are convinced that the design of rules and protocols is also the design of space, especially in this case of a public building, which shelters inclusiveness on common ground.

Zenital Lights – wind and light chimneys

Several rhombic-shaped light chimneys capture the light and create top-lit spaces. The orientation is different to capture the ever-changing colour appearance of the lake. The light lanterns act as daylight diffusers due to using web plates of milk glass. The green roof and its plants will also colour the light in the interior throughout the growth of the plants. At night, the light chimneys are lit up from within and seem to take on three-dimensional lanterns. The Lochau arbour will be visible from a distance indicating activities in the area from the lake but also from the train station.

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Vegetal Screen - Seasonal changes

The Arbour am See, as well as the Lochau reflection site, undergoes pronounced seasonal changes. These changes will also be visible within the façade of the arbour. On the east side of the building, a vegetal sunscreen will be installed, which provides shade and an ever-changing appearance of the building itself. Furthermore, it provides a pocket for different species and serves as a water reservoir within the plants' soil. In winter, the screen under-construction comes to light, only to vanish again under a layer of lush green and blooming during the growing period. In fall, the screen finally gleams with the red of wild vine, Bavarian kiwis, and many more species. The play of light and shade plunges the interior spaces into a series of ever-changing moods. The summer's heat is pleasantly tempered.

Planting typologies and usage

The climbing plants are planted at several levels: directly in the ground at the upper level behind the foliage screen and on the roof, in irrigated troughs. Hardy plants whose form contributes to the architectural ensemble are featured, such as wisteria, grapevine, ampelopsis and Parthenocissus, as well as all the remaining varieties, like honeysuckle, actinidia arguta, clematis maximowicziana, aristolochia durior and many others, all bringing perfumes, attractive forms and colour to the screens, platforms and ground areas. The world of climbing plants, also in and for our climate zones, is rich in species and varieties in many playful forms. Some can easily reach great heights of growth and play on broad areas, provided their roots are given enough space, water, air and food. Species we are interested in are the following: akebia quinata (blue cucumber vine) aristolochia macrophylla (pipevine), fallopia aubertii and baldschuanicum (knotweed) parthenocissus quinquefolia (Wild Vine), climbing roses in varieties, vitis amurensis (Summer vine) and v. coignetiae (Red vine), wisteria floribunda, w. sinensis and w. sinensis' alba' (wisteria, blue vine).

Birds and Insects

The dense interwoven branches of the climbing plants and the roof's foliage offer birds ideal conditions for nesting and roosting in on and around the building. Insects, in turn, are attracted to the flowers of the plants and enrich the fauna around and on top of the building. Different scales of green space interweaving are activated. The existing beehive and insect hotel could be moved to one of the corners of the roof to give the bees and insects a more secluded space to nest.

Shadow and Cooling

The vast surface area of the dense leaf canopy over time provides shade for the functions underneath, prevents the shaded areas from heating up and radiating back, and cools the urban climate through the evaporation capacity of the plants. The interior, with its fully opening window fronts and sliding wall, becomes a ventilated, shaded hall-like space. The zenithal light could work as wind chimneys as an alternative way of ventilating the building.

Water

Rainwater is collected in several ways. It's contained on the roof within the soil and thus creating a climatic water pocket on the top. It is fed to the roots of the screen climbers as well as collected in larger basins at the ground. During dry seasons, the water collected here can be used for the plants through an irrigation system.

The ground

The new building at the harbour will be positioned on the contaminated area of the old ferry. Furthermore, no new green areas are to be sealed. The existing situation will be worked with. Existing ecosystems should not be disturbed, if then only intensified by green networks, and extended vegetation areas .

Construction

The building is considered to be entirely fabricated out of wood. The primary structure consists of CLT panels, which carry the load over longer spans. Precedents for this type of construction could be found in the fabrication of factory buildings (for example, Kaufmann Holzbau in the Bregenzwald region). Round clt columns and bracing walls with thick straw or hemp insulation layer stiffen the structure in the longitudinal and cross-section. Rotating windows provide flexibility for use at various times of the season. The concrete base could provide enough building support without needing deep foundations. The colour of the wood facade will vary due to its weathering and, in that sense, will change according to its season, similar to the lake's colour.