



# FADING FACADES

Revitalizing Untere Landstraße's  
Vacant Storefront Spaces

TRANSDISCIPLINARY  
FIELD RESEARCH

A Special Cooperation Case with  
the Municipal Council of the  
City of Krems an der Donau



This Transdisciplinary Field Research Training (TFRT) is a central characteristic of the curriculum of the MSc Transition, Innovation, and Sustainability Environments Program, closely focused on the investigation of complex real-world problems.

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“I believe that we need disruptive change to tackle our current societal challenges. But this project taught me one more thing: We need communication and understanding. Empathetic listening, a solution-oriented mindset and most importantly: caring co-creation.”

# A Letter From The Project Manager

*Anna Weber*

How often do we see empty storefronts in the city centre? See the stark contrast between some parts of inner cities which are flourishing while others are not living up to their potential? This is also a reality in the city of Krems in Lower Austria.

But instead of getting stuck in problem analyses only, our team wanted to find solutions in a transdisciplinary way. This whitepaper is packed with our story, what we did, how we did it and where the directions changed. You will find the voices of different sections may sound quite different - that is intentional, as it is a collaborative effort of five people with the fantastic support of our supervisor Ilja Steffelbauer. We want to show the richness of our project in each of our writing styles as well. Additionally, we'll balance academic and professional content with the ease of magazines and easily digestible snippets. So hopefully, there is something for everyone in this whitepaper, as it compiles our story over the past six months from the eyes of all of us.

Happy reading!



# Editorial Team



**Anna Weber**

Sustainable business, education, just mobility, fair transitions



**Maria Fernanda Vega**

Cleaner production, circular economy, energy transition



**Aisyah Akhsania Taqwim**

Urban energy transition, smart & sustainable building technologies, biophilic design



**Mariana Gil Colmenares**

Impact measurement, social enterprises, process optimisation



**John Warren Tamor**

Stakeholder participation, smart cities, regional development planning

# The Team's Thoughts



**Maria**

Imagining the future of ULK showed me how powerful community, connection, and creativity can be when brought together with intention. Through scenario planning and strategic foresight, we explored not just possible futures for Krems but a sense of shared responsibility for shaping them. Vacancy turned into opportunity, and uncertainty into direction, reminding us that transformation begins when people come together around a common vision.



Cities aren't just made of buildings. They're made of people, stories, and the dreams we dare to bring to life. In Krems, turning car-centric streets into spaces for walking, biking, and gathering isn't just about urban design; it's about putting people first. When we build with care, community, and sustainability in mind, we don't just change how a place looks, we bring it back to life.



**Aisyah**



**John Warren**

Our work began to matter the moment it stopped being about us. As we moved through the process, I realised this space isn't about what we did or what we learned...it's about *Nik, Franz Böck, Robert, Elena, Kurt, Gabriela, Franz Sam and more...*the folks who are walking the streets of Krems almost every day, who showed up with ideas, and passion, and resilience. This isn't our project. It's theirs...we are simply fortunate to witness the transformation they've been driving all along.



Working on this project made me realise how many interconnected layers influence what, on the surface, seems like just a revitalisation effort. It's not just about improving a street or area, it's about reimagining the spaces where people meet, feel at home, and build community. Every policy, building, and sidewalk plays a part in shaping how we connect.



**Mariana**

# A Letter from the Supervisor

*Mag. Ilja Steffelbauer*



One branch of transdisciplinarity started out with Ivy League Schools realising, they had to give back to the communities they often massively impacted due to their sheer economic weight. UWK is but a small player but still one of the top ten employers in Krems and a key part of what makes this town an educational hub. So, joining our TISE-program to the ambition of the present municipal administration to remake the old town of Krems as a sustainable, walkable, livable town of the future, came naturally to me.

I'm happy that it also met the interest and ambition of the project group. I first met them in person, cold and sleep-deprived before Christmas, when they had made the trip to from Poznan to Krems at their own volition and expenses to "hit the field" as soon as possible. That alone convinced me, that we were up to something here. It was quite a ride. Thank you all. You have already made an impact here.

“I’ve always been convinced, that ‘Think global, act local.’ is the key to sustainable change. You have to get at people with the big ideas where they touch the small world they care for.”

*Mag. Ilja Steffelbauer*

“It’s always great to have  
new and creative ideas -  
this diverse group  
definitely carries many  
of them!”

*Dominic Heinz*

## A Letter from the Project Partner

*Dipl.-Ing.(FH) Dominic A. Heinz*

The revitalisation of the Untere Landstraße in Krems is a project very close to my heart. Not only as a politician wanting to drive change, but also as a resident of the street myself wanting to see the street thrive. And as a Master Builder wanting to combine innovation with protection of our beautiful heritage. For this change we need bold ideas and creative solutions.

The collaboration between the city of Krems and the TISE students therefore came exactly at the right time. Five dedicated and curious students who are bringing fresh eyes & ideas from all over the world to our city. Through various interactions we were able to get to the bottom of the problems and to co-create possible directions forward. I am looking forward to seeing the city of Krems shape and implement these solutions. For a city centre of Krems which is liveable for all of us and inviting to stay.





# Why City Centres Are Going Quiet

BY ANNA WEBER

Who are we, and why this whitepaper you may ask? We are a group of 5 students in the Erasmus Mundus Master on Transition, Innovation & Sustainability Environments (TISE). And this is our biggest group project, titled “Transdisciplinary Field Research Project” (TFRT). For this project, we got the opportunity to explore a real-world case in the town of our last semester: Krems an der Donau, in Lower Austria.

Here we faced the following issue: While the main shopping street and pedestrian zone “Obere Landstraße” is well maintained and comparatively lively, there is an abrupt change when you reach the intersection of “Untere Landstraße” Krems (short ULK).

Right now, it is mainly a **pass-through street, most buildings are vacant**, not well-maintained and the space feels a lot less inviting. The city of Krems already tackled this issue through a renovation of the street and a transformation into a meeting zone (“*Begegnungszone*”) where the street is equally available to pedestrians, bikers, and vehicles. Yet, **transformations don’t end at the renovation of the pavement**, so the city of Krems invited our international group to bring some new ideas and develop this project further.



# INTRODUCTION

# Our Krems Chapter:

## A Journey into the Real – Our Story + Guiding Question

The problem of ULK led us to developing our first version of our guiding question (a guiding question is a tool which directs our actions and helps us define the boundaries of our research).

Guiding question: 14<sup>th</sup> November 2024

**24 October 2024:** “How do we ensure the success of the restructuring of the Untere Landstraße Krems quarter, considering a long-term sustainable transition with active multi-stakeholder involvement?”

Through interactions with various stakeholders and discussions with our colleagues we realised that the boundaries of our research had to better be reflected in our question, so we refined it:

*“How can the ULK green transition enable stakeholder support and collaboration, ensuring that residents, businesses, and visitors can adapt to a pedestrian-friendly, sustainable environment that meets the needs of all involved?”*



*“How can the ULK green transition enable stakeholder support and collaboration, ensuring that residents, businesses, landlords and visitors can adapt to a pedestrian-friendly, sustainable environment, while addressing the complexities of real estate ownership and its impact on the transition?”*

This question guided our research, field trips and activities. However, as in every dynamic real-world project the journey may change. This happened in Mid-March, one month before the end of the project, and just after we planned our final stakeholder workshops. **A new and tangible problem occurred:** The city of Krems launched a competition for businesses to apply for rental spaces in ULK to make the street thrive. The winners get financial and strategic support. Yet, the unexpected problem were the vacant retail spaces. Deep-rooted structural problems and reluctance from landlords to rent out the spaces shaped the reality. You can learn all about this in our Deep Dive, part 2 of the report. So we adapted. Our project and our guiding question. And to direct our work to this specific issue, we also formed a sub-question which informs our deep dive and allows us to become specific.

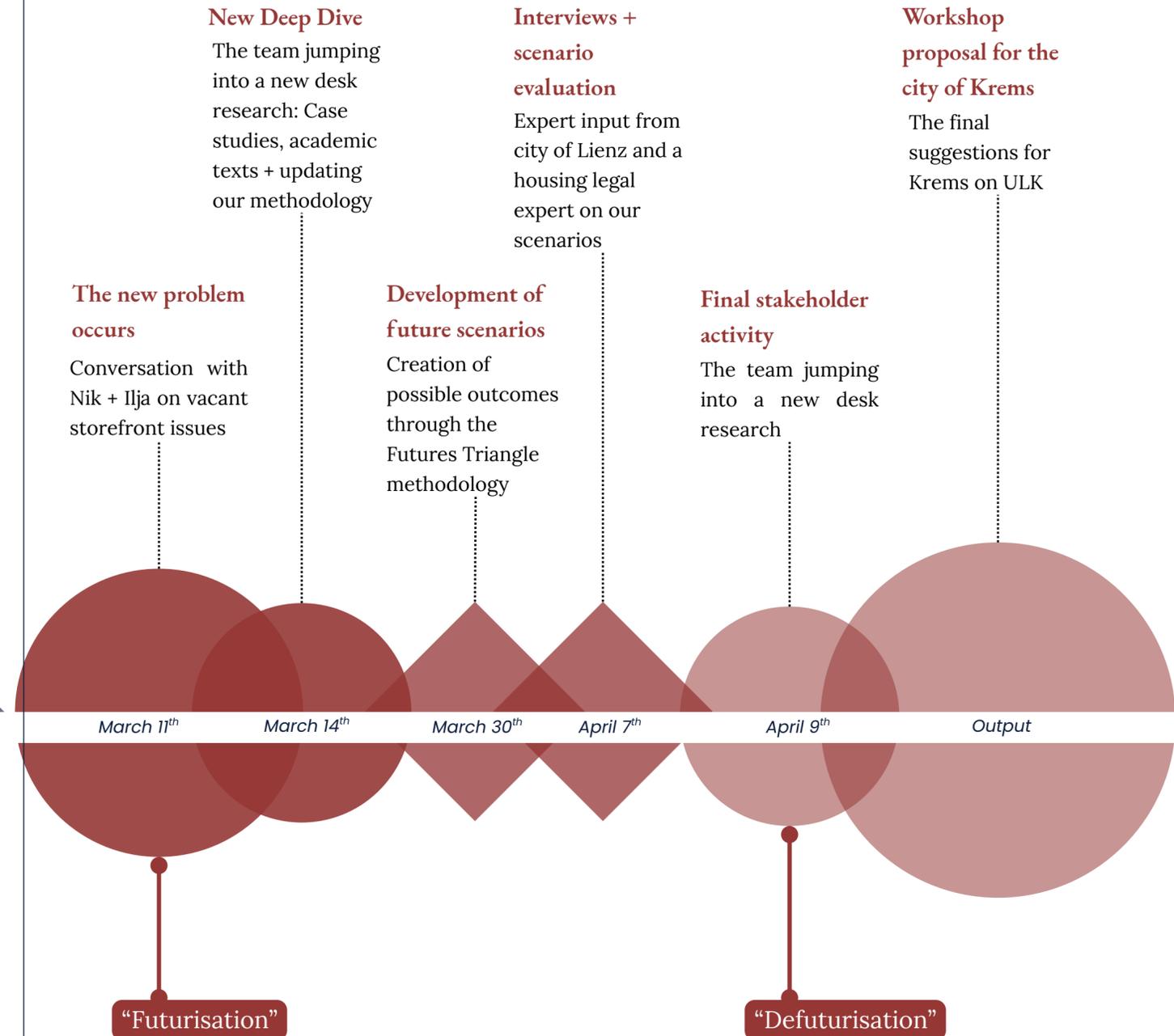
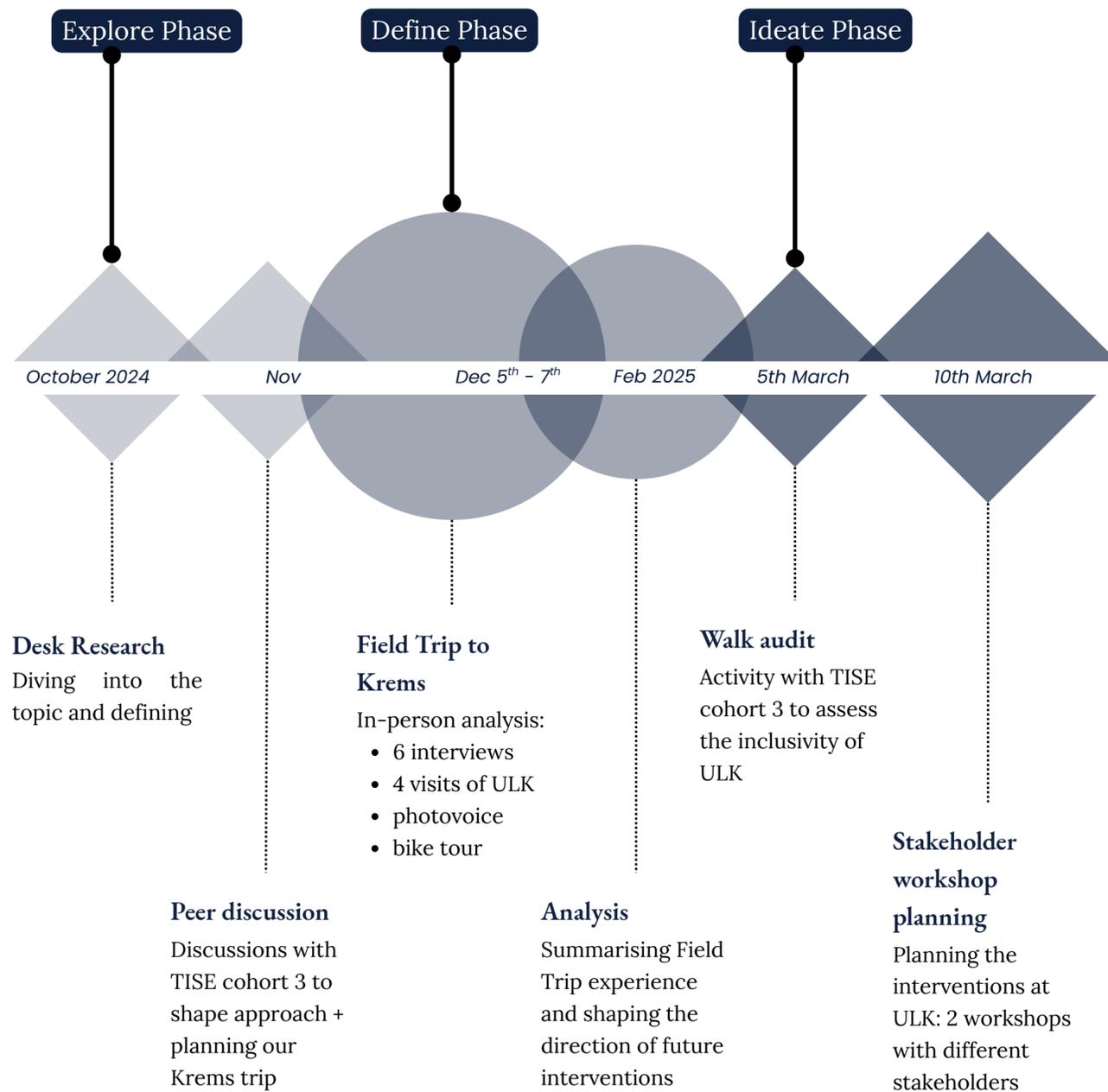
**What policies, incentives, or support mechanisms can encourage new businesses and landlords to invest in and rent out vacant spaces to enable the revitalisation of ULK?**

The updated guiding question and a sub guiding question: 1<sup>st</sup> of April 2025

# Our Timeline

All Our Activities and Our Deep Dive as an Overview

## 01 The Initial Plan



## The Deep Dive 02

# The Original Plan



# Part One

## Building the Blueprint for Krems' Future

**BY MARIANA GIL**

To better understand the dynamics shaping Krems' city center, and to imagine a future that leaves no one behind, we need to step back and look at the system as a whole. It is time to zoom out, connect the dots, and see where change might actually begin.

# Foundations of Change: Applying the System Innovation Model

Understanding the transformation of the city center means paying close attention to the relationships between different stakeholders, their goals, tensions, and how they influence one another. But it also requires setting boundaries: defining what's inside the system we are studying, and what external factors are shaping it from the outside. By doing this, we can make sense of a complex situation without oversimplifying it.

The goal is not just to describe what's happening, but to build a shared understanding of how things work, so we can imagine solutions that are grounded, inclusive, and responsive to the realities on the ground. A future for Krems that takes into account both its inner dynamics and the world around it without leaving any voice behind.

*Before planning the activities that would later guide our fieldwork in Krems, it was important to first make sense of the system we were stepping into.*



# Innovation in Motion: *Inside Krems*



The inner dimension of the project focuses on an area at the heart of Krems' planned transformation: the Untere Landstraße quarter. This space is not just a geographic boundary, but the stage where various strategies will be tested to bring new life to the city center. From energy-efficient upgrades in public buildings to the expansion of pedestrian and cycling infrastructure, these interventions have the main goal of reimagining the urban space as greener, more connected, and more people-centered.

One of the key steps includes converting the stretch between Simandlbrunnen and Kremstalstraße into a meeting zone—inviting residents and visitors to linger, interact, and move in more sustainable ways (Krems.at, 2024). But transforming a place also means navigating the differing values and expectations of the people who use it. Some might welcome improved walkability and greenery, while others may worry about disruptions or rising costs. That is why listening carefully, adjusting thoughtfully, and making space for all voices becomes not just a design principle, but a way of working.

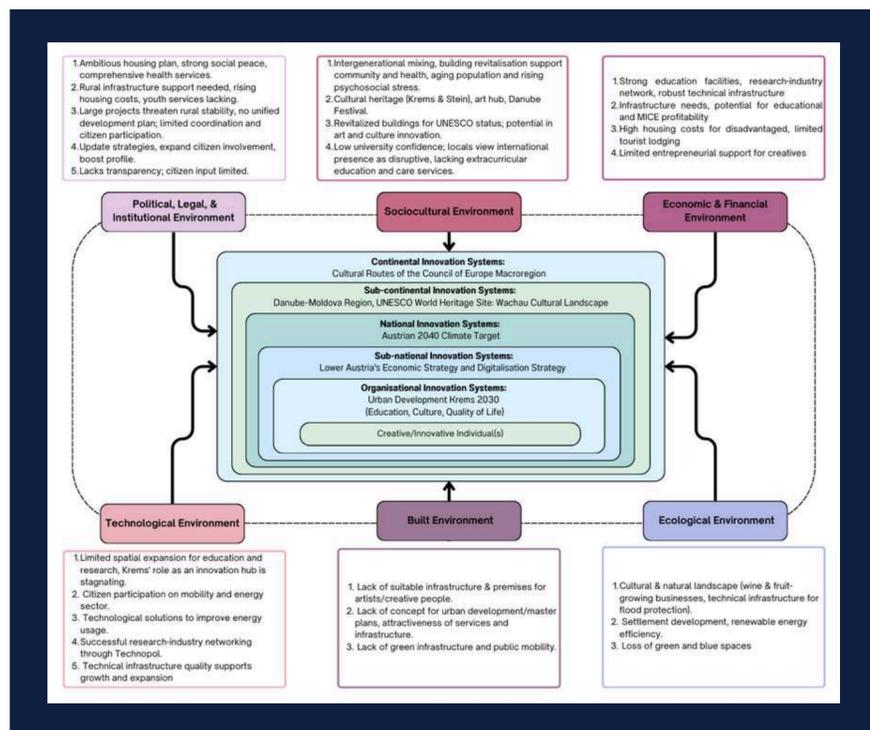


# Influencing Factors

## *What's Shaping the Transition—Past, Present, and Potential.*

The outer dimension of the system includes the broader political, economic, cultural, and environmental forces that influence what happens in Krems' city center. Local frameworks like Urban Development Krems 2030 guide community-oriented planning and livability (Weitzer & Schlögl, 2016), while regional strategies such as the Lower Austrian Economic Strategy 2025 promote innovation, creativity, and sustainable growth (Office of the Lower Austrian Federal Government Department of Economy, Tourism and Technology, 2023).

On a national level, Austria's 2040 Climate Target and supporting policies like the Renewable Energies Expansion Act and Renewable Heat Package aim to decarbonise the economy and foster regional innovation (Austrian Federal Chancellery, 2024). Meanwhile, international efforts such as the EU Strategy for the Danube Region and the European Commission's Climate-neutral by 2050 Strategy push for cohesion, clean mobility, circular industries, and long-term climate resilience (Danube Strategy Point, 2019; Directorate-General for Climate Action, 2019).



*Together, these external systems shape the conditions, both enabling and limiting, under which local change can take place.*

# Loops of Influence: *A Causal Loop Diagram*



This causal loop diagram (CLD) is a straightforward way to visualise how different elements within the Krems urban system are linked and influence one another over time. It's a tool often used in systems thinking to analyse patterns of cause and effect, especially when those form feedback loops that can keep a situation stuck or help it shift. In urban contexts like Krems, where challenges seem interconnected and hard to unravel, a CLD helps make visible the relationships that shape everyday outcomes. It does not solve the problem on its own, but it creates a shared language for understanding how change might actually happen.

# The People Behind the Process:

## *A Stakeholder Mapping*

Identifying the main personas involved in a system is a key step in understanding how that system really works. These people, whether they're business owners, city officials, students, or long-time residents, each experience the city in different ways, and they all have their own goals, pressures, and constraints.

By mapping out who they are and what challenges they are facing, we can see where their interests align or clash, and where opportunities for collaboration might exist. It is not just about knowing who is there, it is about understanding what drives them, holds them back, and how they might play a role in shifting the system toward something better.



## Local Inhabitants

These are the people who live, work, or study in and around the city center: families doing their weekly shopping, workers passing through on their commute, students meeting up after class. For them, the city is more than a space, it is part of their routine and their sense of home. They care deeply about the livability of the area: clean air, safe streets, access to green spaces, and a sense of community. But changes, like reduced car access, new transport rules, or construction, can create tension if people feel excluded from the conversation.

The key here is to invite them in through public consultation, transparent communication, and clear explanations of how the changes will improve their daily lives. When people feel informed and involved, they're much more likely to support the transition.



## Businesses

From small shops and cafes to generational service providers, local businesses are a cornerstone of any lively city center. They depend on people moving through the streets, stopping in, browsing, and coming back again. Many might be open to change but worry about what it might mean for customer flow or daily operations. If renovations or new policies reduce car-based visits, will foot traffic be enough? Will they be able to afford renovations or adapt their logistics?

What they need is practical support to highlight the benefits of a refreshed city center, small subsidies or tax breaks during the transition, and a seat at the table when decisions are made. Helping businesses adapt is not just economic; it is essential for keeping the city center alive.

## Tourists

Visitors come to Krems for its charm: the historical streets, the culture, the scenery. A vibrant, walkable city center fits perfectly with that appeal, but only if it is easy to navigate. Tourists do not have the time or knowledge to figure out complex transport changes or unclear signage. If car access is reduced, there needs to be something in place: good public transport, bike rentals, clear directions, and welcoming places to rest or explore.

As part of the UNESCO Wachau Cultural Landscape, Krems holds a special responsibility to preserve and highlight its rich architectural heritage while integrating nature and everyday life in a way that feels harmonious and accessible (UNESCO, n.d.).



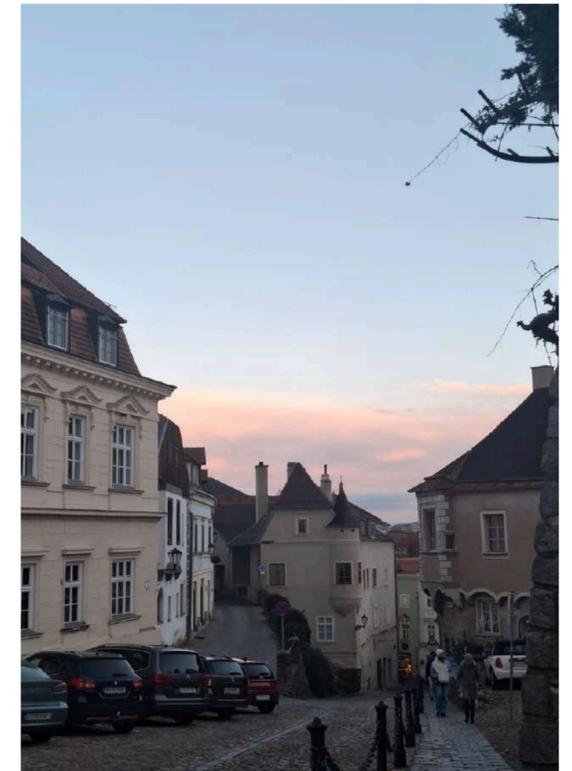
## Municipal Services

The people behind the scenes. Those keeping the city clean, functional, and safe play a huge role in whether transformation efforts succeed. Waste collection, maintenance, emergency services, all of them need to know how to do their job in a pedestrian-first environment. Changing how the city functions day-to-day means they'll need new routes, new tools, and maybe even new priorities. Including them early in the planning phase ensures smoother implementation later on. These teams are used to solving logistical problems, if they're part of the process, they'll find creative solutions that benefit everyone.

## Planners and Heritage Conservationists

Urban planners and those tasked with protecting the city's heritage often find themselves at a crossroads. On one hand, there is the desire to bring in fresh energy, better infrastructure, more sustainable design, and vibrant public spaces. On the other hand, lies the responsibility to preserve the character and history that make the city unique.

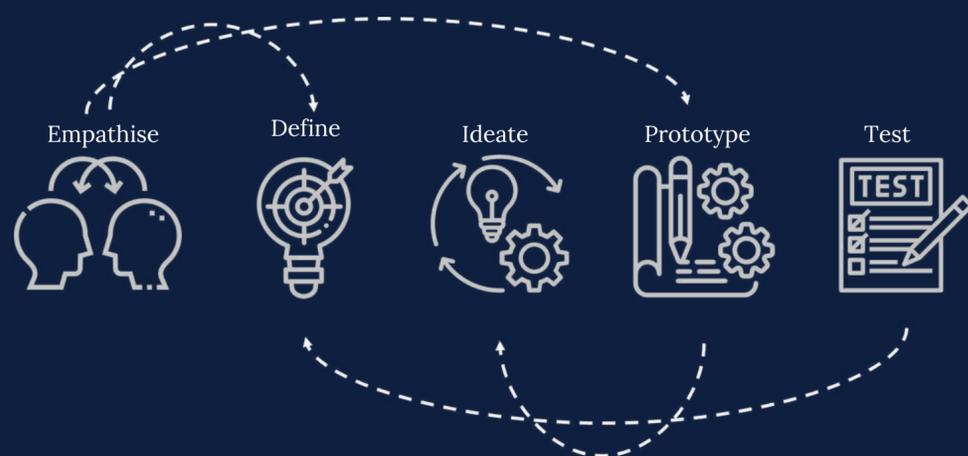
These professionals face the real question: how do you modernise without erasing the past? How do you prioritise diverse interests from business owners, residents, tourists, etc., without losing focus? The answer might lie in collaboration and care: planning processes that are participatory, data-informed, and open to compromise. When heritage and innovation work together, the result is a city that feels both rooted and alive.



*Their power and interest*



# A Fresh Wind Blows: The Method Behind the Movement



5 Stages of Design Thinking (Dam & Siang, 2019; Plattner, 2010)

# Think, Create, Transform: *Design Thinking in Action*

**BY AISYAH TAQWIM**

Design thinking principles guided the engagement with urban stakeholders, ensuring that solutions derived from systems dynamics modeling are human-centered and aligned with community needs (Dell'Era et al., 2020). Based on Dam & Siang (2019) and Plattner (2010), the process was delivered in five phases:

1. **Empathise:** Collected qualitative data through interviews, observations, and surveys to understand stakeholder experiences, challenges, and aspirations.
2. **Define:** Synthesised insights into a clear problem statement to guide solution development.
3. **Ideate:** Brainstormed multiple solutions using mind mapping and co-creation workshops, focusing on community-centered interventions (e.g., interactive art, social seating).
4. **Prototype:** Developed low-cost prototypes within a portfolio framework for simultaneous testing and impact assessment.
5. **Test:** Gathered stakeholder feedback to refine solutions, ensuring practicality, feasibility, and responsiveness to community needs.





## Making It Make Sense:

### *Logical Flow of Interventions*

As part of the empathise phase, the TFRT team conducted a field trip to Krems from December 5<sup>th</sup> to 7<sup>th</sup>, 2024. During our three-day visit, we engaged in a range of activities, including four visits to Untere Landstraße, six stakeholder interviews, and practical exercises such as biking and photovoice. The interviews were conducted with key stakeholders, including: Gabriela Viale Pereira and Ilja Steffelbauer from academia, Kurt Lenitz (Climate Tree Initiatives), Radlobby NÖ (Bike Lobby), Franz Sam (architect), Dominic Heinz (Krems City Council), and local restaurant owners.

After our visit to Krems, we held discussions to analyse key insights and outline the next steps for our research. We then transitioned into the define phase, with a focus on the green transition along the *Begegnungszone* in Untere Landstraße. The findings from the interviews and hands-on activities led to a shift in our guiding question. Consequently, we moved into the ideate phase, where we collected additional data, brainstormed potential solutions, and planned activities such as co-creation workshops.

## Spaces That Speak: *Placemaking Through Photovoice and Walk Audits*

In our exploration of placemaking through Photovoice and walk audits, our approach centered on actively engaging local stakeholders in the creation and transformation of public spaces. This process involved a series of strategic steps designed to ensure meaningful participation and impact. First, we planned to conduct our co-creation interventions, outlining the specific goals and activities that will drive the collaborative process. Next, we defined the scope of our work, clarifying the boundaries and focus areas for the interventions.

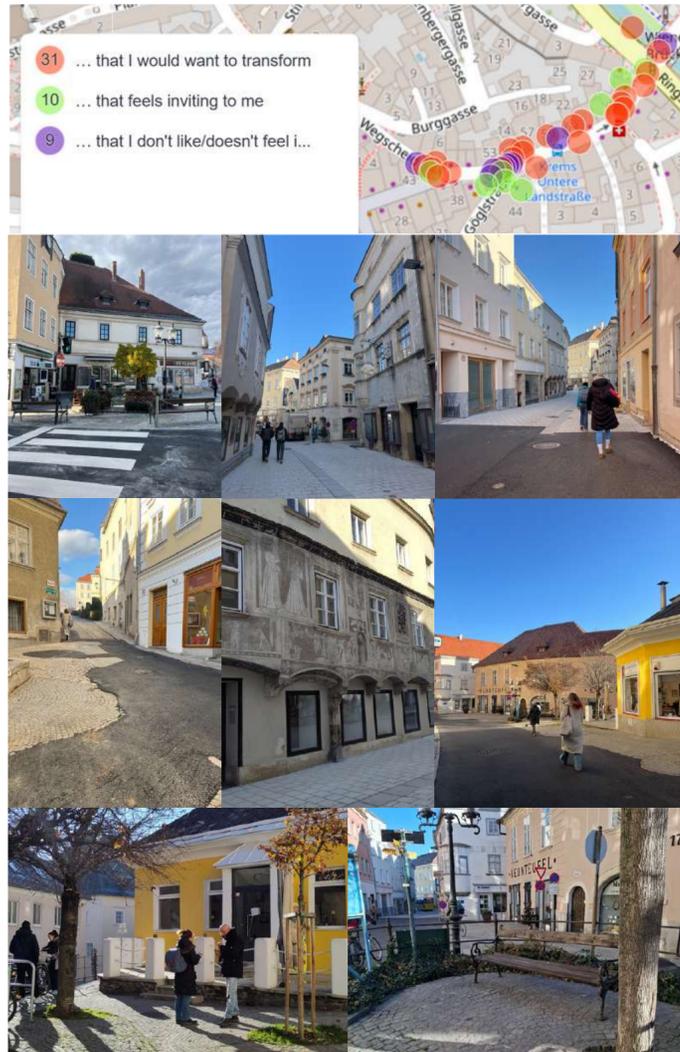
Our co-creative design processes were scheduled for March and April to align with our semester stay in Krems, allowing us more time to engage directly with the local context. To ensure a wide range of perspectives, we recruited participants for the co-creation events with representation from diverse community members. We also focused on building strong relationships with local stakeholders including businesses, organisations, and residents, to foster collaboration and support the long-term success of our placemaking efforts. Through these steps, we aimed to co-create spaces that genuinely reflect the needs and aspirations of the community.



# Photovoice

Photovoice is a participatory method that empowers individuals to capture and share images reflecting their lived experiences, fostering reflection, storytelling, and dialogue around community strengths and challenges. Originally developed for public health needs assessments, it enables participants to identify and interpret issues in their environment, and provide researchers with valuable insights into their lived experiences within the community (Wang & Burris, 1997; Kong et al., 2014; Meenar & Mandarano, 2021).

On December 6<sup>th</sup>, 2024, our five-member research team conducted a photovoice activity along Untere Landstraße, during which the photovoices of the researchers themselves were collected. The aim was to better understand the area and identify key aspects needing attention, which could inform future interventions with stakeholders.



## Through the lens: 5 striking reflections from the photovoice journey

- **Many areas feel unwelcoming** due to poor design, traffic, and lack of greenery.
- Participants see strong **potential for transformation**, especially in areas that are underused, unsafe, or not pedestrian-friendly.
- **Accessibility and inclusivity** remain major challenges, especially for people with disabilities.
- **Aesthetic and functional improvements** are needed, such as more greenery, better signage, cultural preservation, and facade renovations.
- Several places were appreciated for offering information, bike parking, art, or community gathering potential, though many still require care or upgrades.

# Walk Audits

Walking audits are a valuable tool for evaluating the quality, accessibility, and usability of urban spaces from a pedestrian perspective. They involve systematic on-foot assessments of pedestrian infrastructure to contextualise the relationships between people and places (Ariffin and Zahari, 2013; Annear et al., 2022; Annear et al., 2024).

On March 5<sup>th</sup> 2025, 20 students from TISE Cohort 3 conducted a “Walk with Purpose” audit along Untere Landstraße. Divided into four groups, they took on the roles of individuals with mobility, sensory, and accessibility challenges—such as wheelchair users, elderly pedestrians, parents with strollers, and people with visual or hearing impairments. The walk concluded with a debrief and discussion session.



## 5 standout findings from our walk audit:

- **Lack of inclusive navigation aids:** No tactile guidance, sound signals, or traffic light timers for people with disabilities.
- **Limited resting options:** Few benches and shelters available for people needing breaks.
- **Poor signage accessibility:** Public space signs lack formats like braille, large text, voice assistance, or QR codes.
- **Inconsistent sidewalk quality:** Uneven and unstandardized surfaces create mobility challenges.
- **Safety concerns in Begegnungszone (meeting zone):** The shared zone lacks clear visual cues or measures to ensure safe interaction between users.

# Planned Workshop

## FIRST ACTIVITY

Our first co-design workshop aimed to understand the needs and aspirations of diverse stakeholders in Krems' transition. The targeted stakeholders for this session included the Bike Lobby, academics, infrastructure and architecture companies, young people (students in Krems), diverse citizens (including TISE participants), and long-standing Krems residents and cultural institutions (such as museums, older citizens, and tour guides).

Workshop Agenda:

- **Sharing session:** Discuss participants' impressions of Krems
- **Stakeholder mapping:** Identify users, beneficiaries, and those facing challenges
- **Visioning/Reimagining Krems:** Use mood boards, sketches, or storytelling to express visions
- **Prototyping:** Create mock-ups with LEGO, printed maps, or digital tools
- **Reflection:** Summarise key insights and next steps

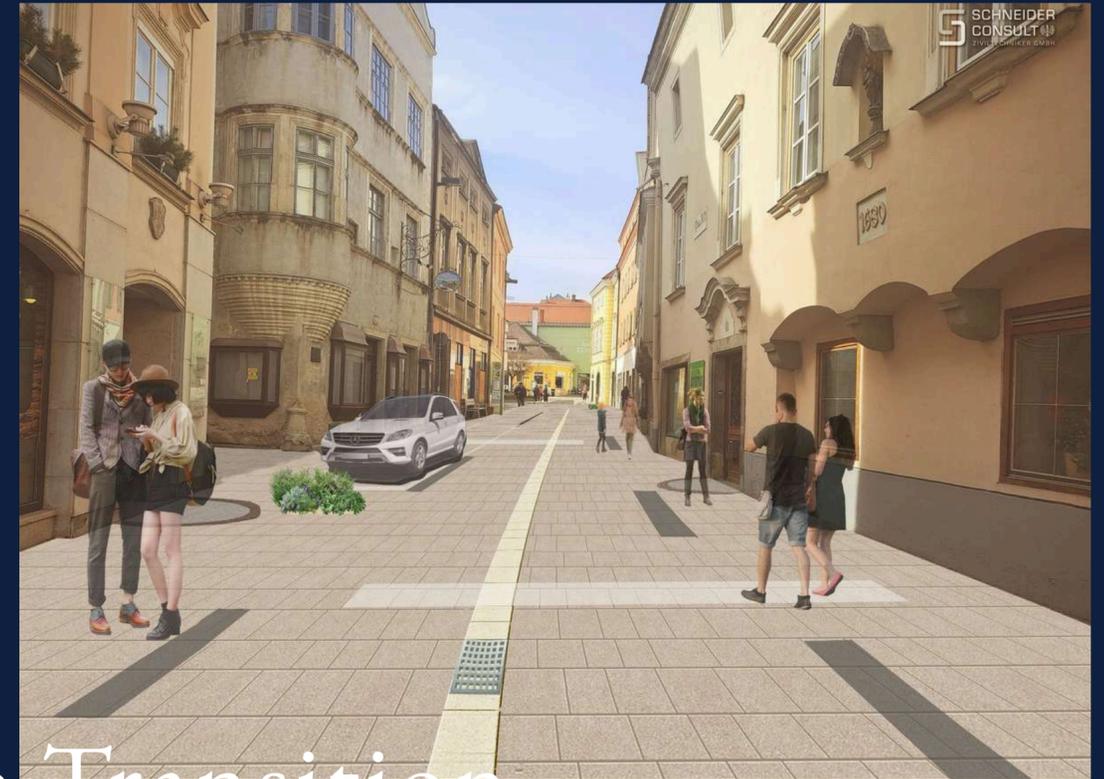


## SECOND ACTIVITY

Our second activity focused on creating street interactions and a booth to engage people in identifying the most important aspects of Untere Landstraße. The stakeholders for this activity were the people walking through Untere Landstraße, with a particular focus on kids and tourists who were not included in the first activity.

Workshop Agenda:

- **Booth setup:** Operate from a small booth in Untere Landstraße
- **Fun activities:** Short, engaging tasks for passersby
- **Brainstorming & discussion:** Identify what's missing or needs repair
- **Hands-on placemaking:** Create small interventions (cardboard models, sketches, chalk markings)
- **Prototype creation:** Examples like seating areas, greenery, bike lanes, community event spaces
- **Short & easy:** Activities designed for quick participation while walking past



# The Transition

## How and Why Our Focus Shifted

Initially, our project was all about looking at the big picture: Krems' green transition. We wanted to understand how the city could become more sustainable, through things like cleaner mobility, better environmental policies, and reducing carbon emissions. But as we started talking to people on the ground and walking through the city ourselves, something else kept catching our attention: the empty storefronts along Untere Landstraße. These weren't just unused buildings, they felt like missed chances for connection, creativity, and local life.

We realised that if we really wanted to talk about meaningful change in Krems, we needed to zoom in and look at what was happening on this one historic street. So we reframed our project around the question on how could Untere Landstraße be reimaged as a more vibrant, inclusive, and sustainable space, by fostering stakeholder support and collaboration, ensuring that residents, businesses, landlords, and visitors. From there, vacant spaces became a window into bigger conversations, about community, culture, and what a livable, future-proof Krems could look like.

A narrow street in Unter Landstraße, showing a yellow bus with the destination '4 Rehberg' on its display. A person is walking on the sidewalk. The street is lined with multi-story buildings, and a decorative wrought-iron sign hangs from the left building. The sky is overcast.

# PART TWO

Bringing Futures to the Streets of  
Untere Landstraße



# When the Streetfronts Struggle to Survive

Anna Weber

Reframing the problem, it becomes clear that the issue of urban commercial vibrancy extends beyond the town of Krems. According to a report by WN24 Wiener Neustadt News, commercial rent levels in Vienna rose by up to 20% in 2023, driven by inflation and increased corporate interest—developments that, as the Greens warned, have disproportionately affected small and local businesses.

The EHL Commercial Rent Report 2024/25 underscores the sector's ongoing challenges (EHL Immobilien GmbH, 2024). Retail insolvencies have reached their highest level in 15 years, and the availability of commercial space continues to decline.

The report also highlights the increasing risk aversion for both, landlords and businesses. This results in high deposits and reluctance to carry renovation costs from landlord side. Businesses demand shorter rental periods and easy exit clauses of rental agreements. Sustainable rent levels are nowhere as important yet also as complex as in this sector according to Mag. Astrid Grantner-Fuchs (ibid).

Yet, there are also chances: City centres are the most attractive place for commerce and can boost that further through renovation and revitalization projects which make streets greener and more pedestrian friendly (ibid).

In Graz, the commercial rent levels are also seen as main problem, whereas pedestrian zones actually boost business activity. To tackle this problem and discuss solutions, the city is planning a multi-stakeholder round table now (Strick, 2025).

Rethinking city centres as multifunctional spaces and not only leaving them up to market logic is essential in driving the transformation (Hatzfeld & Weiß, 2021).

# Insights from Within: *Conversations with Dominik Heinz & Ilja Steffelbauer*

The broader trends reflected in the reports also resonate within Krems. An in-depth conversation on March 12, 2025, with Dominic Heinz and Ilja Steffelbauer formed the foundation for our deep dive.

Sparked by the business competition for ULK, initiated by the City of Krems, the issue of vacant storefronts has taken on a new dimension. The challenges are deeply rooted: landlords are hesitant to rent out properties due to high renovation costs required to make spaces usable, a reluctance to take on risk, and low community engagement.

On the other hand, businesses are also reluctant to take on the risk, as the street has yet to reach a level of vibrancy, creating a vicious cycle that is difficult to break. This issue is further exacerbated by strict heritage preservation regulations, which increase renovation costs, coupled with limited subsidies for renovations and a lack of disincentives for vacant storefronts.

In response, we have taken on the challenge to dive deeper, engage with key stakeholders, and develop actionable strategies to overcome this issue.



# The Best of All Worlds



*What if, rather than seeking a design fix that satisfies all, we looked ahead to the future of these spaces?*

John Warren Tamor

When we started looking at the problem of vacant storefronts along ULK, we initially approached it with a typical design mindset. The solution seemed simple: make the area more vibrant and functional—guide the stride along the twin transition. But as we dug deeper, it became clear that the issue wasn't just about improving the look of the streets or upgrading the buildings.

The real problem lies, not on the lack of creative solutions, but the lack of a common clear vision for the future. Without an understanding of the far horizon, changes would only offer temporary fixes. What we realized along the way is that the storefronts of inner city Krems needed more than just a few actionable solutions—the storefronts of inner city Krems needed a future.

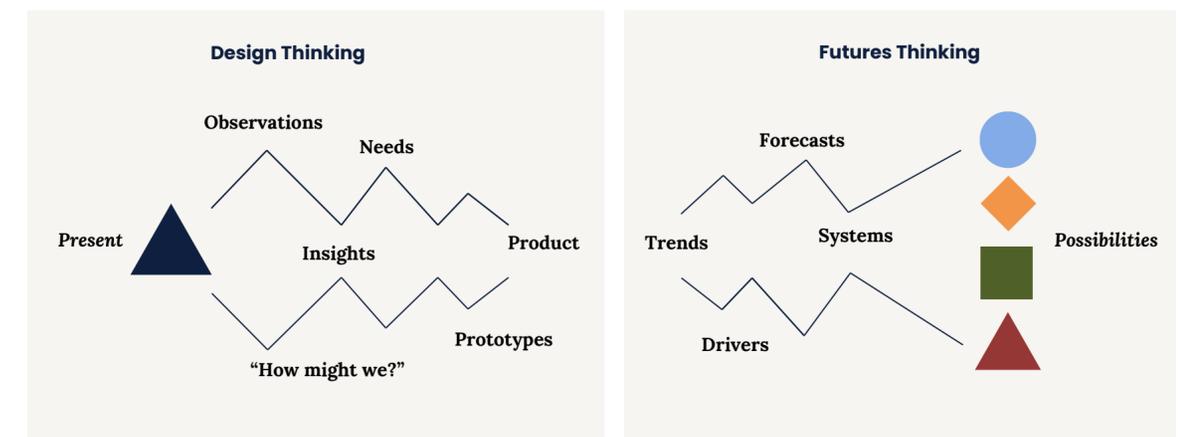
*This realization led us to shift our approach from design thinking to a futures-oriented methodology.*

Futures thinking, unlike conventional problem-solving, emphasizes the exploration of multiple possible futures, rather than focusing solely on immediate fixes. By embracing futures thinking, we understood that the key to revitalizing Krems' storefronts wasn't just about addressing current vacancies, but about creating a vision—and a plan—that aligned with the evolving needs of the community, the economy, and the environment.

This approach recognizes that the future is not a single, fixed outcome, but a landscape full of possibilities shaped by the decisions we make today. We applied this structured methodology in a process that take into account our prior data-collection.

First, we used the Futures Triangle framework to situate the future of vacant storefronts as a vulnerability space across three dimensions. For the Push of the Future, we employed Horizon Scanning to identify challenges and opportunities. Under the Pull of the Present, we applied PESTLE Analysis to map key drivers shaping the system. Finally, for the Weight of the Past, we used the Power-Interest Grid to assess stakeholder dynamics and Causal Loop Diagrams to visualize the complex interactions influencing the future. We, then, developed Change Progression Scenarios, mapping out potential future pathways based on different.

We also proposed ULK to 'backcast', to work backward from an ideal future to ensure long-term success. This methodology, as outlined in "What Works: Case Studies in the Practice of Foresight" (Tamsui, Tamkang University, 2015), provided a comprehensive framework for creating a sustainable future for the storefronts of Krems.



*Adapted from: Rbiannon Milne*

*In the next pages, we delve much deeper into the step-by-step process of co-creating the future(s) of Untere Landstraße.*



01

*The future is not a destination to be predicted but a space to be discovered.*

We begin by shifting our orientation. Rather than treating the future as a fixed point we must foresee, we approach it as a continuous learning journey—fluid, emergent, and shaped by our collective choices.

**PULL OF THE FUTURE**

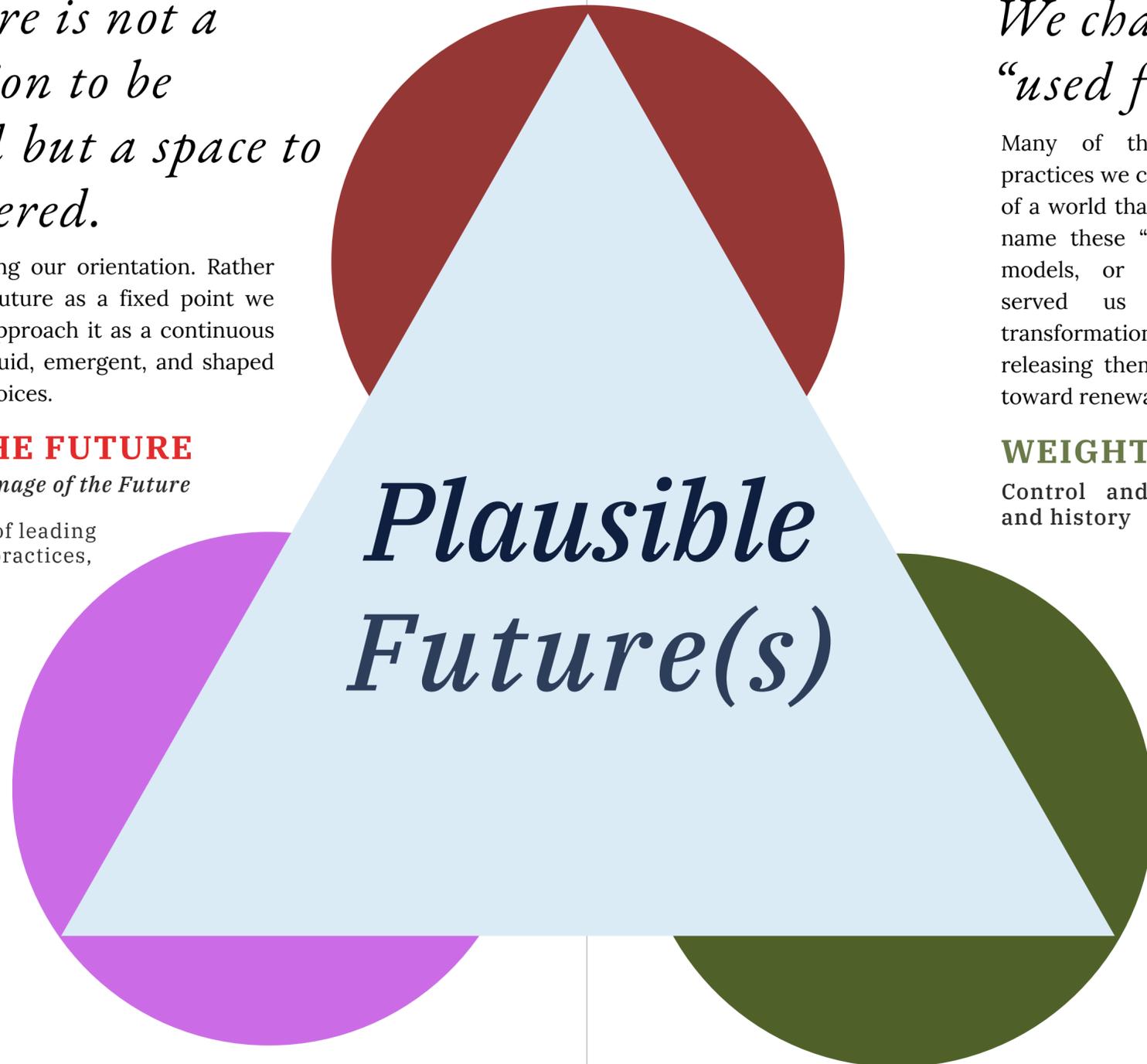
*The Vision or the Image of the Future*

Horizon Scanning of leading case studies, best practices, and experiments

02

*We sense the signals of change.*

We scan for weak signals and emerging issues—the early whispers of change in the present that are often go unnoticed. These signals help us anticipate shifts before they become mainstream, allowing for more informed and adaptive responses.



03

*We challenge the “used future.”*

Many of the assumptions and practices we carry forward are relics of a world that no longer exists. We name these “used futures”—habits, models, or mindsets that once served us but now hinder transformation. Recognizing and releasing them is an essential step toward renewal.

**WEIGHT OF HISTORY**

Control and order, Hierarchies and history

Stakeholder and Systems Analysis of Krems’ Real Estate Landscape

The first three steps apply the Futures Triangle Framework to interpret signals of change from our initial research, revealing plausible futures shaped by the dynamic tensions between the past, present, and future—each with its own drivers and inhibitors, as explored in the succeeding pages.

**PUSH OF THE PRESENT**

*Drivers & Decisions Towards the Future*

Drivers mapping of the system through community listening and participatory workshops

# Horizon Scanning

## Signal Detection

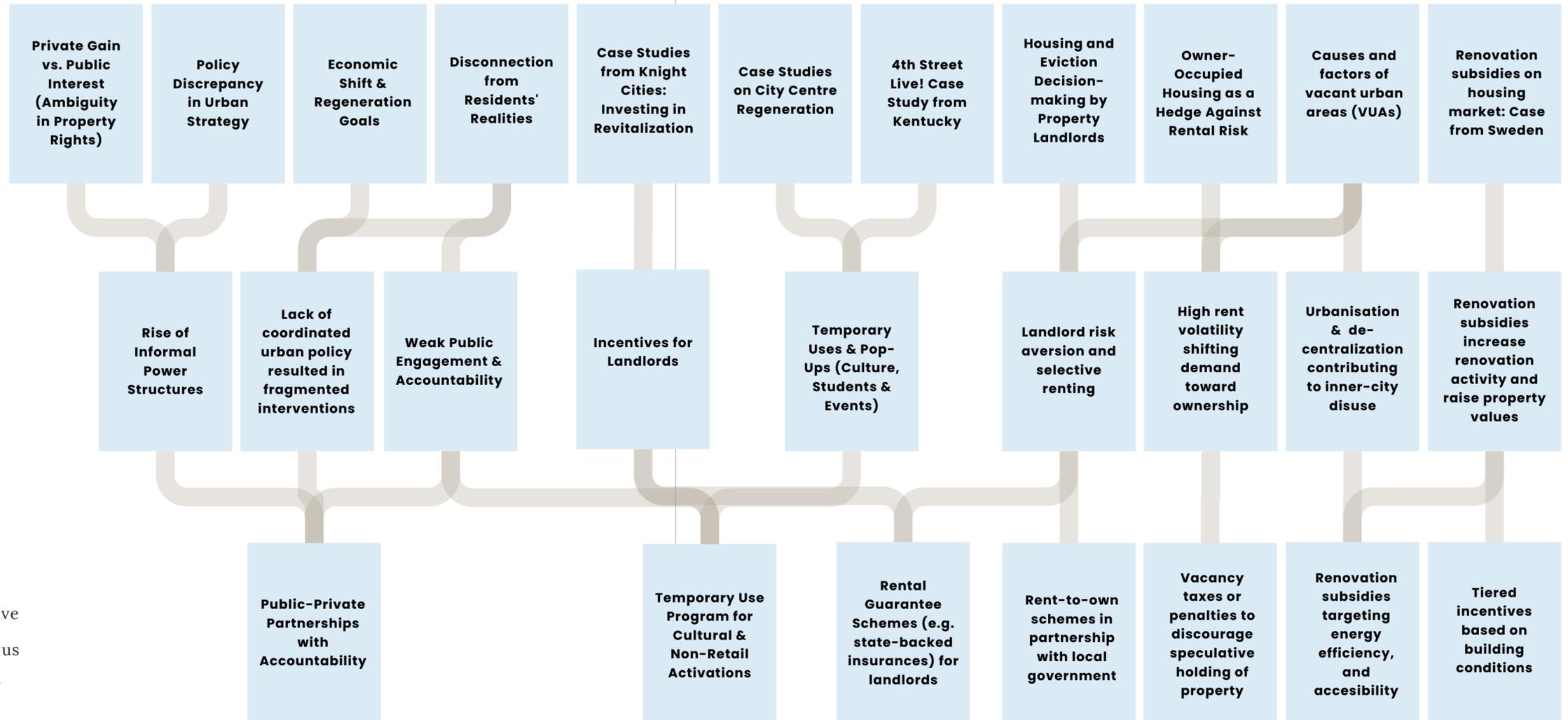
Collecting weak signals and emerging trends from a broad range of sources including media, research, expert interviews, and field observations.

## Sensemaking

Clustering and interpreting these signals to uncover patterns and understand the forces behind them.

## Filtering

Assessing which signals have the most relevance and potential impact, allowing us to focus on the most significant drivers shaping plausible futures.



We use Horizon Scanning as a systematic evidence-gathering process to help identify the 'Pull of the Future' within the Futures Triangle Framework. This "pull" represents the current driving force that are propelling change forward.



Renovation should translate into tangible income benefits for property owners—there must be a clear financial rationale. But not all owners are driven by profit; some are more motivated, not by a return on investment, but by the opportunity to contribute to community life.

Adapted from personal conversation with Prof. Daniel Varro, LLM, from UWK.

This horizon scan, explores a spectrum of emerging and future-oriented policy options. It reveals a complex landscape marked by tension between private gain and public interest, a persistent policy fragmentation, and the disconnection between top-down urban strategies and the realities of residents and small-scale actors.

Looking forward, the scan outlines a set of strategic levers that cities could activate to build more adaptive, equitable, and economically rational urban environments. These include rental guarantee schemes to reduce landlord risk, rent-to-own pathways to support housing stability, temporary use programs to activate cultural and non-retail spaces, and tiered renovation subsidies that reward energy efficiency and accessibility upgrades. Validated by Prof. Daniel Varro's lens of asset-based rationality and systemic incentive alignment, these interventions offer a roadmap for shifting from fragmented, reactive policies toward coordinated, future-ready urban strategies. The inclusion of international case studies—from Knight Cities to Sweden—demonstrates that with the right policy mix, inner-city disuse can be reversed through well-calibrated public-private cooperation and sustained investment in urban vitality.



We use PESTLE Analysis, which gives us a macro view of the system, to identify drivers. Mapping drivers helps to identify the most influential forces of change in a system.

Drivers are influential forces of changes that are currently shaping or have the capacity to shape or transform a system.

Inputs to the analysis were collected through community listening and participatory workshop efforts done in the first phase of the project.

# Drivers Mapping

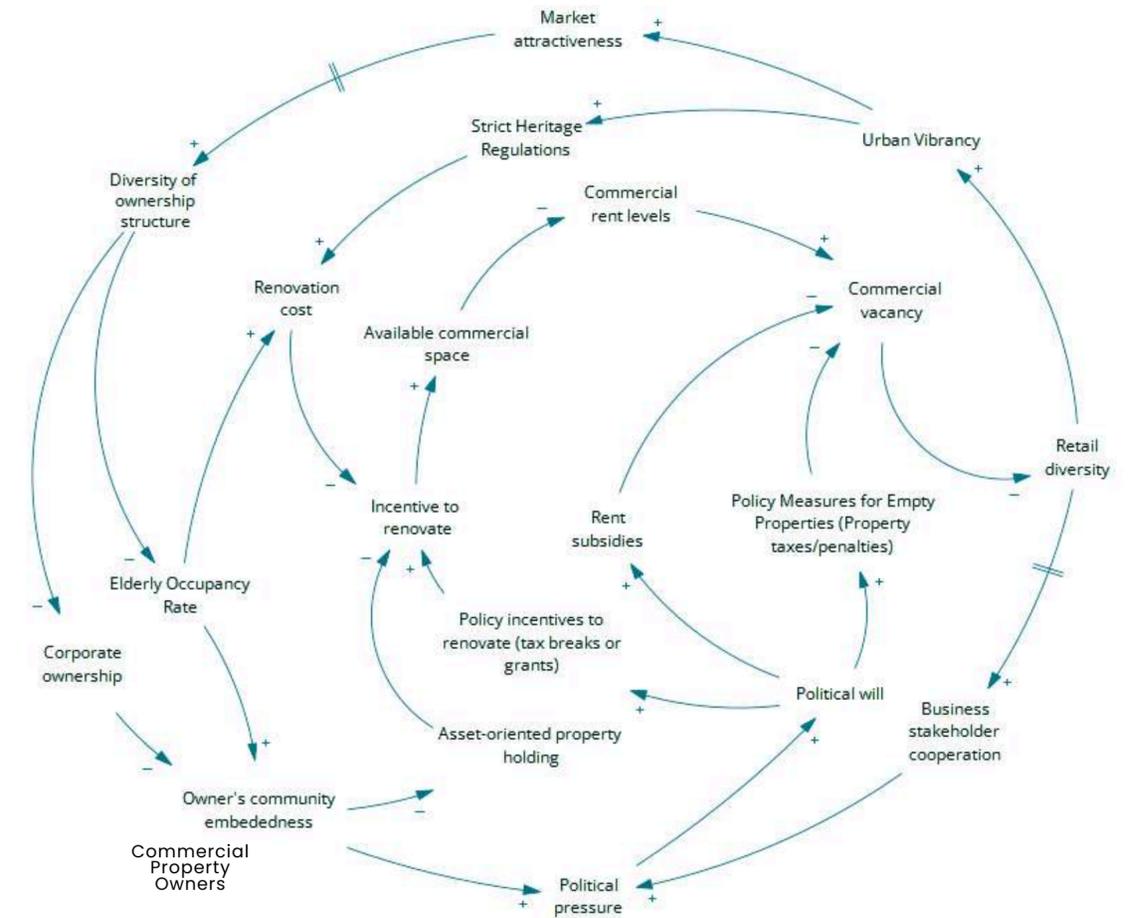
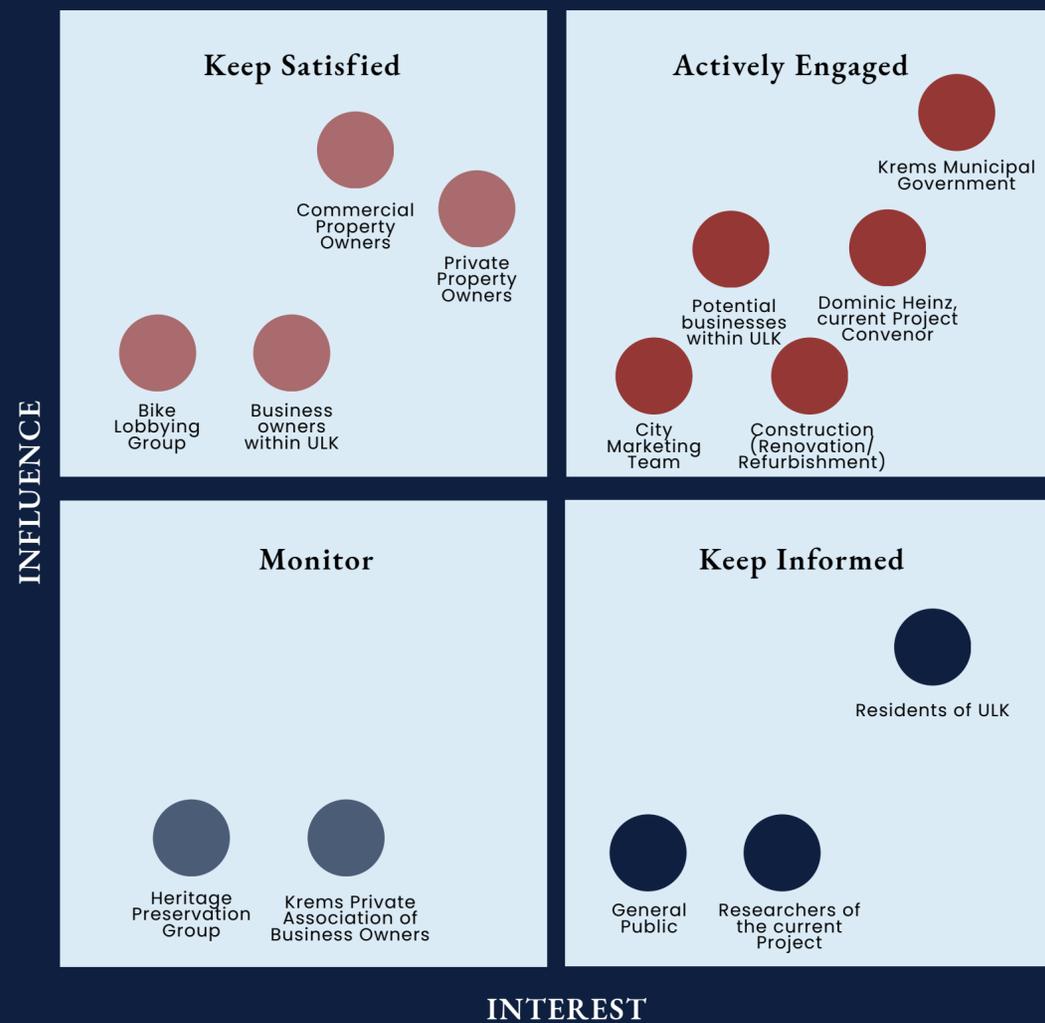
- Political
- Economic
- Social
- Technological
- Legal
- Environmental

Advocacy for rent control (from political parties such as Communist Party of Austria (KPO) and the Austrian Tenants' Association)	Regulations about immigrants (reduce the consumer/renter numbers) & access to political representation (Elena Perez)	Occupancy dynamics (long term vacancy and rising rents) of heritage commercial properties have created obstacles to economic vibrancy in historic areas. (Nik Heinz)	Elderly, conservative voter base continues to resist change and shapes cautious municipal policies and do not have the resources or the motivation to renovate
Small-town politics often remain personal and relational. (Ilja Steffelbauer; Nik Heinz)	Local authorities are finding it challenging to engage landlords to make the necessary improvements.	To compensate for renovation costs, landlords are charging extremely high rents	The city has a latent openness to cultural events and creative interventions (Adaptive Reuse of Four Seasons House), particularly when linked to local identity.
Digital platform to support tenants/landlords for renting (Mietervereinigung, etc.)	Sustainability and insulation costs add to the reluctance of landlords to invest in making the properties more energy-efficient.	High renovation costs make it difficult for landlords to justify renovations.	Public protests to far-right political parties and the policies they made
Utilization and upkeep of architectural heritage limit economic potential and create disconnection in otherwise central areas. (Franz Sam)	Energy transition initiatives (related to building and business regulations)	Challenges for startups regarding regulatory frameworks	Conditions of public-private trust in business relations are built on mutual respect and stability over short-term gain. (Nik Heinz)
Innovative transformation projects in Austria (e.g. Adaptive reuse of buildings)	Impacts of the climate change (towards ecosystems, biodiversity, agriculture, and tourism, with economic costs)	Both commercial and private landlords have no financial motivation to invest in renovations.	Demographic shifts and aging population (which affects labor markets, healthcare, housing, etc.) (Kurt Lenitz)
Zoning and regulatory frameworks limit the transformation of public space usage (Ilja Steffelbauer)	Landlords cannot easily terminate a rental contract, even for non-payment, without going through legal proceedings: Mietrechtsgesetz.	Almost all buildings in ULK are under "Denkmalschutz" (heritage preservation), which imposes strict regulations on renovations.	There is no clear disincentive to leave properties vacant.

# Stakeholder Mapping

We use the Power-Interest Grid to categorize stakeholders based on their power or influence and their interest in the project, helping us understand stakeholder dynamics. The Power-Interest Grid primarily maps existing forces. Sorting stakeholders in this way helps us define how to interact with them. The top quadrants are especially important, as stakeholders in these areas can have a decisive impact on the project. However, we should not underestimate the "Keep Informed" quadrant, as regular communication with these groups can help shift them into active partners.

Stakeholders were identified through the people we engaged with, as well as through expert interviews. Placing them in the grid was informed by the insights from our conversations and observations. The majority of stakeholders have influence, meaning they are crucial to engaging for a successful transition.



# Systems Analysis

We use Causal Loop Diagramming (CLD) to help us visualise the complex system mechanics behind the used future. Their visual syntax relies on two basic elements: system variables or factors that drive a system and their causal connections between those variables.

Rather than providing linear explanation, the CLD helped us recognize patterns of behavior that evolve over time. In our project, the CLD exposed how Krems' urban stagnation is not due to a single issue but to a series of reinforcing habits, mindsets, and structures passed down over time. Mapping these loops & patterns made it clearer to see how deeply history continues to shape the present.

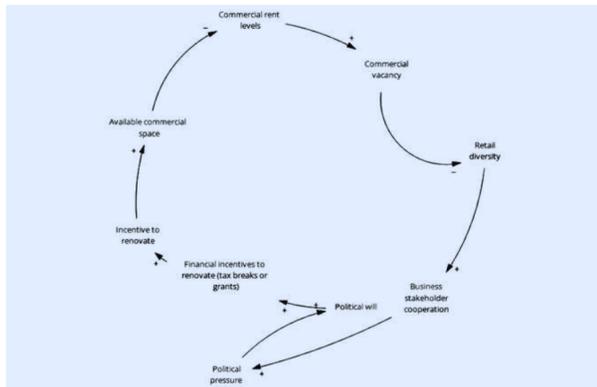
By walking through the loops, we start to see the deeper story of Krems' city center. Reinforcing loops show how inaction from key actors can create a downward spiral, for example, less renovation leads to less retail diversity, less political will, and fewer incentives, circling back to the start. Meanwhile, balancing loops –such as strict heritage regulations– keep things as they are, even when change is needed, by making the renovation cost increases and limiting commercial spaces. Through this lens, we understand that changing the system means shifting relationships, assumptions, and priorities slowly and together.

*Systems are shaped not just by what moves them forward, but by what holds them back.*

The true power of CLDs lies in their ability to identify and analyze feedback loops – the circular chains of cause-and-effect relationships that drive the system’s behavior.

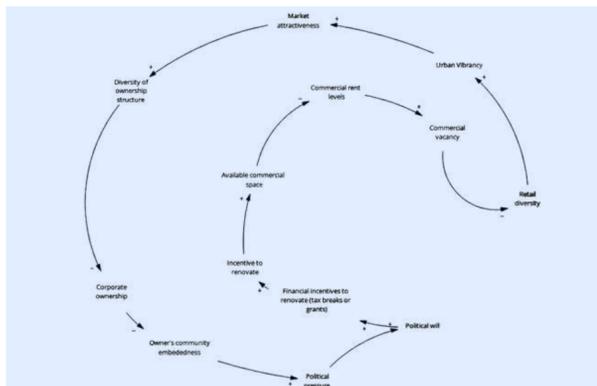
After mapping the system, we identified two types of feedback loops that help sustain the current "used future" embedded in the dynamics of property ownership and urban vibrancy.

**Reinforcing loops act as amplifiers.** They create a snowball effect—where an initial action sets off a chain of reactions that intensify the original change. These loops can drive rapid acceleration, whether in growth or decline.



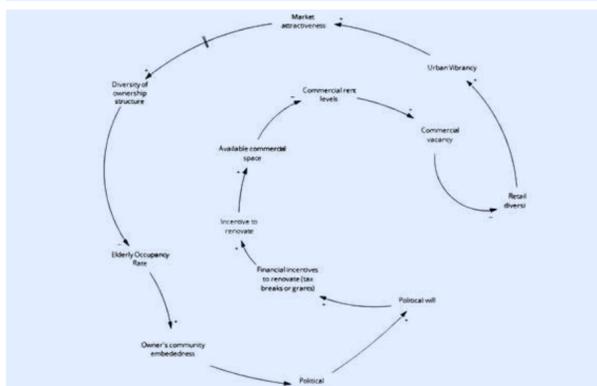
**Business Mobilization Loop**

Lack of incentives to renovate lead to lack of retail diversity, which weakens stakeholder cooperation and political will. This results in less financial incentives and thus less renovation.



**Disengaged Corporate Loop**

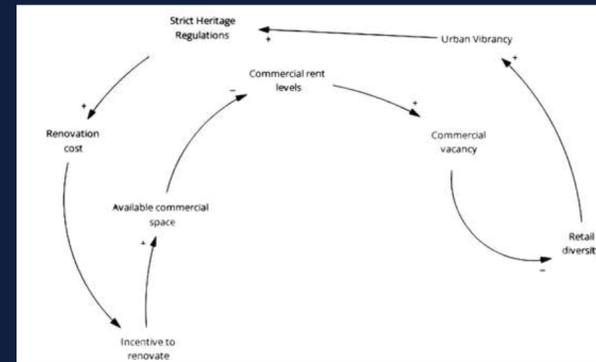
Property ownership structure is heavily skewed toward corporate or institutional investors. As a result, they don't participate in local city-building advocacy, and without that, policy support and renovation incentives remain minimal, reinforcing urban stagnation.



**Hollowing Out Loop**

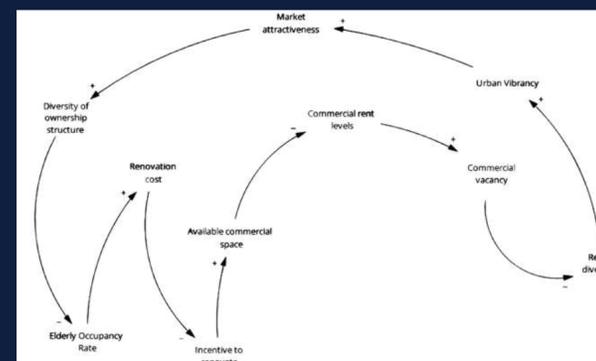
Older residents often have strong emotional ties to place but also tend to resist change, avoid political confrontation, and prioritize asset stability over innovation. Without younger generations, the area becomes devoid of fresh ideas, entrepreneurial energy, and adaptive innovation.

**Balancing loops, on the other hand, resist change.** They work to stabilize the system by counteracting shifts, helping it return to or remain in a steady state. These loops are what keep things from moving too far or too fast in any direction.



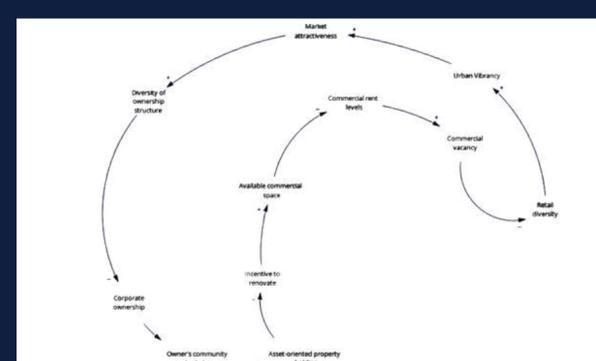
**Heritage Cost Loop**

Strict heritage regulations increase renovation costs, which decrease the incentive to renovate. This dampens urban vibrancy and retail diversity over time.



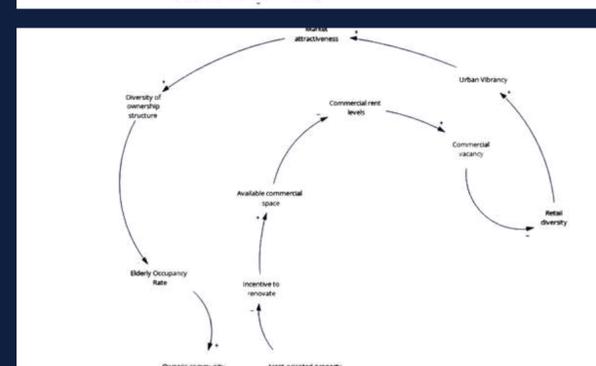
**Demographic Resistance Loop**

Lack of incentives to renovate lead to lack of retail diversity, which weakens stakeholder cooperation and political will. This results in less financial incentives and thus less renovation.



**Corporate Asset-Holding Loop**

Corporate or asset-focused owners may have low community embeddedness and long-term holding strategies that reduce motivation to renovate, even if urban conditions improve.



**Elderly Asset-Holding Loop**

Elderly property owners, while long-time residents, often hold onto properties with an asset-preservation mindset rather than reinvestment. Even if renovation incentives exist, their priorities may focus on stability, retirement income, or legacy & not revitalization.

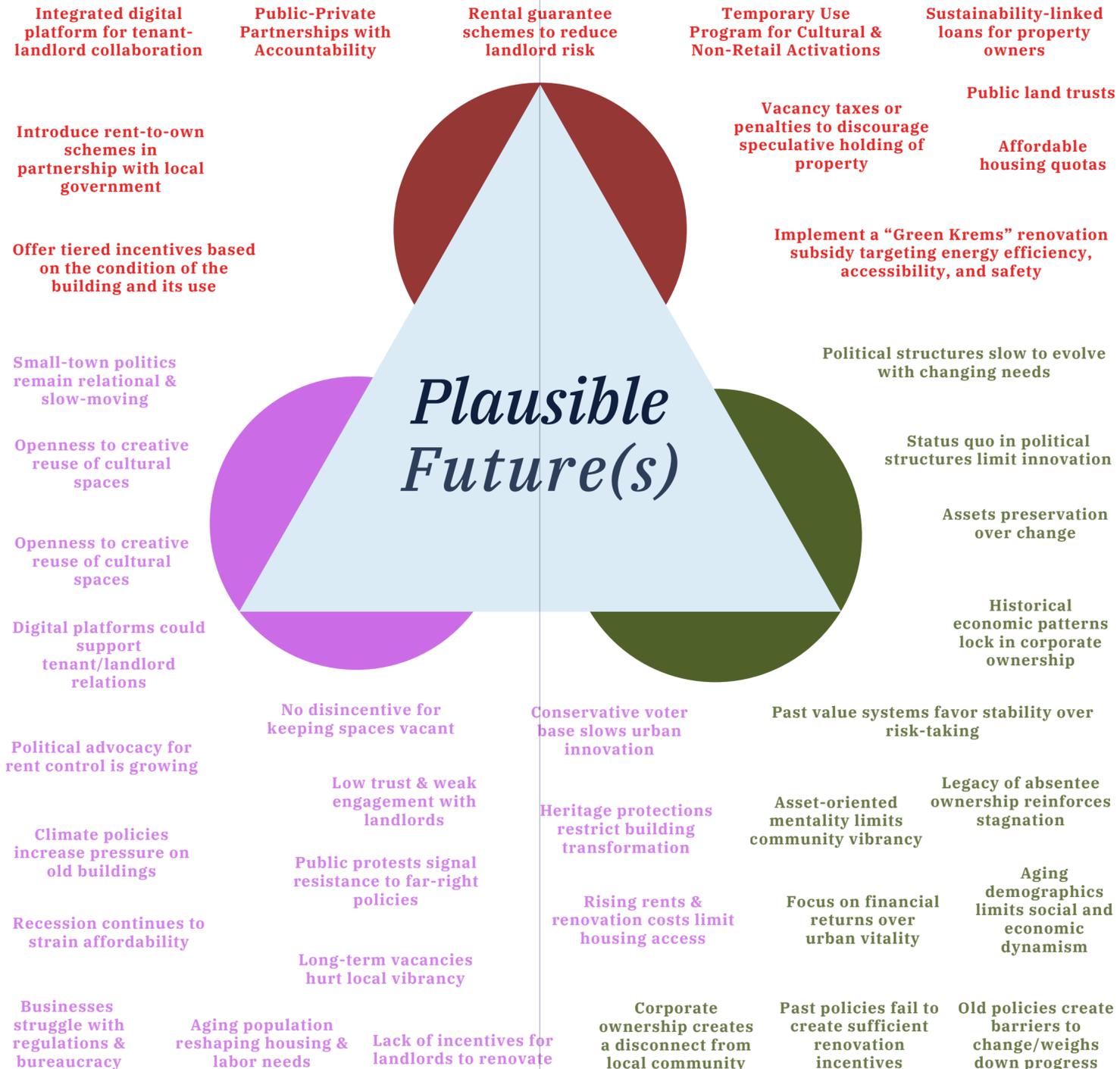
By mapping past, present, and future dynamics through the various tools that we have use, we were able to reveals the space of possible futures through the Futures Triangle and highlights where change is being resisted, accelerated, or imagined –providing a foundation for identifying strategic interventions and transformative pathways.

## PUSH OF THE PRESENT

Rising rents, recession, and renovation costs strain affordability, while businesses face bureaucracy and slow small-town politics. Heritage protections and conservative values restrict innovation. Yet, there's growing openness to reusing cultural spaces and digital tenant tools. Climate policies pressure old buildings, and rent control advocacy gains traction, signaling tension between necessary change and entrenched systems.

## PULL OF THE FUTURE

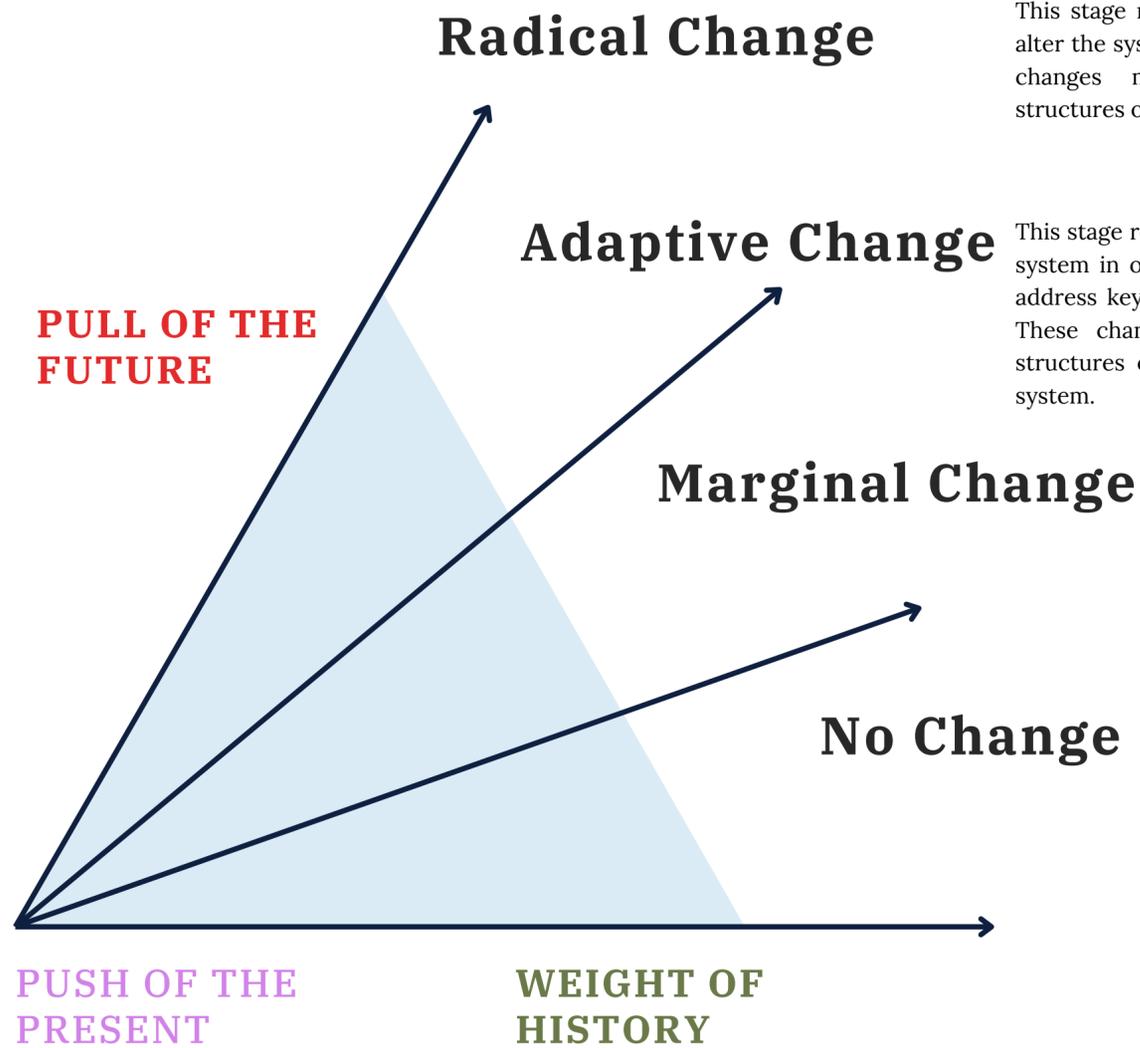
The future envisions accountable public-private partnerships, rent-to-own schemes, and rental guarantees to boost housing stability. Policies like vacancy taxes, affordability quotas, and public land trusts aim to curb speculation. Incentives and subsidies support green, safe renovations. Digital platforms and temporary use programs enhance collaboration and creativity, while sustainability-linked loans align property ownership with climate goals.



# 05

## WEIGHT OF HISTORY

The past imposes inertia through rigid political structures, risk-averse values, and a focus on asset preservation. Corporate and absentee ownership, driven by financial returns, limits local vibrancy. Aging demographics and outdated policies hinder renewal, while historical economic patterns lock in inequities. This legacy prioritizes stability over adaptation, creating systemic barriers to innovation, community connection, and urban revitalization.



This stage represents changes that fundamentally alter the system and create a new paradigm. These changes may involve transforming existing structures or replacing them with new ones.

This stage represents changes that are made to the system in order to adapt to new conditions or to address key issues in a more comprehensive way. These changes may involve modifying existing structures or introducing new elements into the system.

This stage represents small changes that are made to the system, but do not fundamentally alter it. These changes may address some of the key issues, but they do not address the underlying causes.

This stage represents the status quo, where the system remains unchanged and the key issues are not addressed.

Public-private partnerships for urban revitalization	Green Krems renovation subsidies	Temporary cultural and non-retail activations	Vacancy taxes incentivizing space transformation	Affordable rentals through rent-to-own schemes
Incremental public-private collaboration	Green building incentives for energy efficiency	Limited vacancy taxes	Community engagement through pilot programs	Gradual transition toward more affordable renting
Slow-moving political inertia and resistance	Small-scale renovation incentives for landlords	Temporary use programs with limited scope	Rising vacancy rates	Corporate interests blocking large-scale change
Absentee ownership and stagnant development	Lack of political will for urban innovation	No incentives for building renovation or reuse	Preservation-focused, asset-oriented mentality	Growing vacancy rates and cultural decline

# 06

We build on the Futures Triangle using the Change Progression Method to us identify where we want to go, what's pushing us forward, and what's holding us back—building scenarios out of it.

This makes it easier to see the tension between our desired future (the Pull), the forces shaping the present (the Push), and the lingering influences of the past (the Weight of the Past).

By building scenarios through the Change Progression Method, we explored a range of possible futures, recognizing that real-world outcomes often emerge from the interplay of these forces. This scenario building process was guided by the scenario building blocks illustrated below, to which the multiple stakeholders have selected their top priorities based on relevance, feasibility, and radical potential.

By prioritizing these key building blocks, stakeholders helped shape four distinct narratives that reflect both the challenges and opportunities facing ULK. These choices reflect not just aspirational goals, but also grounded insights into what change is possible, under what conditions, and who must be involved.

# Pathways of Change:

## *Scenario Planning in Krems*

From the insights gathered through the Futures Triangle, we mapped the complex interplay between the Push of the Present, Pull of the Future, and Weight of the Past to imagine how change might unfold along Untere Landstraße. This exercise helped us identify key tensions, drivers, and barriers shaping the local context. From there, we crafted four plausible future scenarios ranging from inertia to full transformation that explore how Krems might respond to mounting challenges and opportunities in its journey toward a more vibrant, sustainable urban core.



# Summary

BY MARIA FERNANDA

## SCENARIO 1 – NO CHANGE

ULK remains frozen in time. Despite mounting challenges like rising vacancy rates and aging infrastructure, political will and stakeholder motivation are absent. Absentee landlords and rigid preservation mindsets dominate, with no incentives to renovate or repurpose spaces. As a result, the area's decline deepens, and its cultural vibrancy fades. The status quo holds firm and so does stagnation



## SCENARIO 2 – MARGINAL CHANGE

We are now seeing small scale reforms, such as vacancy taxes or temporary cultural programmes. Bureaucratic resistance and corporate inertia limit impact, while policy efforts feel reactive rather than visionary. There is a dominant paradigm present, long-term financial security and preservation continues to outweigh innovation. Some building at the ULK see use, but broad revitalisation remains inaccessible.



# Pathways of Change:

## *Scenario Planning in Krems*

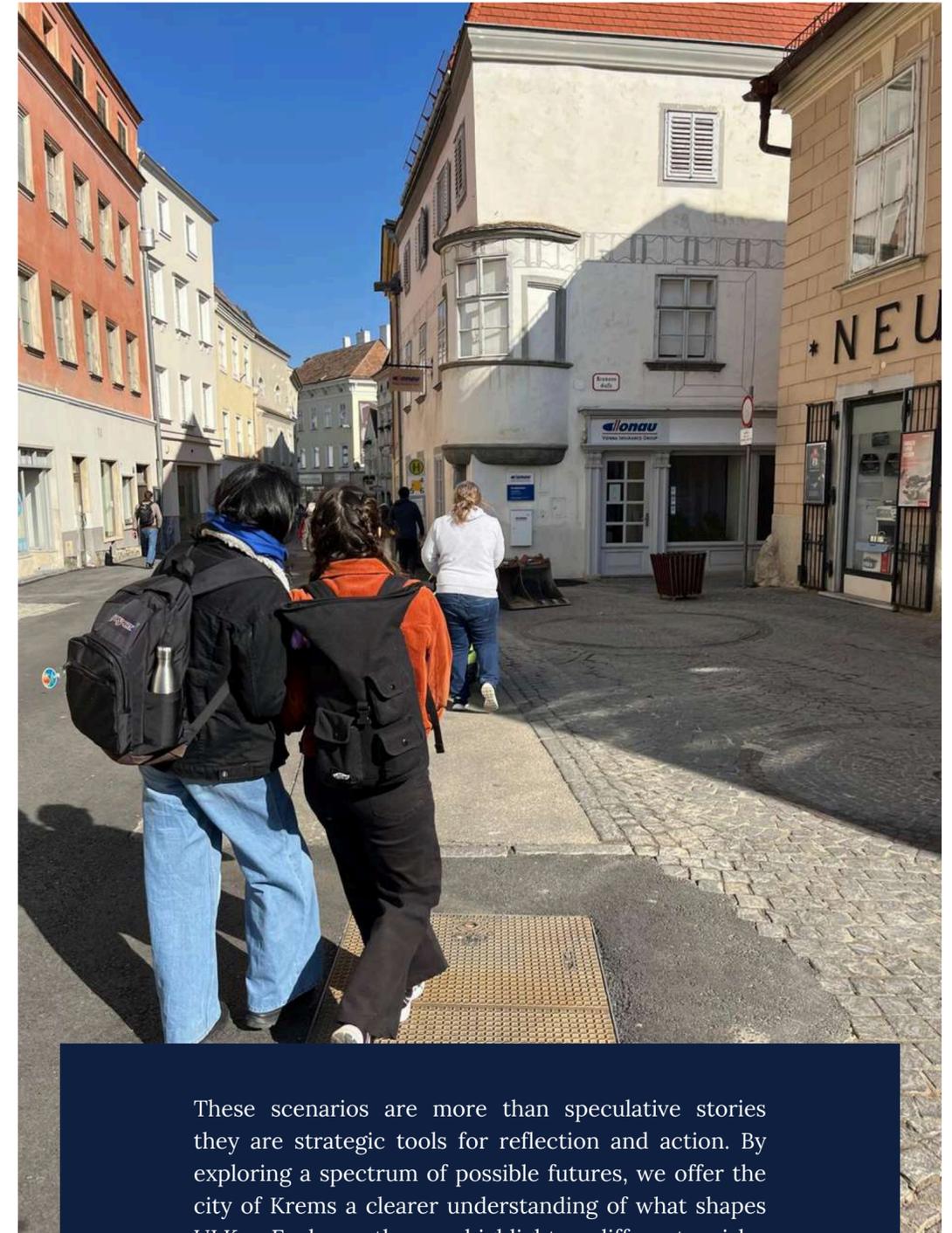


### **SCENARIO 3 – ADAPTIVE CHANGE**

Under adaptive change, we start to see meaningful yet still incremental shifts. Public-private partnerships take shape, and renovation subsidies target energy efficiency and accessibility. While conservative resistance remains, it is gradually softened by shifting demographics and increased engagement. Cultural activations, rent-to-own programmes, and digital tools improve tenant-landlord relations. This future embraces the need to adapt without entirely breaking from past structures.

### **SCENARIO 4 – RADICAL CHANGE**

This is the transformative leap. In this scenario, ULK becomes a model of progressive urban regeneration. Bold policy shifts, innovative financing, and strong community leadership drive a wave of renewal. Heritage buildings are repurposed, vacancies filled, and inclusive housing models introduced. The “Green Krems” vision takes off, backed by active partnerships and a commitment to long-term sustainability. *The past is acknowledged but no longer a barrier.*

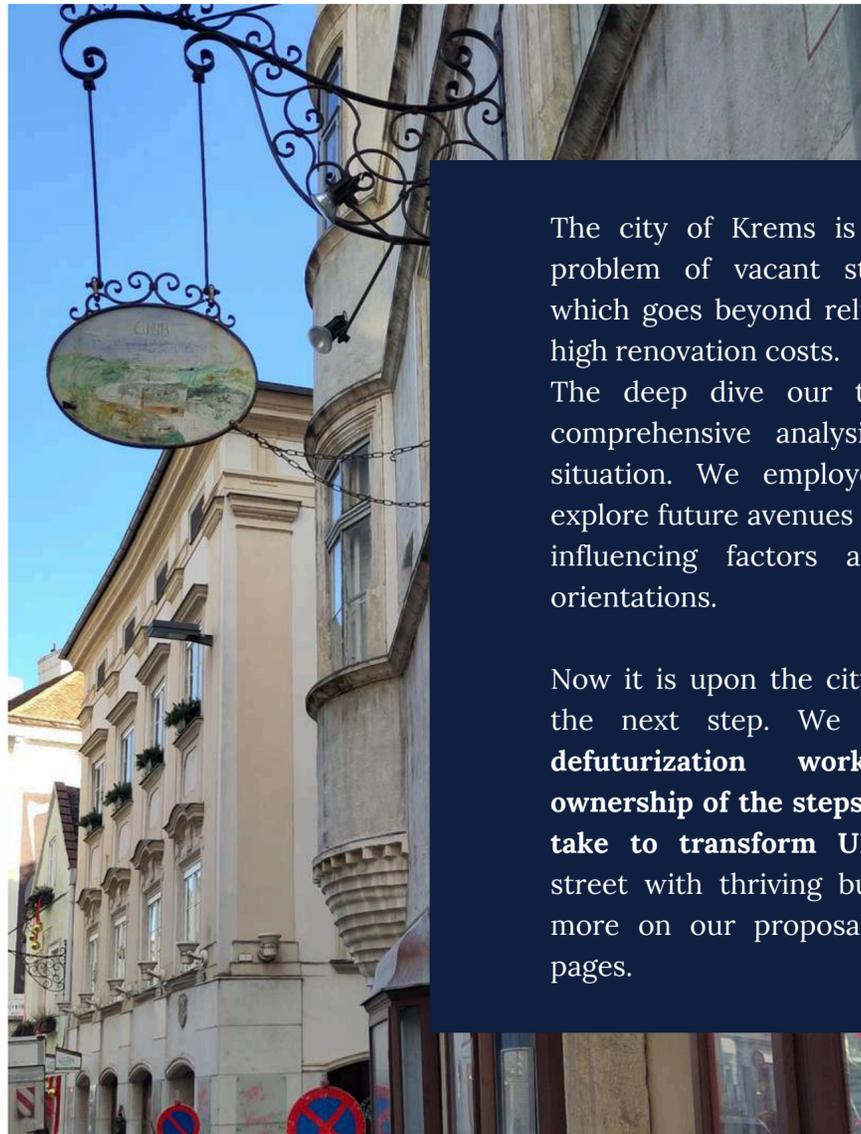


These scenarios are more than speculative stories they are strategic tools for reflection and action. By exploring a spectrum of possible futures, we offer the city of Krems a clearer understanding of what shapes ULK. Each pathway highlights different risks, opportunities, and levels of ambition. Most importantly, they open up space for meaningful dialogue and empowered decision-making. With the right partnerships and bold vision, Krems can move beyond inertia and begin shaping a future that reflects the street’s full cultural, social, and economic potential.

A street view in Krems, Austria, showing historic buildings and a yellow bus. The street is paved with cobblestones and lined with multi-story buildings. A yellow bus is driving away from the camera. A decorative hanging sign is visible on the left building.

# WAYS FORWARD

## What We Can Offer the City of Krems

A close-up view of a decorative hanging sign on a building facade. The sign is circular and features a landscape painting. It is suspended from a black wrought-iron bracket. The building facade is light-colored and has a curved corner.

The city of Krems is facing a systemic problem of vacant storefronts in ULK which goes beyond reluctant landlords or high renovation costs.

The deep dive our team did offers a comprehensive analysis of the current situation. We employed futurization to explore future avenues of change, dive into influencing factors and create robust orientations.

Now it is upon the city of Krems to take the next step. We offer the city a **defuturization workshop to take ownership of the steps they would like to take to transform ULK** into a vibrant street with thriving businesses. Find out more on our proposal on the following pages.

# Vision Setting

The first phase of this methodology is **Visioning**. Here, stakeholders come together to craft a shared vision for what ULK could become not just in functional terms, but also in its social, cultural, and economic potential.

This future oriented exercise is meant to expand imagination while remaining grounded in local values and possibilities. It creates a unifying direction that can bring together different groups around a common goal, whether that's a vibrant pedestrian street, a hub for creative enterprise, or a welcoming place for residents and visitors alike.

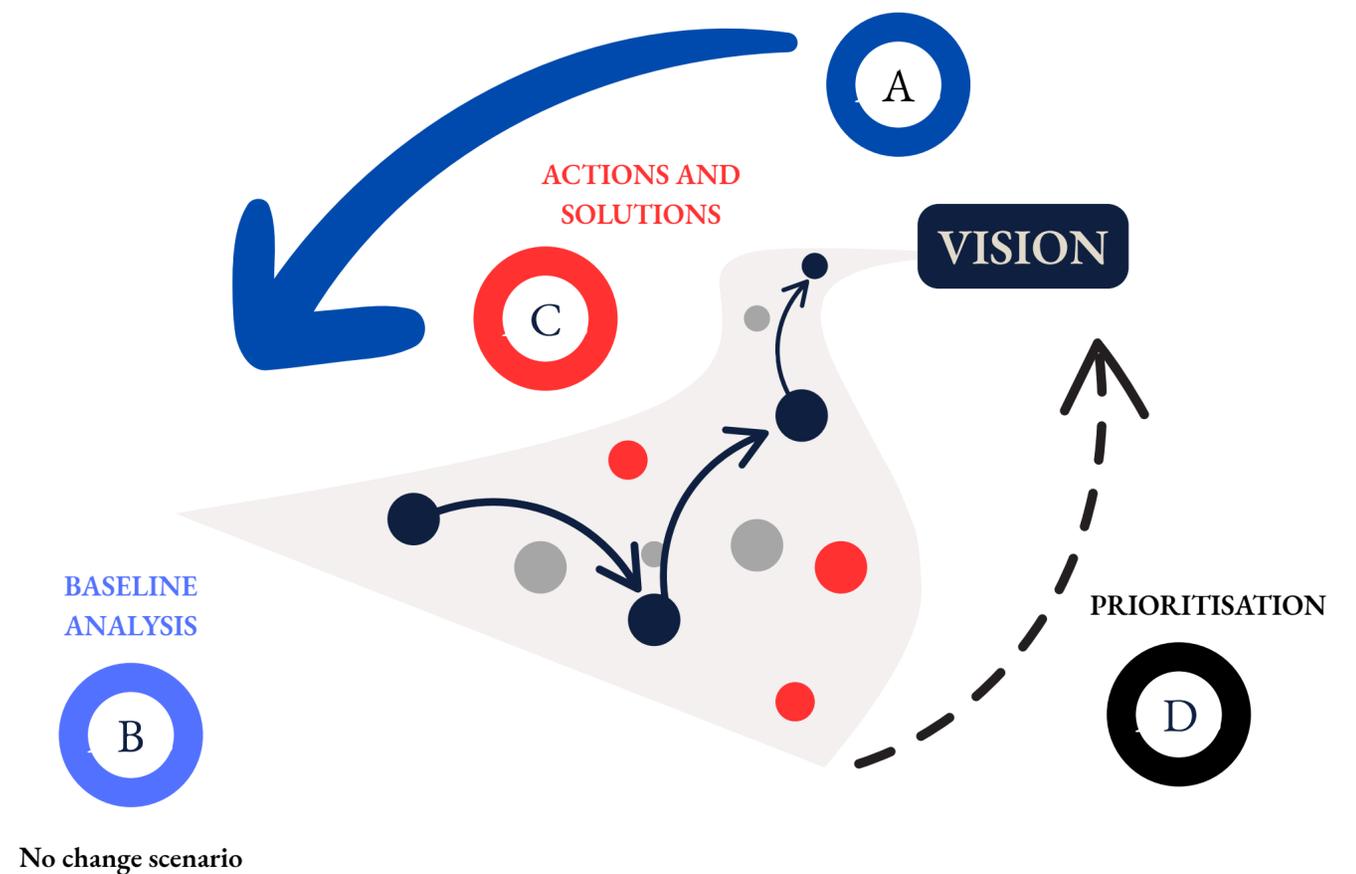
## *Glimpse of ULK vision*

"By 2030, we envision Untere Landstraße as a vibrant, inclusive, and culturally rich urban street, where long-vacant spaces have been transformed into thriving community hubs, creative enterprises, and accessible housing."



# Backcasting

Moving into Backcasting, this allows us to work backwards from the desired future to identify the important steps needed to make it real. It begins with where we want to be and asks: *What must happen to get ULK there?* This helps stakeholders think strategically about timing, sequencing and feasibility. It also helps us uncover potential roadblocks early on and highlight opportunities for collaboration, policy interventions and innovative design.



## *Envisioned Scenario*

At the heart of this vision lies Scenario 1, the preferred future pathway identified by participants. This scenario imagines Untere Landstraße as a vibrant, inclusive urban core, shaped by public-private collaboration, progressive planning, and cultural regeneration. Vacant and underused spaces are repurposed into community hubs and affordable housing. Renovation is made attractive through tiered incentives, digital tools, and rent-to-own schemes. This future is not only possible, it is plausible and within reach.

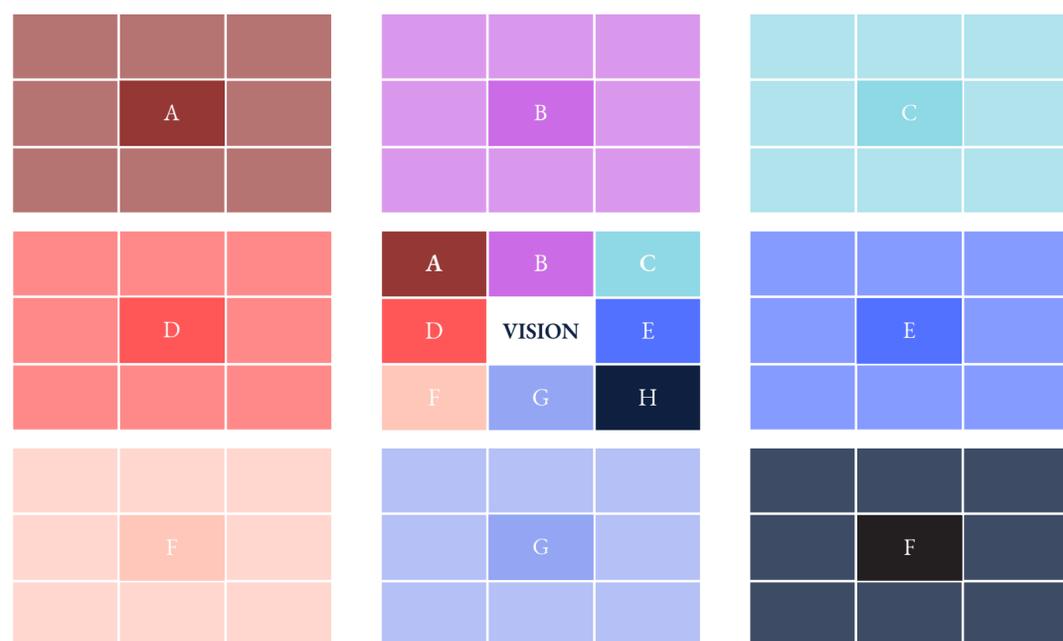
# Creative Solutions

## *From A Shared Vision to Bold Ideas*

In this phase of the workshop, participants would be invited to explore solutions freely, beginning with the future they want to achieve. By starting with a shared vision, the process shifts focus away from short-term fixes and toward long-term, systemic change.

To support this, we propose using the lotus bloom technique, a creative thinking method that expands ideas from a central theme and breaks them into concrete, actionable concepts. In this case, the vision for a revitalised ULK would serve as the anchor. *Rather than prescribing a solution, this phase opens up space for collective imagination and shared ownership.*

Some of the proposed strategic levers include: Green Krems renovation subsidies, Public-private partnerships, Temporary cultural uses and pop-ups, Rent-to-own schemes and Flexible heritage policy.



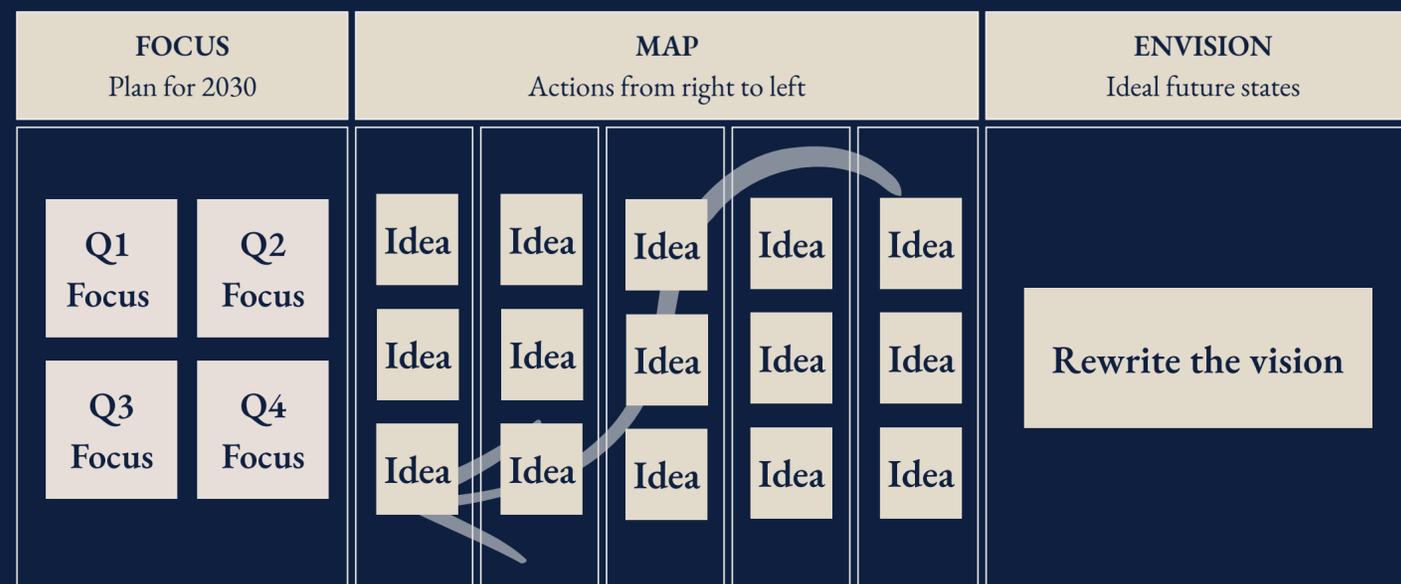
*Adapted from: Robert Riley*

# Priority Definition

## *The Final Stage to Ideas into Strategic Action*

The final stage of our backcasting approach focuses on making decisions: selecting and sequencing the actions that will move the city step-by-step toward the envisioned future.

We suggest placing the proposed ideas on a flexible timeline that spans the coming years. This timeline is broken into priority phases, each centred on a set of focus areas. Early actions aim for quick wins, while more complex steps are planned further out.



The idea is to build momentum. Quick, visible changes can help create engagement and support. Meanwhile, longer-term goals remain anchored to the original vision, ensuring coherence as the city progresses.

This approach also allows for adaptability. As actions are implemented, new insights can guide revisions to the timeline or even the vision itself. In this way, Krems stays focused but flexible ready to respond while still moving forward with intention.

# A Jigsaw Project: Pieces Forming One Picture

**ANNA WEBER**

Now, six months later, we are in the final stage of this project. Drafting our whitepaper also makes us reflect on the process, our learnings and of course also what it all boils down to. So join us on a summarising and reflective journey in this last chapter.

Something that started as a research project on the revitalisation of a whole street and ended as a deep dive on vacant storefronts had many stages in between. Through our initial innovation report and field trip we got an **in-depth understanding of the complex problem which ULK faces**: with its passing-through character and vacant buildings rising in numbers, ULK does not convey closely as much charm and livability as its bigger sister Obere Landstraße. To make sure that the **reconstruction is not only physical we spoke with diverse stakeholders** and did accessibility screenings through a walk audit. Yet, just when our final interventions were defined, our project scope shifted.

The very tangible problem of vacant storefronts and reluctance to overcome this from different sides demanded for ideas.

So we build our intervention on futurization, including academic sources, practical reports and expert input

From there we derived building blocks on the transition, as well as four possible scenarios depending on the radicality of change. If all our steps remind you of a jigsaw, that is intentional and also characteristic for transdisciplinary projects. We are empathetic listeners, creating the pieces of the puzzle and making a first attempt of pre-structuring them. But the final solutions cannot come from us alone.

Instead, we are offering tools with a call to action for the city of Krems to design the desired future themselves. We'd be delighted to support in that process with our targeted defuturisation workshop, where the city of Krems and its stakeholders can work out their desired futures through our guidance. We'd do this with the help of backcasting methods, that are all designed to not get stuck in current problems but to embrace creativity and imagination for a thriving future of Untere Landstraße. With our knowledge on the overall transition of ULK coupled with in-depth ideas on the vacancy problem, we can act as sparring partners and skilled facilitators in supporting the city of Krems piecing all the puzzle parts together in their own unique way.



CONCLUSION



# Roadmap to Renewal:

## *Pathways to Solving Vacancy*

**John Warren Tamor**

For us, systems analysis was not just a tool—it became a way of seeing. As we worked through the complexities of the ULK case, it helped us zoom out and understand the broader dynamics at play: why things were stuck, where resistance was coming from, and how seemingly unrelated issues—like heritage protections or aging demographics—were deeply interconnected. Systems thinking gave us the vocabulary and structure to make sense of that complexity, not to reduce it, but to navigate it more meaningfully. It helped us see that real-world problems like urban vacancy or stagnant renewal efforts aren't isolated—they're the product of patterns, behaviors, and reinforcing loops that require more than surface-level fixes.

The ULK project reminded us how emergent and dynamic real-world cases can be. We came in with a framework, but the situation evolved organically as the project unfolded. Stakeholders changed, priorities shifted, and the boundaries of the system itself kept expanding. It wasn't a straightforward journey—it felt more like chasing a moving target.

Every time we thought we had the scope defined, new variables emerged. This forced us to continually adapt our methodology, reframe the system's goals, and remain flexible in how we engaged with both the content and the process.

Managing this kind of emergent complexity was, frankly, hard. Working in a transdisciplinary space, we saw how local politics and stakeholder dynamics could both accelerate and stall progress, sometimes simultaneously. We had to accept that control was an illusion—what mattered was responsiveness and relationship-building. As system boundaries shifted, so did our understanding of the "problem" we were trying to solve. It taught us that systems work isn't about fixing—it's about evolving with the system, about co-shaping change rather than delivering a predefined solution. This was humbling but also empowering—it made the work more human, more real.

*It wasn't a straightforward journey. It felt more like chasing a moving target.*

What stood out most for us was how much the process itself shaped the outcomes: as we engaged more deeply with stakeholders, our role shifted from analysts to facilitators of collective sense-making. We realized that in a system as fluid as the municipality of Krems, success couldn't be measured solely by implementation, but by the creation of shared understanding and trust across diverse groups.

The more we opened up the process—allowing the system's boundaries, goals, and even definitions of success to be negotiated—the more relevant and grounded our approach became. This fluidity was challenging, but it was also where the real transformation started to take root. It reminded us that systems change is as much about relationships and learning as it is about strategy or structure—and that embracing uncertainty is not a weakness, but a strength in this kind of work.





## Social Strength: The Robustness of Future Scenarios

“Transdisciplinarity in a nutshell suggest that socially robust orientations can be considered a main outcome of a transdisciplinary project.”

*Scholz and Steiner (2015)*

Our transdisciplinary journey opened space for negotiation, iteration, and unexpected insights. It reminds us that sustainable transformation is a collective process.

This project expanded our roles from researchers to facilitators and listeners, emphasising collaboration and care in shaping future-ready cities. Each encounter from stakeholder interviews to co-design workshops revealed how urban change is not only technical but deeply social and emotional. These interactions also shaped the social strength of our future scenarios, grounding them in lived experience and enhancing their robustness and relevance across possible futures.

## Future Research Avenues

In the heart of Krams, many buildings along ULK remain unused, held back by complex ownership, renovation costs, and hesitant landlords. But what if there were a way to gradually bring these properties back to life while fostering community ownership and supporting the green transition?

Rent-to-own schemes offer a promising avenue. This model allows tenants to lease a property with the option to buy it over time building equity through their rent. It reduces risk for owners while giving residents a stake in the future of their neighbourhood (Decker, 2023; Sinai & Souleles, 2005).

Future research in Krams could explore the legal and financial feasibility of implementing rent-to-own locally. Austrian property law, tax policies, and urban regulations would need to be reviewed, especially in a heritage rich zone like ULK. But the potential is clear: rent-to-own could turn vacancy into opportunity.

There's also a chance to link sustainability goals to this model. Contracts could include commitments to green renovations, improving energy efficiency, reducing emissions, and aligning with the city's pedestrian-friendly vision.

On the social side, rent-to-own may offer young people, creatives, and entrepreneurs a realistic path to secure housing and invest in their communities. Long-term, it could help reverse population decline and prevent speculative disuse of valuable urban space.

To get there, Krams needs collaboration. Who manages these schemes? What incentives are needed? Futures thinking and stakeholder interviews like the one with a local lawyer can help identify viable pathways. Rent-to-own is not just a financing tool, it's a strategic lever for inclusive, sustainable regeneration.



# Beyond Boundaries:

## *Reflections on the Transdisciplinary Journey*

Our journey in this project was shaped by learning with and from others. It meant learning to let go of control, to sit with uncertainty, and to listen deeply to others whose experiences and perspectives were very different from our own. At times, it felt overwhelming since there was no perfect plan. We had to learn how to adapt quickly: when plans changed, when feedback surprised us, when ideas clashed. The complexity made us slow down and reflect on what we could realistically and meaningfully contribute to this project.

We often found ourselves translating between different “languages,” whether it was visual ideas, academic theories, professional terms, or everyday ways of speaking. It made decision-making more complex, but also more meaningful. With every conversation, workshop, or walk through the city, we were reminded that urban change isn’t just about policies or plans. It is about people, emotions, and the stories they carry.



## Lesson Learned

One of the most important lessons we took away from this project is that working in real-world contexts requires humility and patience. It also calls for a willingness to sit in the in-between spaces: between knowing and not knowing, between ideas and implementation, and between differing needs and shared goals. We learned that co-creation is rarely a straight path. It moves through tension, honest dialogue, and slow trust-building.

We stopped chasing perfect answers and started asking better questions. Along the way, we discovered that real change happens in relationships, by showing up, listening deeply, and staying open even when things felt uncertain. In the end, this project didn’t just shape ideas, it also shaped us.

# Behind the Scenes: Shaping Our Knowledge

Especially in transdisciplinary projects our learnings are not always one-directional or one dimensional. We have covered our formal activities in this report. Yet, we also engaged in activities beyond that which did not have specific goals or outputs but definitely shaped our approach and learning journey. Therefore, this page gives a little look behind the scenes.

**Exploring local traditions: Christmas Markets in Krems & Vienna**



**Exploring local traditions: Local Food Market Krems**



**Movie Screening of "Der automobile Mensch" in the Kesselhaus Kino Krems**



**Visit to the special exhibition "Suburbia" in the Architekturzentrum Wien**



# Learn More About Our Project



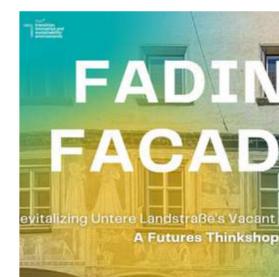
## **OUR SYSTEMS INNOVATION REPORT**

An initial in-depth analysis of the problem, its boundaries and the broader system it operates in. It also includes our first intervention planning.



## **REPORT FROM OUR FIRST FIELD TRIP**

A visual introduction of our project and a summary of our activities and interviews during our first field trip in December 2024.



## **OUR FINAL PRESENTATION**

The presentation summarising this report and our process.

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## FRANZ SAM

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## KURT LENITZ

Insightful views of an expert from Climate Tree Initiative about the changes happening in Krems and the hindering forces.



## DANIEL VARRO

For the legal expertise on vacant buildings and revitalisation projects in Austria.



## ALL PEOPLE IN KREMS WE TALKED TO

All people we met on the streets, at the market and we asked questions about Krems. Thanks for feeding our curiosity.

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