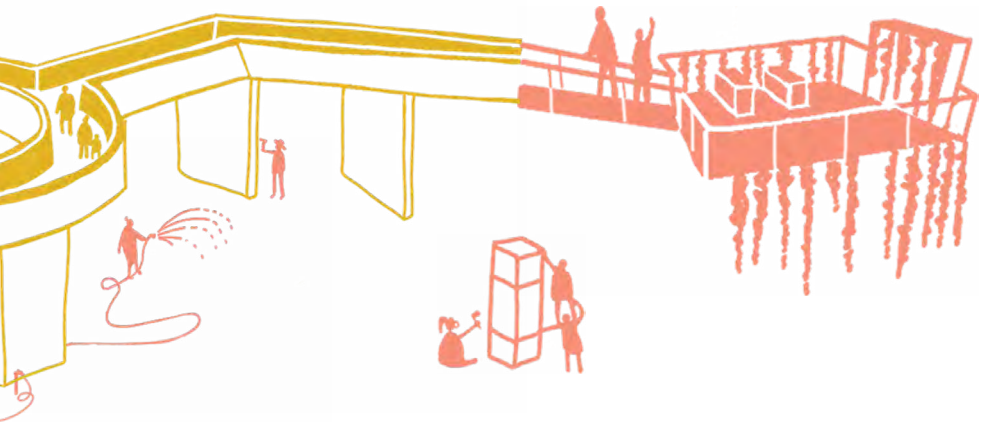
Prototype!

Building places together



Prototype!

Building places together

eds. Caroline Dahl & Titti Olsson

City of Gothenburg

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A sustainable future

This book is published on the occasion of the 400th anniversary of the City of Gothenburg, which occurs during what the UN refers to as *The Decade of Action*. The world's population is facing what may be its greatest challenge yet: to manage the transition to a sustainable way of life that remains within our planet's boundaries, and to achieve this within a short time. The process has raised many questions about what a sustainable society is and how we want the cities of the future to look and function. Ecological and economic sustainability are not the only things that have to be achieved. For society to be genuinely resilient, it also needs to be socially sustainable, and everyone has to feel a sense of belonging and a desire to play their part. Working co-creatively, on a smaller scale, and making urban development processes more accessible to a broader range of people are important steps in that process.

Here, we gather thoughts and experiences from a number of projects where the starting point has been to work exploratively and co-creatively to develop public spaces through temporary structures, interventions and on-site management. We have also invited researchers, artists, architects and other 'co-builders' who have developed expertise and gained experience of experimentation in urban development processes.

The examples presented in the book are referred to as prototypes, but we intentionally leave plenty of scope for interpretation – for both authors and readers – regarding what a prototype actually is. The word prototype has long been used in the product industry to develop and test new products before they go into mass production. Prototypes often take on a different role in urban development projects. For instance, they can be used to explore the use of a place, test a new feature or develop the identity of the place together with the people who use it. As part of the EU initiative *New European Bauhaus*, prototypes are highlighted as an approach for finding new tools, solutions and policy recommendations for the transition work towards sustainable cities.

There is so much more to 'prototyping' than just the built environment. Through its dynamic context, the prototype can be either physical – a place, an installation, a technical solution – or structural – a network, a collaboration model, or a manual for a working method. The process surrounding the creation and use of the prototype is important: everyone who interacts with, activates, visits or builds the prototype contributes to the outcome. As prototypes take shape, social spaces are also being built.

We hope that this book will serve as a source of inspiration for all who are already involved in urban development processes, or who wish to get involved!

Gothenburg, 2 June 2023

Henrik Kant, *Director of the Urban Planning Authority*
Anders Ramsby, *Director of the Urban Environment Department*
Johan Rehngren, *City Gardener*
Björn Siesjö, *City Architect*

Part 01 – What is a prototype?

Part 02 – How it works!

Part 03 – Prototypes in Gothenburg

What is a prototype?

01

Dare to try!

Caroline Dahl & Cecilia Helsing

We are living in a time of uncertainty and change. Global challenges are apparent at a local level and have to be addressed. Things can seem overwhelming. Previous generations of planners tackled the challenges of their age using statistical data and set out their vision of the future in a plan. For several decades, the future also seemed to unfold just as predicted and planned. There was no need for prototypes; it was possible to go straight to a 'mass-produced' future. The nuclear family, single family homes, public housing, nursery, associations.

Then all of a sudden, all that came to a halt. The forecasts were wrong, and not many people wanted to live in the future that was predicted by the experts. The downside of the lifestyles made possible by planning began to become apparent – for both people and the environment. Not everything has gone wrong, of course, and the reasons for people acting as they did in the past are relatively reasonable, given the challenges they faced in those days. History teaches us that unfortunately, it is easy to get things wrong when you just want to do the right thing.

Caroline Dahl is a senior lecturer in landscape architecture at the Swedish University of Agricultural Sciences, specialising in urban transformation and how a design approach with iterative transformation processes can support the transition to more sustainable urban development.

Cecilia Helsing is an architect and artist working as a project manager for place development processes for the City of Gothenburg.

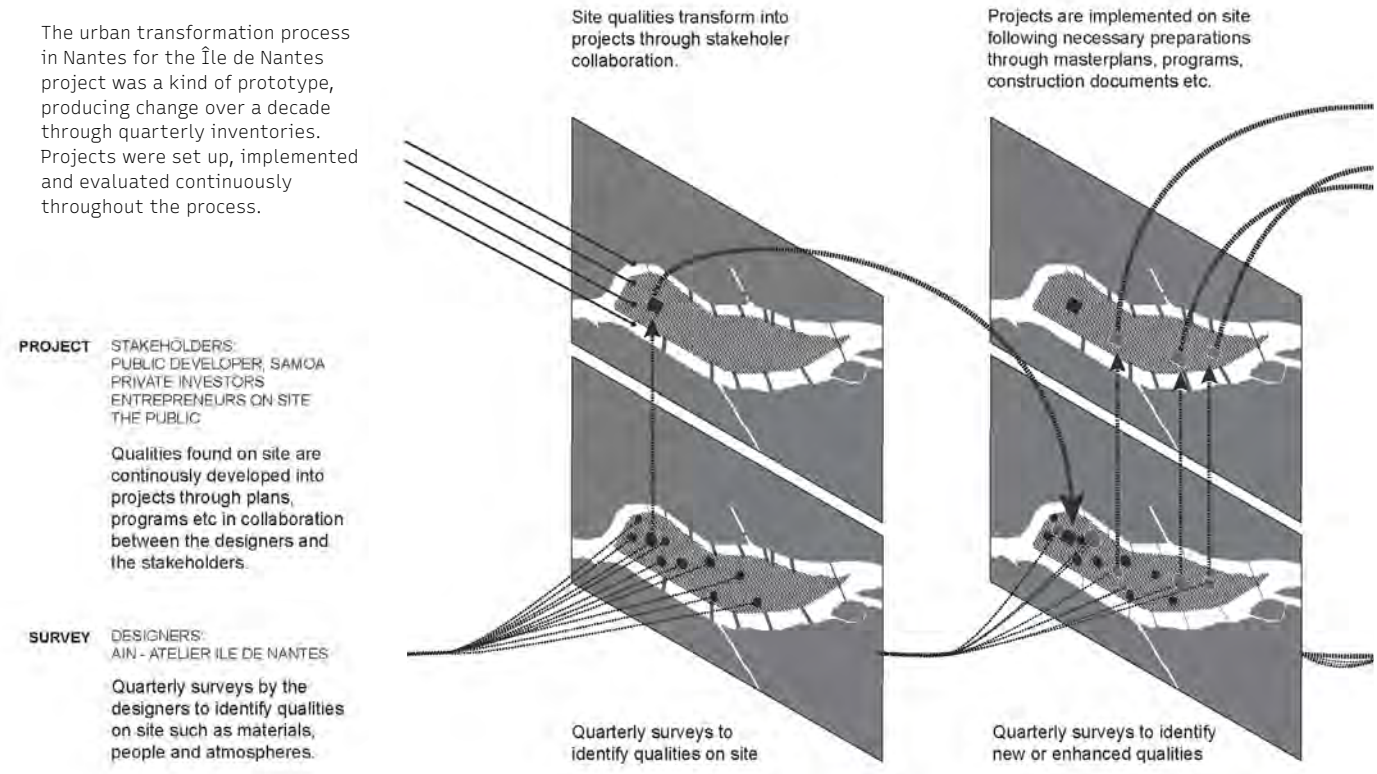
Even today, planning in many places is still carried out in the same large-scale and prescriptive manner as in the latter half of the 20th century, but this is becoming increasingly rare. A planning culture of experimental and exploratory approaches is now beginning to emerge in the municipalities of Sweden. The interest in developing new methods stems in part from the realisation that different approaches to urban development are needed, as places differ depending on history, context, challenges and qualities. Perhaps the biggest challenge is the perception that experimentation takes time and yields uncertain results.

The exploratory approaches currently being established in the field of Swedish planning go by various names, such as living labs, test beds, and innovation hubs. The emphasis is often on processes and greater collaboration between stakeholders who are taking on new roles in the urban development process. Ideas are tested before any decisions are made on how to develop an area, the notion being that testing precedes the 'real' transformation. Herein lies what may be an even greater challenge: the fact that these tests are not ascribed the importance they might deserve, as they take place prior to formal implementation. As a result, they do not always have an impact on formal planning: planning instruments have not kept pace with this shift and still rely on outdated modernist approaches, linear processes and top-down perspectives. Despite the challenges, there is growing interest in rethinking how cities should be developed and rebuilt.

The desire to experiment in the Île de Nantes urban transformation project in Nantes, France, ranged from the urban development process to playground equipment.

PHOTO: Caroline Dahl

The urban transformation process in Nantes for the Île de Nantes project was a kind of prototype, producing change over a decade through quarterly inventories. Projects were set up, implemented and evaluated continuously throughout the process.



The prototype is an essential part of these exploratory practices. In Gothenburg, prototypes and prototyping are closely linked to the strategic method of place development, formerly referred to as placemaking. This is based on three urban transformation strategies, one of which involves working with temporary prototypes. The second strategy focuses on building on the existing values of the place and the people who live there; while the third involves working with the meantime by being aware of the time span between the here and now and the future for which planning is taking place. Experiences from Gothenburg suggest that it is important to work integrate all three strategies in order to achieve a high qualitative outcome.

In innovation literature, the prototype is often referred to as part of an intended sequence of co-creation, evaluation and upscaling. However, these concepts take on a slightly different meaning when they are transferred to an urban development context, as in the case of Gothenburg. Co-creation, for example, may involve the residents of a city forming a relationship with a place before its final design has been completed. This increases the chances of people wanting to look after the place later on and caring about how it is developed.

Prototypes make it possible to start small. Small interventions can be realised early on in a project, instead of making grand plans that never come to fruition. Prototyping makes it possible to visualise, in a concrete, comprehensible way, something that could later be developed on the site on a larger scale. Seeing and testing something on a scale of 1:1 is very different from just viewing it on the drawing board. This makes it easier for people to engage in dialogue on urban development issues.

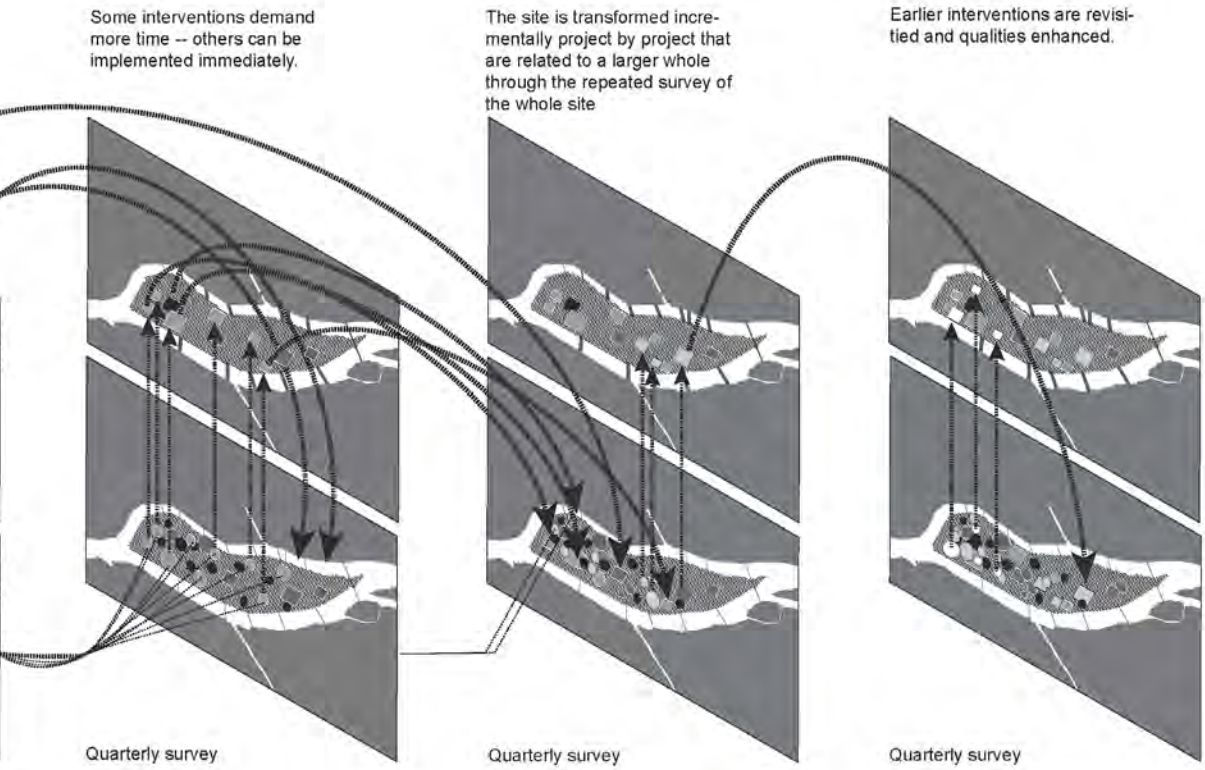


ILLUSTRATION: Caroline Dahl

Scaling up in the context of urban development is often quite different from starting to mass-produce a concept or product. For instance, a feature may need to be tested on a smaller scale first and then built on a larger scale on site or elsewhere. Trees that can be relocated are a useful example that has inspired cities like Hong Kong and Helsingborg to place trees in temporary location, with the option of later establishing them permanently on the same site or relocating them to another place where they can provide temporary greenery.

Some prototypes are created with a view to initiating activities on the site and developing the identity and distinctive character of the place in a way that attracts interest among the city's residents so that they turn up and make the place their own. Such prototyping needs to be given plenty of time and enough of a budget so that it does not simply become a symbolic gesture of participation. It is also important to ensure that prototyping begins early on in a transformation process, when there is still an opportunity to influence outcomes.

The knowledge that emerges out of a strong presence on site can lead to unexpected solutions through prototyping. One good example of this is the *Lilla Salt* prototype, which made it possible to trial the use of a saltwater wedge in the river *Göta älv* to supply clean water to the swimming facilities in the park area of Jubileumsparken in Gothenburg. There was little chance of such an idea emerging without the strong on-site presence of people who were curious about the local environment. This is another example of what upscaling in an urban environment can involve – finding better solutions. Although not the main purpose, prototyping can also create economic value: the site becomes more attractive to other developers as it becomes filled with activity.

To what extent can you go on testing lots of things as part of an urban transformation project, and for how long? Does this not lead to messy, unmanageable processes? There is certainly a risk of this happening, but even conventional urban design processes can sometimes end up becoming extensive and unwieldy, often resulting in paralysis. A well-known pioneer of innovative urban development processes is the city of Nantes in western France. In 2000, an architectural competition was held concerning the transformation of a former port and industrial area on the island of *Île de Nantes* in the river Loire. The winning proposal was not a finalised plan, but a process involving dynamic urban transformation. This approach came to be known as the *Plan Guide* and was a method of pragmatic, step-by-step transformation of the area on the basis of quarterly inventories.

The method proved highly successful and resulted in experiments on various scales, from creative playscapes to innovative designs for public spaces that invite new ways of engaging with the place. The method was applied over a decade, with high demands for quick action from the people responsible in order to maintain interest among stakeholders who were unaccustomed to lengthy urban development processes.

These rapid and incremental changes provided opportunities for continuous evaluation and organisational learning, but the extent of the transformation projects appeared to impede oversight and project management. In the project's series of documentation titled *Chroniques de l'Île*, researcher Frédérique de Gravelaine notes that over time, initiatives also became more and more difficult to launch due to the increasing complexity of regulations and protocols. Even in France, it seems that the reform of implementation instruments is lagging behind.

Urban planner and architect Kevin Lynch pointed out as early as 1972 that prototypes involve many challenges – not least the need to protect the experiment from the discontent that often arises when established organisation and approaches are challenged. For prototypes and prototyping to realise their full potential in the context of urban development, there is an urgent need to alter protocols and planning instruments for urban development and transformation.

But how can the prototype have an impact beyond various placemaking projects? Can the prototype have a meaningful influence on an area's future development and design – and if so, what is required?

There is much to suggest that the value of prototypes is difficult to comprehend, as they are often temporary, and traditionally temporary approaches carry little weight in formal planning contexts, or even within municipal organisations. It is necessary to understand that different changes have different temporalitites – that is, they can exist in parallel over varying periods of time. This approach also recognises the fact that all environments change, albeit at different rates. Such a mindset allows prototyping as a method to become a continuous part of the development of a place. It invites us to consider that the planning of an area can be viewed more as a management process, where decisions are made as the place or the community evolves.

In Amsterdam, lessons have been learned from the NDSM project, which involves a former port site along the north side of the river IJ. The site was initially characterised by large dockside workshops, wide open spaces and a constant sense of connection to the river. Today, the site is described as a creative and experimental place where major global corporations, small artist collectives and individual entrepreneurs have all established a presence. There are now homes, hotels and cultural institutions on the site.

Trees set out temporarily to green a place in Helsingborg (below left) for a time, or to indicate that the transformation of an area has begun, as in the West Kowloon Cultural District in Hong Kong (left and right below).

PHOTO: Caroline Dahl

Allmänna bastun (the public sauna) and the *Lilla salt* saltwater pool in Jubileumsparken in Gothenburg.

PHOTO: Simon Haglund

A number of buildings were occupied when the municipality started to take an interest in the area. After years of working in relatively conventional stakeholder constellations, a decision was made to involve the people and actors – both legal and illegal – who were already present on the site. One of the first steps was to call for proposals for the temporary use of the premises. A foundation, Kinetisch Noord, was set up in response to this call and is now an active stakeholder in the transformation and development of the area. The temporary use was intended to continue for five years initially, but that period was soon extended to a decade. During that time, the foundation purchased the building (the land is leased) and the activities became permanent.

The advice from Amsterdam is to both 'speed up' and 'slow down' transformation processes so that there is time to test and time to create content and organisation. It is essential for the process to be allowed to take time. In the 1990s, Amsterdam planned for the transformation of areas with implementation periods of about five years. Nowadays, timeframes of ten to 30 years are discussed instead. This means that organisations and approaches working methods must also be allowed to evolve as experience is gained, and a number of approaches need to be developed. If the lessons learned from Gothenburg, Nantes and Amsterdam are taken seriously, prototyping and experimentation in Swedish municipalities can also realise their full potential and contribute to the dynamic transformation of society over time.

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Plans, protests & prototypes

Erik Berg

On which side of the divide do you stand? Are you the person who plans, who sets the course and defines the boundaries that you want others to follow and abide by? Are you the person who will be affected by the plans and the shifts, protesting desperately in your attempts to defend your place in the world and protect yourself and the people you love? Or are you the person who impatiently tries out alternatives, who seeks new paths, who builds the world through direct action, the person who builds prototypes?

The relationship between plans, protests and prototypes presents one of the major points of tension in urban development. How should we move on into the future? On what terms? At what pace? Who and what should lead the way? How can we change course? How far ahead can we think? What aspects should be given priority? What should be swept under the carpet?

Erik Berg is an architect and project manager at Egnahemsfabriken, and is also a permaculture designer and project manager specialising in building communities and ecovillages. He has been working on co-creative design and co-building since 2005 and is the author of the book *Att bygga mötesplatser* (Inobi, 2017).

When it comes down to it, it is all the same: taking on the world and trying to influence its direction, but using very different methods – and approaching from different vantage points.

The prototype is related to the protest in that they both derive their energy from something that is wrong or unsatisfactory. But while protest is a reaction that focuses on attempting to halt or overturn something, the prototype looks to the future with impatience, devises a hypothesis as a potential response and gets straight to work on creating something. This makes the prototype a more powerful force than protest in the long run – although both may be needed.

The prototype is also related to the plan. Both face the same direction, with the aim of shaping the future. But where the plan focuses on attempting to establish 'how things should be', the prototype is more concerned with asking questions and trying out 'how things could be'. And where the plan is based on an attempt to predict the future, the prototype says: we have absolutely no idea, and so we have to play it by ear. This places the prototype in a better position to cope successfully with a changing future.

I was one of the founders of the *Egnahems-fabriken* cooperative in 2018. I sought out that setting because I had grown tired of drawing, planning and giving opinions on matters from behind a desk at an architectural office. I longed to be in a setting where collaborative exploration and hands-on action were more direct and unfiltered, more connected to people, more prototype-driven. I know I am far from alone in longing for that.

Egnahemsfabriken is a house-building cooperative in civil society where members and visitors explore forms and visions of the future, and work together to build houses and other structures. Those of us today working in the organisation and in the factory's social construction projects come from a mix of backgrounds and professions, but we frequently step into each other's roles. What unites us is active collaboration and hands-on action, resulting in useful physical artefacts. This collective act of construction is how *Egnahems-fabriken* generates its unique energy. And the prototype, with its directness and degrees of freedom, is an indispensable and necessary tool to access this type of action.

I think it is important to understand how the specific form of collaborative and cross-border action enabled by the construction of a prototype also enables a different kind of social relationship between people to emerge. In my experience, a particular kind of conversation and thought process tends to arise around direct and active collaboration and hands-on action. A sense of collective exhilaration hovers over groups of people who are shaping and building something together. Perhaps this feeling stems from the deep human experience of seeing relationships becoming stronger and deeper, of the threads of our relationships branching out, growing together and digging into richer soil. And these threads of our relationships are not to be taken lightly: they are the hardware of society, because society is formed through relationships between people, and between people and the world.

The shared experience, and the relationships that experience cultivates, cannot be achieved within the framework of The Established Plan. And while exhilaration may well emerge in collective protest, it is, in part, different – more reactive, more defensive.

The great thing about prototypes that involve active collaboration and hands-on action is that they can make plans completely redundant. Strengthening good and equal interpersonal relationships also allows wisdom, care and collective capacity for action to emerge out of direct human relationships – and this diminishes the need for guidelines, policy documents or plans.

Okay, I must admit that I have become a bit allergic to guidelines, policy documents, plans and strategies over the years. I find that we often like to imagine that these policy documents belonging to the organisational society are a way of "setting the course." But in practice, they often function as a blunt instrument of power, whose primary actual function is to act as a barrier that restricts who can take initiatives and is allowed to make suggestions. Who can take up a position and leave their mark on the world. They become a kind of tollgate that everyone is forced to pass through and hand over their own ideas.

And speaking of tollgates: our built landscapes contain many such structures that once served a purpose but are no longer relevant nowadays. The great fortifications were built to fight the wars of yesterday and were outdated after just a few decades, sometimes even before they could be put into use. They were built on the basis of established plans but were defeated by rapid prototypes, technological development and the evolution of thinking.

This is actually what happens with the vast majority of plans we humans make and the elaborate structures based on those plans. This is particularly evident when time and the world are changing rapidly, as they are now, more than ever before. Plans are perishable goods, but once they have been adopted they can remain in place for a long time. This is especially problematic when it comes to the plans we adopt in order to guide how we build our cities and communities. Plans that are already a decade old do not match up well with the challenges we are facing today, and so they often become part of the problem instead.

Prototypes, of course, are also perishable goods. That is their nature. That is the whole point of them. They are meant to test the way out of a moment. But they make no claim to be long-lasting: they are merely temporary waypoints. As the world changes, prototypes become more relevant as tools for testing ways forward through the changing future.

In many ways, we have now returned to the intense exploratory phase that characterised the 'stormy youth' of modernism, an era that was full of prototype creation. Although the types of challenges we face now are completely different.

Could we imagine building whole parts of our cities more in the form of prototypes? Society's interest in locking in possible uses through detailed development plans is also, in a way, an attempt to safeguard the public interest and prevent it being disregarded. So if plans are more often to make space for prototypes as an urban design tool, this has to go hand in hand with ensuring that more construction is socially driven – by people working together, and on the basis of common needs. That is when the construction of the city can also become a driver of social relations, a place where society avoids constantly trying to exert control so that it can flourish instead.

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PHOTO: Gunilla Forsman

Topping-out ceremony following a day of urgent effort to complete the roof before it started to rain, with *Vi Bygger Tillsammans* 2022.

Joint loading of a small building constructed by Grundkurs för självbyggare 2022 (the Basic Course for DIY Builders 2022), for transportation to *Familjebostäder* in Gothenburg.

PHOTO: Erik Berg

Prototyping a prototype

Per-Johan Dahl

The prototype in an architectural and urban design context occupies a dynamic field of tension between representation and construction. It is based on design principles that have been tested using drawings and models, but not yet translated into systems for construction. It is designed to generate feedback, so that what has been investigated and tested in the prototype can be evaluated, adjusted and then used within formalised urban processes.

Professor of Architecture Bob Sheil argues that prototypes operating in this experimental space between drawing and construction provide fertile ground for collaboration and creativity. They are laboratories, where designers in the spatial field can interact with technological advances and socio-cultural tendencies to develop new approaches to the creation of built environments.

Per-Johan Dahl is an architect, Associate Professor, and Head of the Department of Architecture and Built Environment at Lund University. His research focuses on complex relationships between architecture and urbanism, with emphasis on new building types, design process and urban form.

All prototyping is, to some extent, open-ended. This doesn't mean that the prototype cannot have a huge influence on how our cities are developed and managed. Architecture historian Robert Fishman describes the visionary work of landscape architect Frederick Law Olmsted on Riverside, Illinois as a bourgeois utopia. But he could just as easily have described it as a prototype for the American suburb.

By contextualising his design in the picturesque tradition of British landscape architecture, Olmsted created a new type of living environment that was neither rural nor urban, but rather an ideal community linking nature and culture. This ideal community was tested at full scale, and although the project resulted in financial bankruptcy, the picturesque balance between single-family dwellings and public green spaces developed into a spatial role model for good living. The radical increase of mobility that characterised the period around the turn of the last century made it possible to translate Olmsted's design concept into a system for the production of suburbia that would later become the engine of the American dream.

Olmsted's prototype of the suburbia would evolve into the urban design ideal that characterised the development of American society in the 20th century. Perhaps the most extensive example is Los Angeles, the suburban metropolis on the Pacific coast often referred to as *the mother of sprawl*. There, a cocktail of property speculation, lifestyle production and a pleasant climate has generated a seemingly endless grid of suburban lots.

This metropolis, which has expanded through sprawl, is taking up vast tracts of land. It consumes huge amounts of natural resources for construction, maintenance and management. It generates one of the largest economies in the US, and it fulfils the dreams and nightmares of countless people.

In 2001, the Southern California Studies Center (USC) published a report pointing to the alarming need to rearrange the urban design ideal that had dominated the development of Los Angeles for most of the 20th century. The report noted that almost all available land was fully developed, making it difficult to meet housing demands for the continued population growth in the region. At the same time, it was observed that a number of the resources that made housing construction possible, such as access to water and efficient systems for technical infrastructure, had reached breaking point. "Sprawl has hit the wall in metropolitan Los Angeles," the report said, and the research team called for local, regional and national debate on its urban future.

The researchers at USC were wise to spark debate at different levels. Complex problems cannot be addressed with simple solutions. Knowledge and engagement are needed from multiple sources, with varying intensity and through many channels, and action is needed on various scales. One measure that spans both large and small scales has been explored by cityLAB, a think tank at UCLA in Los Angeles, which is working with architectural and urban research to develop new urban planning solutions. Since the mid-2000s, there has been interest in a small-scale phenomenon that has arisen through informal construction in the backyards of LA's suburbia, and that may offer a number of entry points for large-scale transformation of the residential suburb.

By definition, suburbia consists primarily of privately owned properties, with each lot being zoned for one main building and one complementary structure, which most often encompasses a garage. The low building density is achieved by means of a property typology where the position of the main building on the lot delineates a well-proportioned backyard for private use that must not be developed. Today, therefore, there are hundreds of thousands of suburban lots in Los Angeles with backyards that collectively offer large areas of undeveloped and unused land. Sluggish legislation has prevented the development of these areas – legislation known as *single-family residential zoning*, which is similar to the detailed development plans that regulate development in Swedish residential suburbs. Despite this, a new building type known as the *Accessory Dwelling Unit*, or ADU, has emerged in Los Angeles. For decades, such units were built illegally in the backyards of suburban lots, hidden behind the main building to avoid detection by planning authorities. ADU buildings have served as housing for family members – for grandmothers or teenagers – or for undocumented immigrants, and they have been used as offices, as workshops for surfboard manufacture, or rented out for short-term lease.

PHOTO: Photekt/Nico Marques

In this way, ADU architecture challenges the homogeneity established in suburbia by means of planning legislation. It defies the nuclear family norm and the monofunctionality that are the cornerstones of suburban culture. It paves the way for new aesthetics and economies that cannot necessarily be controlled by planning legislation. It offers a new housing typology in a context that has long been shielded from many of the social processes that have shaped the mixed-use city, such as homelessness, diversification and social synergies. As the ADU has been built informally, it has not yet been systematised and can therefore be viewed as a small-scale prototype, intended as a response to many of the large-scale challenges that have emerged in suburbia.

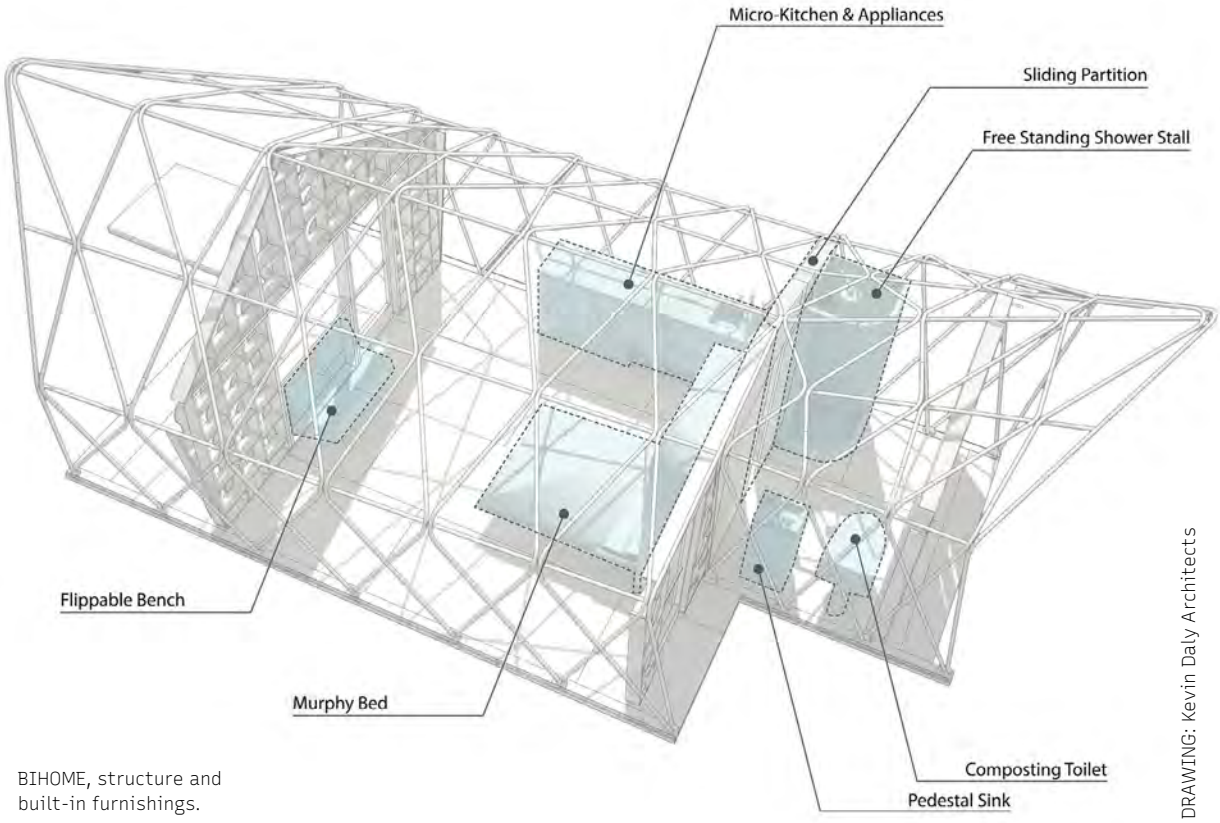
ADU architecture allows us to develop new approaches to suburbia. But we can also use the ADU to explore new points of entry into housing construction as a process and culture. Industrialised housing production requires infrastructure that is both costly and resource-intensive. What if housing could be procured and built more simply, in a way where we re-evaluate the notion of the permanence and instead develop a temporary structure that is easy to dismantle? It would be easier to recycle such buildings, but this would require the culture in suburbia to accept temporary elements in its permanent environment. Would it be possible to prototype an ADU to trial such a dwelling?

A BIHOME unit installed at the UCLA Broad Arts Plaza.

These questions were asked at cityLAB, which often uses Los Angeles as a laboratory for development of solutions to social segregation, high housing costs, infrastructure, and housing typologies. The idea of trialling its research on a full scale emerged when cityLAB exhibited research at the Venice Biennale, and the summer of 2015 saw the unveiling of the ADU prototype BIHOME, which was developed in collaboration with Santa Monica-based Kevin Daly Architects and the neighbouring Institute of the Environment and Sustainability.

BIHOME is based on a frame system of light gauge steel pipes that is mobile, resource-efficient to produce and easy to assemble and erect. The frame is stabilised by a façade membrane consisting of two layers of EFTE plastic, which is dimensioned by means of an assembly made up of plastic tubes and structurally defined by means of a vacuum. The air pockets in this ingenious, lightweight façade provide sufficient thermal insulation – for the climate of Southern California, at least – while creating privacy, beautiful light, and a distinctive aesthetic. The foundation is made up of removable screw jacks with auger footing, which makes it possible to calibrate the foundation with ease to suit to varying topographical conditions. The size of the building, over 46 square metres, is organised as an efficient and autonomous residential unit, with a kitchen, toilet and shower, as well as space for sleeping and furniture that can be used for dining, socialising, and working.

Dana Cuff, professor and director of cityLAB, explains that the project should be viewed as a critique of the prefabricated construction industry, which continues to produce unreasonably expensive housing. Instead, BIOME explores a new direction for the modular approach developed in the 1960s by architectural groups such as Archigram in the UK and the Metabolists in Japan. The objective is to be able to produce an ADU building that is cheap to buy and available off-the-shelf, and that can be constructed using unskilled labour.



DRAWING: Kevin Daly Architects

BIHOME, structure and built-in furnishings.

Herein lies the interesting link between temporality and permanence. BIHOME is designed as a residential unit that is to be built in the backyard of a suburban plot, which is a typology that is usually constructed with an aesthetics of permanence. At the same time, its tectonics have strong links to tent structures, which encompasses an aesthetics of temporality. With its materiality and spatial expression, BIHOME operates within a dynamic field of tension between permanence and temporality that generates an aesthetics of transformation.

Not only does BIHOME's transformative aesthetic create new expressions for architecture, it will also be a tool that can be used to support ecosystem services in suburbia. The undulating façade composite is designed to handle light and structural characteristics, but also to serve as a habitat for insects and other small animals. It is easy to imagine clusters of BIHOME units, concealed behind the main buildings in the residential suburbs of Los Angeles, each of them weathered by humus and plants nourished by the droppings of insects and other flying creatures. This integration of architecture and ecosystem interacts with the lush gardens of Los Angeles to camouflage the amplified building density and social diversification that is undeniably generated by ADU architecture. Therefore, BIHOME can be likened to a Trojan horse, where the micro-scale and transformative aesthetic of the building support the autonomy of the residential suburb while simultaneously implementing a radical change in the culture of suburbia.

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PHOTO: Photekt/Nico Marques

BIHOME's façade membranes create new lighting qualities in the residential suburb.

Equal spaces

MYCKET

With a loud splash, bodies make their way into the water. We are at the brand new Angeredsbadet swimming facility and have reserved a pool and changing room for ourselves. We have been swimming at various locations with different groups all week. On this particular occasion, we have invited a group of ladies, newly arrived immigrants, to swim with us. The group has been put together by the municipality. Some of them know one another well, others are complete strangers.

The age range is broad. We have brought swimsuits for everyone, offering different levels of body coverage. Most of the women stay in the shallow end of the pool and rest their arms on the edge while just kicking their legs without moving around. Nearby, a few people have sat down on the plastic chairs to feed their children (which technically, we are not allowed to do).

The art, design and architecture group **MYCKET** is made up of Mariana Alves Silva, Katarina Bonnevier and Thérèse Kristiansson. Together, they develop methods and designs to show how equal spaces can look and work in practice.

The women who have learned how buoyancy works float and splash around, crossing the pool and returning now and then to rejoin the ongoing chat at the edge of the pool. Someone thinks the place is too quiet without music and starts playing something on their phone, while someone else swims away from the noise. We talk about what water means to us, memories of hot springs under clear, starry skies, saunas packed to the rafters. But much is not put into words. We understand by seeing how everyone – including us – deals with the situation.

We have recently formed the group MYCKET (which is Swedish for “A LOT”) and have been invited to conduct a feasibility study on bathing cultures and a physical prototype that will serve as a basis for the upcoming projects for Jubileumsparken in Frihamnen, Gothenburg. With this assignment, we particularly want to support specific groups that are rarely highlighted in urban planning processes: LGBTQI children/young people, newly arrived immigrant women, homeless people, people with mental and physical disabilities. We and our clients want the future district that is taking shape to also meet the specific wishes and needs of these groups of people.

View from the duckboards at Playan, with Playan furnishings, 2014.

PHOTO: MYCKET

PHOTO: Jessica Segerlund

Post-Pride party at Playan with Playan's public barbecues and furnishings, 2014.

Co-creation at Playan, 2014.

PHOTO: Jessica Segerlund

To explore what those needs are, we choose to spend time in physical spaces together – we change our clothes, hang them up, shower together, feel hungry and thirsty, experience temperature changes. This all provides us with more information about everyone's different needs, sensitivities and vulnerabilities than we could have obtained through conversation alone. In addition to the experiences we document among the participants, we also discover things we did not know about ourselves.

Facing new situations and meeting people with different experiences is challenging. We need to dare to be vulnerable if we want others to open up to us. We noticed that the specific needs also turned out to be shared with many other groups. Many of us want warmer swimming facilities, hammams instead of dry saunas, seating areas and showers at different heights, the opportunity to shower and get changed in privacy, parts of the pool where we can touch the bottom comfortably, places where we can eat our packed lunches – and to be surrounded by beautiful colours.

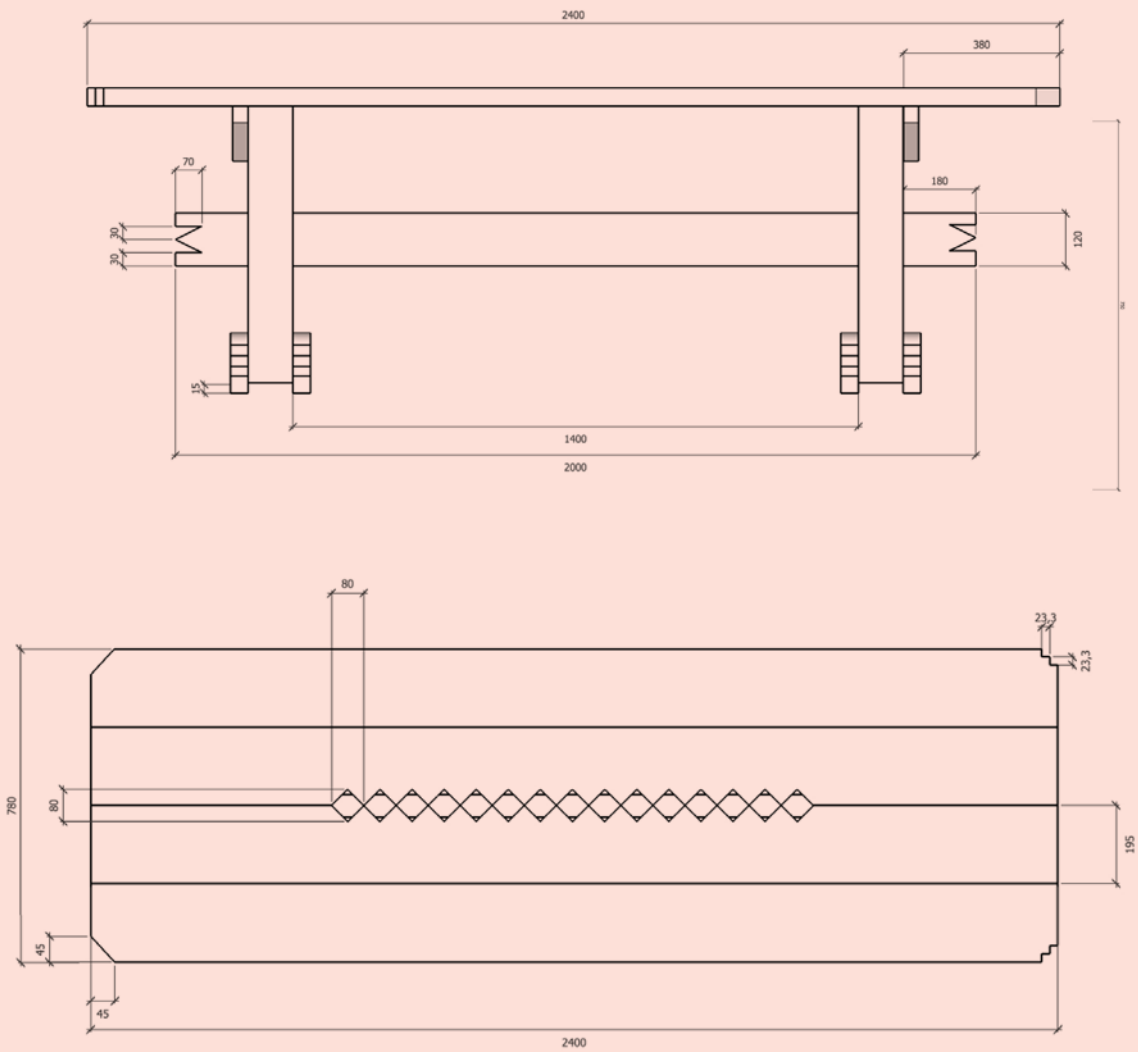
The collective knowledge of the needs of the various groups resulted in a prototype and temporary spatial intervention, as well as a written report – an action plan containing guidelines on how to create inclusive spaces in Jubileumsparken. In this report, we highlight the importance of ensuring that the built environment, both aesthetically and functionally, is shared fairly and represents different groups in society, and that we therefore also need to build specific structures for those groups whose needs are rarely represented in urban planning processes: because they rarely have purchasing power, because they rarely work in architectural or planning offices, because they rarely run property companies.

We also invited some of the groups to co-create with us. This resulted in sketches of temporary spaces that met the specific needs of the groups (warm rooms, changing booths, showers, a dance floor, somewhere to hang out at the beach, seating and dining areas, and special events to make the most of the spaces). Several of these ideas were developed further in the final prototype, which was named Playan. This consisted of a sandy beach with a wooden deck with step-free access, decorations painted collaboratively, colourful, movable long tables, benches and barbecues, and a sound system that could be booked and borrowed for free. Some of the groups were invited to use Playan for their specific needs, and were offred support to organise their activitites. A free Lilla Namo concert was organised by GUTS/G.I.A, Angered; a theatre performance involving the Grunden Media day programme, a film screening by Cinema Queer and an afterparty for the Pride parade.

The other ideas and sketches that could not be accommodated due to budget restrictions, such as changing cabins and humid warm rooms (a kind of hammam where the body never has to be exposed to physical cold or voyeuristic eyes, and where the water is important but the actual swimming is secondary) were to be carried forward by the next team of architects.

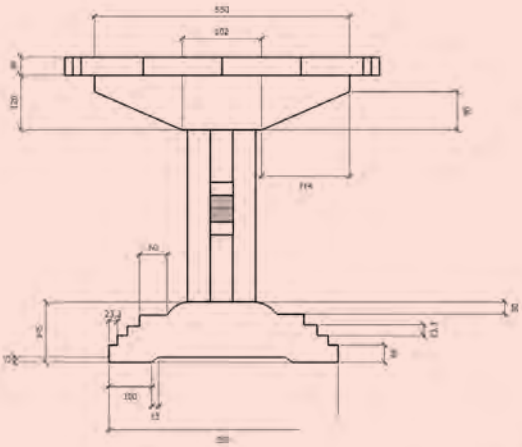
Building a prototype in Frihamnen was one of MYCKET's first projects, and we have continued to develop our approach since then. Now, after a decade of leading co-creation in design processes, we have developed an exploratory method which we call D-I-G (doing-in-groups). The method is based on hands-on action – we physically create something (a room, an object, a place) together with a specific group. It is a kind of material mapping where we collect together and analyse different tactics, aesthetics and suggestions that we come up with together by means of hands-on action. From this, we create new spatial and material proposals (which we then continue to test).

ILLUSTRATION: MYCKET



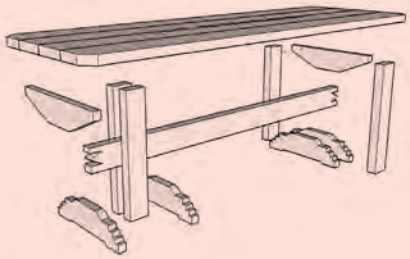
It is a kind of generative process that feeds itself. A D-I-G can be carried out in an hour or take several weeks and result in a small artefact, a temporary prototype or a permanent site, depending on the situation and the scale. In our experience, it is both easier and more constructive to hold discussions on specific material proposals rather than ideas that have not taken shape or form.

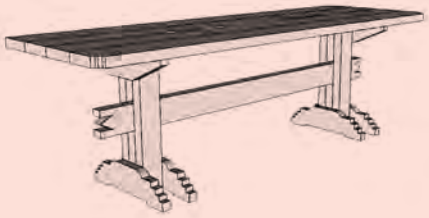
The physical experience can be shared, regardless of prior knowledge of words, drawings or other industry-specific means of communication. And functions and aesthetic expressions can be evaluated, adjusted and transformed into other more permanent structures through the use of temporary spatiality. This is also where the power of the prototype lies.



Playan – Table
2014 04 28

All parts made of whitewood,
class III, 34 mm thick.
All parts are screwed together.
Sections are cut using a jigsaw or
band saw without being smoothed.
Exact precision is not necessary.
Any sharp edges can be sanded or
filed smooth.





As designers, we are constrained by our own personal spatial experiences, whether those are the spaces we have lived in and had access to, or the spatialities we learned about when we were training. That is why the spaces we know are quite limited, and prototyping – creating the temporary spaces with others – gives us the opportunity to be part of something we did not know about, something greater than ourselves. Temporary spaces are cheaper to produce and often require shorter processing times, so they can also be implemented more easily than permanent structures. And they can be adjusted in retrospect: lessons are learned if people are responsive and willing.

We are very keen to deliver the things we arrived at collectively when we create architectures together with different groups. Seriously asking people what they need and want also means we are responsible for abiding by their answers. As consultants with a limited remit (certainly as municipal urban planners), it is easy to feel inadequate and that we are letting down the groups we represent if their dreams do not come true.

While we were working on Jubileumsparken, the process was structured like a relay race where we had to hand over our research to the next team, and we do not know what impact our research and prototype have actually had on the project. Politicians, housing associations, planning offices and architects do not always agree with one another, and spatial objectives can change rapidly depending on who ultimately holds to decisive power in the context.

If we are to test and prototype spatialities, we need to invite others to get involved in the decision-making processes. In specific terms, this means that relinquishing our power as architects or planners and letting go of the notion of complete control. This can feel uncomfortable. It also highlights an important issue: what fears – on the part of both the creator and the user – need to be addressed in the design and construction process if we are to build a society where everyone is welcome?

We believe that this requires us to accept that not everyone will agree, and to be very clear about whose needs we prioritise. As political theorist Chantal Mouffe emphasises in her book *On the Political* (2005), it is extremely important for the public space to be allowed to be a field of negotiation rather than a space of consensus. Mouffe argues that total consensus is an impossibility in a democracy and suppresses or conceals the actual diversity of needs and wills.

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Concept image for Jubileumsparken
by MYCKET, 2014.

Learning by doing

Dan Hill

An emerging practice of strategic prototyping may offer alternatives to the traditional binary opposites of 'top-down' or 'bottom-up', technocratic or self-organised planning cultures, city-scale or district scale, centralised or distributed, mission or movement – rarely both. By focusing on the possibilities inherent to the distributed infrastructures and diverse cultures of today and tomorrow, whilst also recognising that any urban interventions are nested within interconnected broader urban systems, strategic prototyping sketches new cultures of decision-making, perhaps better attuned to moving our cities forwards.

Streets are a particularly rich proving ground for such urban experiments. They are the basic unit of cities. As our most complex public spaces, streets are where the city comes together, and so the way we handle streets, from a design, planning and governance perspective, reveals much about the city itself. Their infinite possibilities for "the magic of the street," as Rebecca Solnit reminds us, are conjured from the "mingling of the errand and the epiphany." Whilst errands can often be predictable, it is rarely possible to plan for epiphanies. So the ability to fix the street around the more easily measurable and managed 'errands' has meant a concomitant fixing of the idea of the street, and thus large parts of cities, around traffic. This is a denuded and diminished reduction of those largest, most distributed, shared spaces in our cities.

Professor Dan Hill is the director of Melbourne School of Design at the University of Melbourne and a visiting professor at UCL and its Council on Urban Initiatives. Dan was previously Head of Strategic Design at Vinnova. His research interests focus on participatory urbanism, urban technologies, governance and sociology.

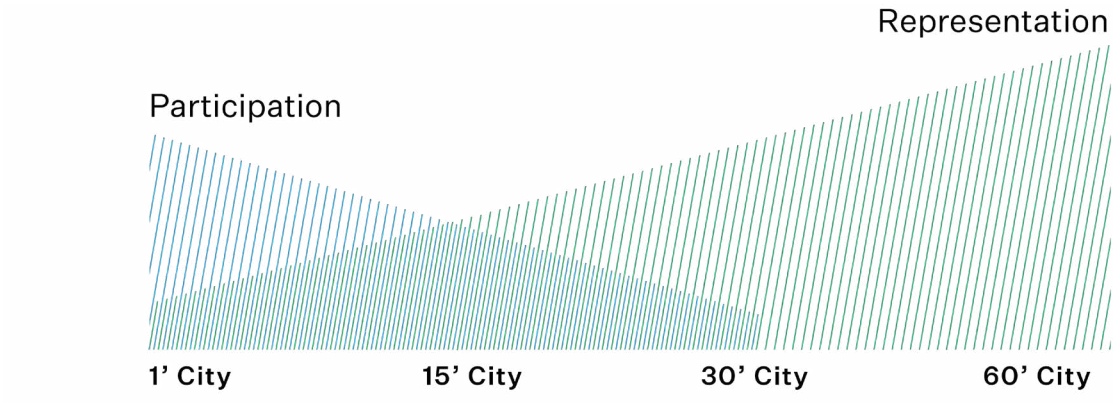

ILLUSTRATION: Dan Hill

	1' City	15' City	30' City	60' City
Greenery	Shared garden	Local park/allotments	Municipal park	Wetlands
Football	Street football	School grounds	Large sports centre	Stadium
Religion	Shrine	Local church	Large mosque	Cathedral
Mobility	Bike, scooter	E-bike, shuttle	Tram, bus	Subway
Energy	Microgrids	District heating/cooling	Urban grid	Regional grid

Comparison between the one-minute city and other city scales.

That gravitational pull of traffic management leads to an abstracted risk aversion being codified at the heart of urban planning. Even the complex propinquities at the heart of the 15-minute City strategy (hereafter 15′ City) remain somewhat technocratic in origin. It is based on 'chrono-urbanistic' principles of the municipality organising amenities on behalf of clusters of density of people, rather than any deeper shift in planning practice towards allowing desires to emerge directly from those people on their own terms.

Indy Johar has suggested that this tendency for abstraction, generally, is having a profound impact on our ability to produce resilient, thriving places, particularly in the light of our entangled crises of climate, health and social justice. "I think our relationship with land, to be specific, is also a theory of control. So we have enslaved land – through abstracted means – and distanced ourselves from it to allow for a way of constructing the world."–Indy Johar

There is another possibility in thinking through the complex interweaving of scale, time and culture implicated in city-making, however, by pulling focus on a notional 'one-minute city' (1′ City). This is the immediate environment-loosely defined by a minute's stroll or roll, throughout the swathes of shared space outside your front door, and that of your neighbours adjacent and opposite, suggesting blurry circles of shared engagement overlapping in the street.

At this 1′ scale, prototyping comes into play as an appropriate design technique, whereas key nodes at a 15′ City scale, such as a metro station, kindergarten or health centre, do not lend themselves to such a verb. Those same challenges – mobility, learning, health – at the scale of the 1′ City can be understood with different dynamics and outcomes: immediate and intimate, self-organised and collectively-maintained, practised as everyday life, prototyped collaboratively, and adapted over time. Using its own logic, then, how might the 1′ City be prototyped into life? And how might a practice of strategic prototyping be seen not as a tactical workaround, but as a direct response to both the abstractions involved in urban planning, and the conservatism of data-led 'predict-and-provide' urban policymaking?

Gothenburg, along with Stockholm and Helsingborg, was in the first wave of the Street Moves project during 2020–22, funded by Vinnova as part of its Street mission aiming to 'retrofit' all Swedish streets such that they are healthy, sustainable and full of life. The project was initiated by Vinnova, and then co-produced with ArkDes, Volvo Cars, Voi, and representatives of national, regional and municipal governments, comprising a stack of 'system players' behind the prototypes.

Street Moves helped conjure and articulate the 1' City model of engagement and participation which, via a loose 'kit of parts' for transforming streets from motor vehicle-dominated spaces into biodiverse and socially diverse places. Its design process emphasised super-local participative decision-making, wherein 'the street designs the street', whilst the shared governance platform allowed streets, and the diverse activities they can support, to form the connective tissue between 1' City, 15' City, and beyond.

Strategic prototypes like Street Moves aim to occupy all these perspectives at the same time. The 'prototype' aspect is capable of exploring change rapidly and powerfully at the street scale, whilst the 'strategic' aims at systemic change, at national scale. Far from perfect – prototypes are always wrong, but in useful ways – Street Moves is now well into its second phase, extending to further cities. ArkDes now reports a 'queue' of 25 Swedish municipalities, each keen to trial the ever-evolving street kits.

Currently, however, most responsible agencies do not use experiential prototypes to shift urban environments like streets, gallery-bound or otherwise. Instead, the culture of planning is immersed in analytical data models, whether simple spreadsheets or advanced digital twins. As anthropologist Genevieve Bell puts it, "data is what has been, not what could be, and therefore is always conservative and constrained." Uncritically assessing historical increases in car ownership, for instance, begins to suggest that such patterns conform to inevitable natural laws rather than market-shaping policies, in turn justifying further car-based infrastructure provision. Yet our challenge, surely, is to actively reverse the curve of those historical graphs, rather than blithely tracing our fingers along on their upward curves forever.

Possible future for Street Moves prototypes.

ILLUSTRATION: Utopia Arkitekter

Early Street Moves prototypes.

PHOTOS: Lundberg Design

Yet strategic prototyping could manage the risk involved in the bolder possibilities of decide-and-provide. By emphasising portfolios of grounded and tangible participative experiments at the 1′ City scale, with adaptive design allowing progress to be shaped by feedback loops and deliberation, strategic prototyping is quite different in spirit to the abstracted lop-down′, often destructive planning practices deployed in the so-called Rapid Acceleration era. Strategic prototyping's contemporary dynamic is far more likely to be a retrofitted 'small pieces, loosely joined' approach to systems weaving themselves together from the ground up, with 1′ Cities informing 15′ Cities, and 60′ Cities beyond, rather than the other way around.

Today's infrastructures, based on distributed, decentralised systems like micro-mobility, distributed energy, and digital-physical interactions, enable this subtler form of city-making, just as our diverse cultures and politics demand it. The major trends that are likely to define tomorrow's world, such as zero-carbon societies or the global population slowdown, also present a quite different dynamic to that of the last century. These drivers of change should reinforce a practice of careful and engaged 'refining in place'.

Strategic prototyping provides a means to imagine possible futures, but together, in public, through making and adapting. Speculation is bound into practice rather than paperwork, with data following doing. In this reversed model, urban policies might be thought of as the crystallised insights that emerge from strategic prototypes. Strategic prototyping enables neighbourhoods to work with forms of self-organisation and mutualism whilst the broader platform of governance 'behind' informs and reinforces wider urban conditions and systems predicated on a re-engaged and re-tooled municipalisation. It recognises that a city exists at the scale of a game of street football or a shared apple orchard and at the same time that of regional watersheds and metro systems. It connects decision-making at the individual scale with that of the city.

In this emerging form of engaged transdisciplinary practice, strategic prototyping carefully tries to attune cultures of decision-making for the challenge in question. It provides a district or block with an engine and stage for endless invention, whilst absorbing shareable learning, cultural expression and valuable resources into the long fibres of equitable fabric that make a city greater than the sum of its parts.

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Healing a landscape

Ylva Frid

The fields slope down to a dense, overgrown area just south of *Fengersfors bruk* in Dalsland. A path runs across the field, marked by small signs on sticks. The path leads into the thick undergrowth, across small footbridges, and then everything closes in as damp alder forest takes over. Rusting wrecks of cars, empty oil drums and car tyres litter the slopes to the left of the path. A stream runs adjacent to the path, and some of the rusty drums are reflected in the watery surface. Further ahead, the landscape opens up. A footbridge leads out into a muddy, grey-white area. The lime sludge field spreads out.

Next to the trunks of a few slender birches, tall, flaky objects rise up amongst the roots. Their tops glisten green. Something can be seen out in the field. Something that looks as though it grew there, made of the same material as the surface on which it stands.

Artist Cordula Bielenstein-Morich has been working on large ceramic works for the site since spring 2021. More and more of them are finding their way into the strange landscape, forming a kind of wordless language that tells their tale to those who find them. Cordula herself explains her works as being all about depicting the healing power of nature – how it always finds ways to recreate life, even in places that have been severely scarred by industry, chemicals and heavy metals.

Fengersfors bruk was once a world-leading paper producer. Ocean paper was invented here, a waterproof paper that protected goods that were transported across oceans. This was a major product in the first half of the 20th century, when maritime transport increased dramatically around the world. The paper was transported from the factory on small railway wagons down to the jetty in Lake Ärr, where it was loaded onto a boat and continued on to destinations like Buenos Aires, Tel Aviv, Cape Town and New York.

Ylva Frid is an architect and writer and lives in northern Dalsland. Her own company, Vega, focuses on creating positive transformation processes using existing buildings and environments. She also runs the Healing Heritage research project together with the artist collective Not Quite.

Ceramic works by Cordula Bielenstein-Morich among birches with aerial roots on the lime sludge field.

PHOTO: Ylva Frid

ILLUSTRATION: Yaroslava Korchagina, Warm in the Winter

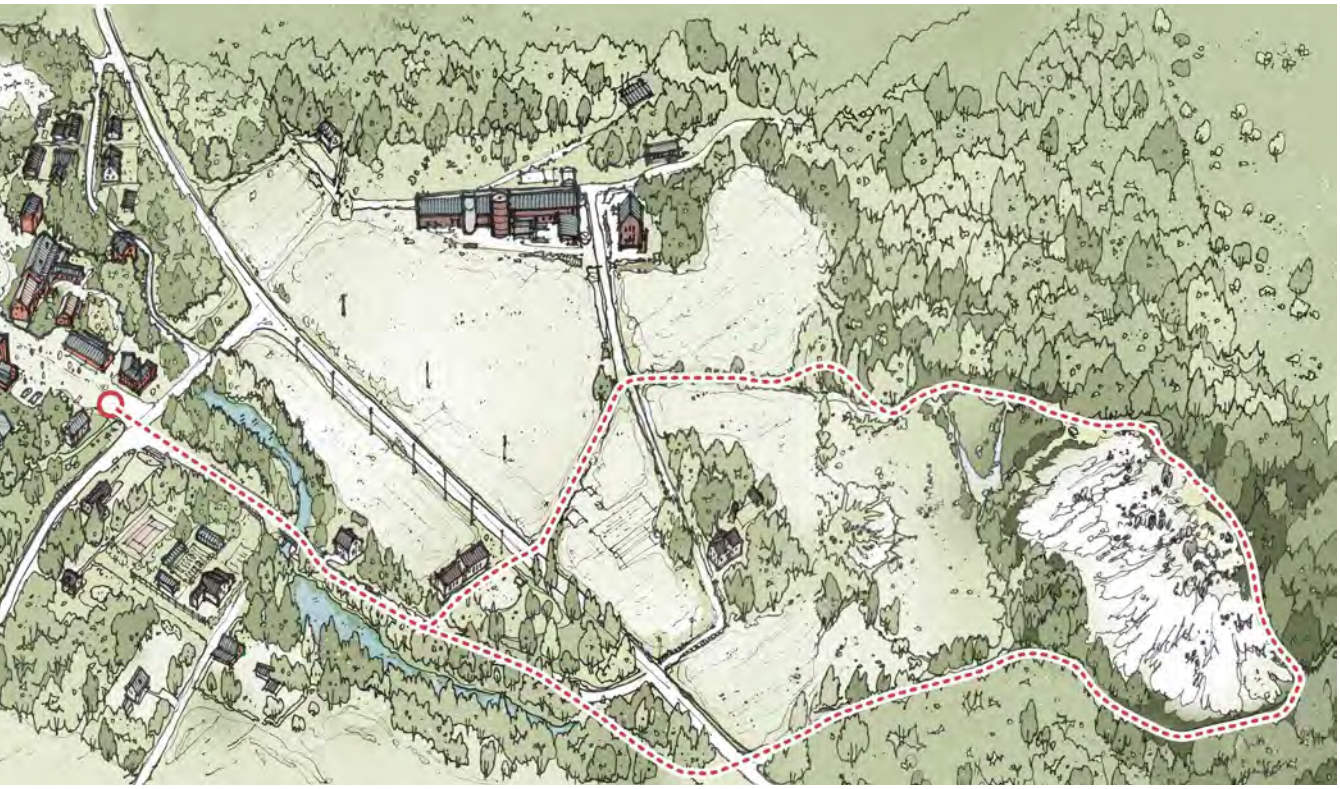

PHOTO: Ylva Frid

Map of the path leading out to the lime sludge field from Fengersfors bruk

The lime sludge field consists of the lime-rich material known as lime sludge, which emerged as a byproduct of paper production at Fengersfors bruk.

A kind of model community grew up around the factory, with homes, a school, a shop and a community centre. The factory buildings themselves were constructed using the best materials by the most talented tradesmen, and were built as if they were intended to last forever. But that was not how things turned out. Paper production ceased in 1968, and the last shift workers walked out through the gates. Plastics and container shipping had driven ocean paper out of the market, and globalisation was reshaping conditions for the industry in Sweden. Fengersfors was hit hard. Industrial towns were shattered.

In 2003, the artist collective Not Quite established itself on the factory side. Since then, the town has gradually developed into one of the few places in northern Dalsland to have a growing population. Today, there are around thirty businesses operating on the factory site, most of them working with small-scale production and the creative industries. During the summer, it is also one of Dalsland's biggest visitor attractions, with a café, exhibitions, events and opportunities to explore the unusually well-preserved industrial environment.

The background to the Healing Heritage project can be found in the process of establishing new ownership of the site that began in around 2019. The current owner of the factory indicated at the time that they were considering selling the site. In response, Not Quite initiated a process together with a number of other stakeholders to shape a new form of ownership, thereby safeguarding the site as a place for the production of art and culture. In 2020, I was appointed as the project manager for this process. Dealing with the issue of potential soil contamination was a key concern right from the outset.

As the legislation currently stands, any new owner of a contaminated site becomes responsible for decontaminating the land if so required. However, that same responsibility is not placed on a current owner, unless it can be proven that they caused the damage. In the case of Fengersfors bruk, the contamination dates back to an era before the current owner took over, so it was necessary to look into the cost of decontamination. This situation effectively makes it impossible to obtain a bank loan to purchase potentially contaminated land, as the costs of remediation could be enormous. Finding new paths forward would be a way of eliminating obstacles to development for valuable industrial environments in rural areas.

The Healing Heritage sub-project was initiated as a way to both raise awareness about the contamination situation and explore whether other methods were available for decontaminating the land. The usual method today is to remove the contaminated soil, which essentially involves moving the problem elsewhere. There are currently 9,653 potentially contaminated sites in the Västra Götaland region alone. Where would the soil from all those sites be placed if they were all excavated? And what kinds of sites would be created in the places where the spoil was deposited? We wanted to explore whether it would be possible instead to use what is known as phytoremediation, a method whereby plants are used to extract or break down harmful substances in the soil in various ways.

If it turned out that it was possible to decontaminate the soil using sunflowers, mustard and other flowering plants, then the decontamination process itself could become something to experience and engage with. A garden or a landscape park that also fulfilled a function. This is also a method that uses photosynthesis as an energy source and tackles the problem *in situ*. The first thing to be done was to explore how what we were left with – the contamination and the need to address it – could be transformed into a resource for the development of the site. At the same time, we had to raise awareness of the huge impact industry has had on the landscape as a whole. The lime sludge field is one such area.

There were no paths leading out to the lime sludge field before we started work. The site was described in the initial soil contamination reports that were compiled in 2018, and yellow warning triangles were marked on the field in the maps in that documentation. Initially, I imagined the field to be a kind of evocative toxic landscape. A bit like the toxic forests in Hayao Miyazaki's film *Nausicaä of the Valley of the Wind*, perhaps, where grey jungles filled with poisonous spores proliferated after some kind of disaster, or like the landscapes around the abandoned car factories around Detroit and Chicago. Vast, strange landscapes that were hard to reach. Would it even be possible to access the site?

The research council Formas' call *Gestaltad livsmiljö* (Designed Living Environment), which granted us funding, focused on public spaces. So where are the important public spaces in the countryside?

One of the answers, undoubtedly, is: in nature. Paradoxically, however, nature is often less accessible in the countryside than around cities, as there is often a lack of maintained paths and hiking trails. The idea was to increase access to the surrounding landscape simply by adding a path connecting Fengersfors bruk to the lime sludge field.

The call also encouraged interdisciplinary collaborations between art and natural sciences. Researchers in the natural sciences, artists and architects, all members of our team, have worked together to highlight different aspects of the industrial footprint.

As it turned out, the lime sludge field was not particularly toxic at all. Natural science contributed clear, factual explanations: lime sludge is a basic (alkaline) material, a byproduct of paper production. It is a kind of calcareous clay that has such a high pH that plants struggle to grow there, while also being so densely compacted that roots can barely penetrate it. In parallel, an artistic exploration of the site began and is still ongoing and evolving.

Aerial photographs dating back to the 1960s show a site that is completely different to how it looks today. Sharp outlines of dark ponds can be seen across the site, and it is clear that the structure is deliberately engineered. When the factory was operational, the site was used to separate paper fibres from the water before it was discharged into the lake, and to deposit lime sludge, a by-product of production. The path that now runs around the lime sludge field follows the old embankments, which have lost their sharpness over the decades and become criss-crossed with trees.

The lime sludge field could be viewed as a prototype for how to develop sites with modest means and using local operators. Physical planning often involves shaping and designing a space, usually in an office setting, before it is implemented on site. Here, by contrast, the approach has been to work on the basis of what is already there and highlight its unique aspects. A strong artistic presence and a finely tuned sensitivity to all the things that the place communicates. The site we have mapped, surveyed and worked with covers more than fifty hectares. As a prototype area, therefore, it is vast. And yet the interventions themselves are modest and subtle. There is now an accessible path to use, even though it still comes across as wild and overgrown. That sense of personally discovering a strange and hidden place was exactly what we wanted to preserve. This is a way of working that could be described as making the most of what you have. This is not placemaking on a huge budget, but a low-key, cautious process that cares for what is already there.

The site was used as grazing land for animals before the ponds were built on the lime sludge field. Nature is slowly beginning to reclaim the barren site, of course, but progress is slow. Cattle could help accelerate this process and aid in the healing of the landscape. There are examples of similar approaches being used to combat desertification. By setting silage bales out for cattle in areas that are too dry for grass to grow, a process can begin that will gradually restore biological activity to the land. In just a few years, cracked semi-deserts have been transformed into lush areas with rich biodiversity using this method.

Healing Heritage
In the Healing Heritage research project, artists, researchers and architects work together to turn contamination, something that might initially be viewed as a problem, into a starting point for creating something new.

Methods are being tested at Fengersfors bruk in Dalsland that aim to remove heavy metals from soil using plants. The first display garden featuring soil-cleaning plants opened in the summer of 2022, while a second will be completed in spring 2023. The project has mapped how industry has affected the entire landscape between the two lakes, Knarrbysjön and Ärr, which were historically used during the industrial era for floating in timber and shipping out finished paper.

The project involves testing phytoremediation plants and carrying out a broader investigation into the relationship between industry, history, landscape and environment. One starting point for the project is to help to develop new ways of preserving cultural heritage environments and making them accessible, and to create new public spaces in rural areas.

PROJECT OWNER: Not Quite.
PROJECT PARTIES: Warm in the Winter, RISE, Urban Futures.PROJECT MANAGER: Ylva Frid.PARTICIPANTS: Cordula Bielenstein-Morich, Ulrika Aneer, Miklós Fözö, Björn Ekelund, Yaroslava Korchagina, Fredrik Fogelberg, Kristina Mjöfors, Kerstin Hemstöm, Jenny Lööf, Nils Strand.
FUNDING BODY: Formas through its call Gestaltad livsmiljö (Designed Living Environment).PROJECT PERIOD: 2021–2024.

www.healingheritage.se

If we could eventually do something similar on the lime sludge field, the area could eventually be restored to pasture. The lime sludge field would then be transformed from a sculpture trail through a kind of landfill site and become a trail through a cultural landscape where animals graze.

In this way, the project is also a prototype for a new perspective on nature conservation, which involves moving away from management – that is, setting aside protected nature as national parks and reserves – toward actively restoring nature in places where it has vanished. This process is often referred to as *rewilding* and is frequently highlighted as one of the responses to the immense challenge we face on Earth.

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How is prototyping done?

Malin Finlöf

Before a prototyping process begins, there is always an initiative. It can come from various sources: a citizen, a municipal worker or a property owner – or from somewhere else entirely. The initiative arises for one of two reasons: either because there is a site that needs to be developed, or because there is a need that requires a site. Regardless of the actual reason, the criteria for the site or the need have to be mapped out.

When mapping a need, talking to the target group is always the most fruitful approach. Or, if no such group exists, it is worth talking to someone who has worked for a long time on meeting the need. Needs are important even when the site is the starting point, but in that case they come later in the prototyping process.

When a site is to be developed, it is desirable to select a site where planning has just begun or is about to get started. It is important to have time between the start and the point at which the site is to be completed: this is precisely when a place development method focusing on the prototype really comes into its own. Planners need to be involved in the process, either driving operations or participating at regular intervals. Talk to them and understand what they have in mind for the site. Something to start from is often available; perhaps a vision, a comprehensive plan or some other general planning document.

Malin Finlöf is an architect, employed by the City of Gothenburg. Since 2016, she has been involved in on-site construction and early-stage development at locations such as Frihamnen and Hammarkullen.

ILLUSTRATION: Lukas Hamilcaro

ILLUSTRATIONS: Lukas Hamilcaro

If you want to map a site, you need to spend time there in order to get to know it – from all angles. And it is better to visit the place often and for longer periods than just to conduct the occasional site visit. Have a picnic, take photos or create sketches, bring along old maps and see what is still there. Perhaps a book has been written about the place? Some history to read? Maybe you can talk to someone who worked or lived there? And then there are more technical and legal conditions. Who owns the land? Are there any ground conditions that it would be useful to be aware of?

Gather all your material in a single location: it is always useful to have it. Document the site as it is right now: is there anything distinctive about it? What qualities can be identified? Try to spend time there at different times of day, and for different lengths of time. Invite others to come along, people who do not think like you. What can they see at the site? Have they been here before? What can they imagine? What would make them want to go there?

Bear in mind that it might be a good idea to bring along something you can offer them – a special experience or something else that makes your invited guests happy. Things like that usually make people more willing to share their thoughts and ideas, and it becomes easier to keep them there for longer. It may also be a good idea to ask groups that are not usually consulted or who do not regularly attend public consultation meetings. There are often strong incentives to create something specifically for marginalised groups that do not usually find themselves at the centre of attention. Hopefully, your invited guests would grow to like the place they are helping to shape so much that they would populate it during the process. Generally speaking, places can be magical when you are alone, but they are best when you have company.

If the planners were not involved in the mapping phase, invite them again and share the information gathered with them, ideally in a form that they are not used to. Perhaps they would like to come and have lunch on site? The more familiar both planners and prototypers are with the site, the more knowledge can be gained by testing prototypes. Planners can bring their sketches and a roll of paper with them so that the qualities can be labelled and the information compiled.

Reflect on the what you have learned about the site and what might happen going forward. Is there any connection? Are there any physical features on the site that it would be a good idea to preserve? Can they be kept as a kind of bridge between now and what comes next? Any of the old features remaining may perhaps just need a minor adjustment to enable them to be used for a new future.

You rarely think of everything when sitting alone in your room. So it might be a good idea, as you did during your mapping work, to bring together a group of people with diverse perspectives. It is best to pay salaries to such people, so a procurement procedure or similar arrangement is recommended. Be clear about what is being asked for. Having an interdisciplinary team with different perspectives is a must, otherwise you will rarely be surprised. An architect of some kind is usually good, but a human geographer or an artist might be useful as well. Include someone who is skilled with their hands, who can quickly create illustrations and sketches on the basis of the discussions and ideas that arise. What would happen if you did X, Y or Z?

Communicating in pictures is important for this kind of project, where the end result can rarely be predicted in advance. Continuous discussion and feedback are a prerequisite for being able to keep up with a varying process towards an unknown goal. Some of the people who were involved in the mapping phase could also be invited to take part in the discussion: they may have valuable perspectives to offer at this stage.

It is important to talk to the landowner as the proposal is sketched out. In a best-case scenario, you will own the land yourself. If not, you will need to reach an agreement on what can be done and who will cover the costs. Eventually, a few prototypes will have been identified that feel exciting to develop; a few what-if elements that spark curiosity and engagement. Investigate which of them can be implemented, given the timeline and the funding available. Sometimes, there may be a call for proposals where you can apply for funding that will pay for resources for a more exploratory or time-consuming process.

When the design proposal has taken on a more defined form and has been turned into building permit documentation (if so required!), it has to be submitted. It might be a good idea to factor this into your scheduling from the outside, as it can take a long time to process applications. However, it is perfectly possible to start planning while that process is ongoing. What materials will be used? Where can they be sourced? Is it possible to reuse materials from elsewhere? Also consider the construction process – some parts will need to be done by professionals, but maybe other parts can be built together with others? Could novices be invited to take part? Do all the people who were involved in the mapping phase want to help build the prototype? If parts of the process can be opened up to include others, this is always enjoyable and helps to create relationships – both to the site and to the function the prototype is intended to serve. An inclusive process fosters engagement, which is desirable to carry into the next phases of the prototyping process – the use.

Now it is time to build the prototype! This is one of the most enjoyable and intensive parts of the project. Try to enjoy this period, and make time to celebrate the little milestones along the way. When the prototype is completed, it is a good idea to host an opening celebration and invite all kinds of people – decision-makers, planners, surveyors, builders and others. At that time, everyone can have a look at what actually ended up happening, usually in combination with a prototype-specific activity. An outdoor kitchen, for example, where the main function is – of course – to prepare food. But it also creates an excellent opportunity for people to prepare food and eat together. So what happens next? What conversations arise? What encounters? Where do people sit?

When the prototype has been built and inaugurated, it is important for it to be given the opportunity to go on living. How can it be brought to life? Does someone need to be on hand to activate it, or is it necessary to let people know that it exists and can be used? It is also important to go on managing it. There are times when minor and inexpensive adjustments can give a prototype a real boost. It is important to ensure that some of the budget is left over for this part, for create programmes that attract visitors and give them the opportunity to come up with ideas of their own that they can turn into reality. All relationships formed during the process need to be nurtured, regardless of whether they are to be ended, extended or altered. It is also important for several people – planners, builders, decision-makers, and others – to take the collective knowledge generated by the process and carry it forward into the next steps. The best way to learn something is to test it!

ILLUSTRATION: Lukas Hamilcaro

How do you end a relationship with a prototype? The prototype has a limited life: that is one of its qualities, but it also presents a challenge when the period is drawing to a close. There is an unspoken promise in every conversation, bolt or scrape – regardless of your awareness of the project's time limit.

Ideally, the prototyping process should arrive at a permanent solution of the same type as the solution available on site before the prototype needs to be decommissioned. Anything that remains can carry the story forward and preserve the good relationships that have emerged as the work has progressed.

However, the prototype is not always given the opportunity to live on, either elsewhere or in a new, permanent form. In that case, it is necessary to pay attention to how you say goodbye and express your thanks for the time spent. Some kind of ceremony or event, perhaps giving people an opportunity to express their feelings on site or work together to help dismantle the prototype. Maybe you could have an open workshop where the prototype is taken apart bolt by bolt, board by board. Conclude the process with dignity and in the same way as it all began – together.

Further reading:

Bader, Markus, Kafka, George, Schneider, Tatjana & Talevi, Rosario. (eds.) (2022). *Making futures*. Leipzig: Spectormag GbR.

How it works!

02

Prototypes as a driver of change

Kolbjörn Guwallius in conversation with
Jessica Segerlund, Head of ArkDes Think Tank, Stockholm
Kristoffer Nilsson, architect and head of development process at Nyhamnen, City of Malmö

Jessica Segerlund and Kristoffer Nilsson had been hand-picked from the City of Helsingborg when they started working with the former harbour area Frihamnen in Gothenburg. They had outstanding experiences working on a harbour project in anticipation of upcoming urban development – the *Folkets hamn* area in Helsingborg.

"We received an invitation from Gothenburg to lecture on placemaking methodology. After that, we carried out a feasibility study and proposed development of the site through prototypes," says Jessica Segerlund.

Kristoffer Nilsson had already left his Helsingborg job, and Jessica Segerlund resigned. They were employed separately in Gothenburg – Kristoffer Nilsson worked at the City Planning Office, while Jessica Segerlund found a job with the municipally owned company *Älvstranden Utveckling AB*.

They embraced the vision for development area called *Älvstaden* as an inclusive test arena where the general public would be involved. Jessica Segerlund believes that their work led others to assume that inclusion had been achieved as a result.

"All the sub-projects in *Älvstaden* ended up being developed like this, and maybe we became a kind of alibi for others, but that's key to the vision," says Jessica Segerlund.

Involving the general public is increasingly viewed as a successful way forward for urban development. Since the project in Gothenburg, the EU has launched its *New European Bauhaus* initiative, where inclusion is one of the cornerstones. The aim is to promote environmental sustainability, good aesthetics and inclusion in everyday environments. Inclusion concerns everything from accessibility to the financial prerequisites for participation.

"Design is something that has to be done together with users. This is linked to sustainability and the transition we all have to make," says Kristoffer Nilsson.

He believes that the conventional approach, where an urban designer compiles a master plan, does not always produce good results from a sustainability perspective. The standard procedure includes politicians and city officials, but rarely users – except when someone lodges an appeal.

"This might be an easier way in which to work, but it won't achieve the things we need to do," says Kristoffer Nilsson.

But isn't that how things are usually done?
"Yes, definitely."

Do we need to move away from that completely?
"There are advantages to the planning instrument and the expertise associated with it. I don't think it should be replaced entirely, but it does need to be changed. Elements of urban development, such as the overall structure, need to remain stable. Urban development takes place over time, and so it's possible to work actively with temporalitites and to build knowledge on the basis of a place, to identify places and strategic issues where there's time to experiment."

Kristoffer Nilsson believes that not leaving everything to planners and engineers allows ideas to be identified that are rooted in a place and the people who use it.

The Frihamnen project required them to work with temporary building permits as this was necessary for them to get started quickly. The fact there was no detailed development plan also made things easier.

There was no local population on site to get involved, as this is a former industrial site that is being transformed into a city. The central location meant that some groups of people could be found in adjacent residential areas. But the initially inhospitable environment, three hundred metres away from the nearest apartments – as the crow flies – posed a challenge when it came to inclusion. Who should be included, who could be included?

"One crucial aspect was our cooperation with the NGO *Passalen*. This association worked as a stakeholder in the management and programming of what we referred to as the 'community hub'. That created a presence on the site."

Are there any groups you didn't reach?
"Yes, for sure. We insisted on working together with different groups when we created the prototypes. *Allmänna bastun* (the public sauna) was an open invitation, *Berget* was linked to a preschool, and we built a park together with pensioners. Several different groups took part, although things could have been done more methodically," says Kristoffer Nilsson.

The prototype work meant that the content of the park area Jubileumsparken and the placement of its various elements could be tested in a way that would not have been possible with a traditional development plan where everything is decided before construction commences.

"We designed, planned and built everything in fourteen months. That has to be a record. I don't think we even realised it ourselves while we were working," recalls Jessica Segerlund.

Could you work on a similar project again?
"I don't think anything should be done exactly the same way in another place. The fact that what we were doing was specific to the place, time and situation was all part of it. The site itself was unique, and the land was largely owned by the municipal company."

While Jessica Segerlund has moved on to ArkDes, the Swedish Centre for Architecture and Design, and work on the policy for designed living environment, Kristoffer Nilsson has a new harbour on his hands; in Malmö, this time. He has been the coordinator for the urban development project in the harbour area of Nyhamnen for some time now. This shares both similarities and differences with the Frihamnen area in Gothenburg.

One concept that he wants to reuse from Gothenburg is the 'community hub'.

"This involves creating a place for the whole city by the water. I truly believe that waterfront sites, with relational management, have that potential."

At the time of writing, resident participation is still only in the embryonic stages. The approach is not as pronounced as in Gothenburg, and there are no guarantees that it will be allowed to play as large a role. But the intention is to use prototypes to some extent. That is all part of the sustainability work.

Are experimentation and the involvement of the general public required to produce a sustainable district, or can you achieve success without them?
"You can build a city that's technically sustainable. But you'll only get some of the job done without involving the people who are going to live and work there. As far as I'm concerned, it's clearer now that this way of working is the path forward," says Kristoffer Nilsson.

The years spent working in Gothenburg have given them both a number of new insights. Jessica Segerlund relates how the challenges sometimes required persistence and refusing to take no for an answer when decisions were overturned.

"If I'd done that with the proposal to construct a public bath in the middle of the city, we'd have concluded that it just wasn't going to work. After all, nobody had ever done it before. But I'm very much of the mindset that things can always be improved if you just look into them a bit more closely, and if you have the courage to speak up when something isn't working."

Were you sad to have to let go of the prototypes?
"I maybe felt that we didn't need to have let them go so quickly. The management model with the association could have done with some more time. 'Business as usual' was forcing the pace, but the Frihamnen area is huge. We could have done things better. The prototype years weren't quite finished," says Jessica Segerlund.

Kristoffer Nilsson believes that the prototype model can inspire others.

"I hope it does, and I hope they carry it forward," he says.

Have you seen any signs of that?
"There's interest from several cities in Sweden, especially with regard to the *New European Bauhaus*, which leans towards small-scale interventions and has that in its DNA. Things will only be effective and sustainable if everything is done together."

In what way?
"Reuse and existing assets. Buildings can be utilised more than they have been over the last decade. But I think I'm seeing a shift."

While Kristoffer Nilsson perceives growing interest in small-scale projects, reuse and preservation, he believes that this will also bring with it economic challenges. Thinking outside the box is often perceived as more expensive, although this does not necessarily have to be the case.

Can you get politicians on board when the benefits can't be measured in purely financial terms?
"In Gothenburg, there was a willingness to view the finance differently. There's something in the way our administrations are structured that makes it easiest to just do things the way they've always been done. That's the biggest obstacle to change, more than politics itself. Although there also has to be a political desire for transformation, too," says Kristoffer Nilsson.

Kolbjörn Guwallius is a freelance journalist, author and photographer. He writes regularly about aspects such as sustainable urban development. A number of his books deal with aspects of the city and public space, most recently in his book *Grindstaden* (2022) about *gated communities*.

Keep it playful!

Kolbjörn Guwallius in conversation with *Anna Tidefelt*, project manager at *Älvstranden Utvecklings AB*, Gothenburg
Ia Kjellsdotter, operations manager at *Passalen*, Gothenburg

Anna Tidefelt at the public developer *Älvstranden Utvecklings AB*, together with Jessica Segerlund, was project manager for the park area Jubileumsparken prototypes *Berget* and *Näsan i blöt*, which were specifically aimed at children. *Berget* was a water-based artwork made from plywood panels that became just as much an unofficial playground as a work of art due to the fact that it was so easy to climb. The design was created by artists Akay and E.B. Itso.

When the wooden panels began to give way, it was time to dismantle *Berget*, right on schedule. The water play area *Näsan i blöt* was already completed by that time: but that, too, was a prototype. A permanent playground was eventually built on the site.

When it all began, the Frihamnen area was a place where nobody lived and few people had any connection to it. There were no public activities or places worth visiting. To get children involved in the process, contact was made with Rambergsskolan, the nearest school, even though it is over a kilometre away on the other side of an arterial road.

"We felt it was important to work with children from the local area, because we realised that they were likely to be the first children to play here. But awareness of the Frihamnen area was low, so the threshold was much higher then than it is now," says Anna Tidefelt.

The children were invited to a water-themed day. They did wet experiments and got to try their hands at sailing in the harbour basin. They also got to meet the artists who were going to build *Berget*.

"It was a fun-packed day, with happy children playing in a new place that they'd never been to before. They were given a sneak peek at the future, and it really whetted their appetite for the water-themed playground that was going to be opened."

How did you manage to find the right group of people to invite?
"As a public stakeholder, you sometimes send out open invitations through the channels you have available to you, like social media. Having that direct contact created a sense of closeness."

Is there a risk of excluding groups too?
"From a democratic perspective, we tend to think we have to reach out to everyone, that it's always important for the same chances to be available to everybody. But just because you make everything general and inclusive, that doesn't mean it'll be for everyone. We felt that children living relatively close by would be the first people to play on a climbing structure in the Frihamnen area."

Did you hope the children selected would be representative of the general public?
"No. Rather, they were meant to represent as local a group of children as possible. That seemed like a reasonable place to start. Since then, we've worked in many other ways to reach out more to a wider area. That work hasn't been linked directly to *Berget*, although play on *Berget* often ended up becoming part of such visits."

Anna Tidefelt is convinced that the prototypes have influenced further urban development. The permanent playground is Gothenburg's fifth 'destination playground', and it has a unique design with elements drawn from the two prototypes.

"The playfulness, joy and permissiveness remain elements in the design of the new playground."

The *Näsan i blöt* water play area is still standing at the time of writing, But it is also set to be removed.

How do you feel about removing the prototypes?
"They're temporary by their very nature. In the true sense of the word, a prototype is something that precedes the permanent. I don't think *Näsan i blöt* will be as hard to remove as *Berget*, because there's already a replacement for it."

One important aspect of the prototype work has involved ensuring that there is always something new in place when earlier structures are dismantled.

"Otherwise, play in the Frihamnen area will end and the relationship building effort will have to start all over again. That's how it works. We're creatures of habit and build up a relationship with a place," says Anna Tidefelt.

The park area Jubileumsparken has needed staff to be on site to make it work, especially for the swimming and sauna facilities. Operations have been managed by the *Passalen* association, where Ia Kjellsdotter is the operations manager. She believes there is a difference between how those the people involved in work on the prototypes view them and how the general public perceives them.

"The concept of a prototype isn't something that's understood by the visitors who come here. They understand the word, but when people turn up at the park area of Jubileumsparken pool, they don't want to swim in a prototype. They want to swim, bathe and play," says Ia Kjellsdotter.

The discrepancy between planning and understanding among the general public has presented a challenge. But Ia Kjellsdotter still thinks prototypes are a good way of developing the city.

"I think it's a fantastic method, and that we should be doing a lot more work like this. It's important for us to have the courage to open things that aren't entirely complete. There's so much that gets built but people don't visit it, or understand it. So it's better for us to bring in the visitor's perspective when we're halfway through the work, and learn from that so that the permanent design can be influenced."

How did people react when you explained the concept?
"Visitors who just want to enjoy the sauna and have a nice time don't view the place as temporary. They might wonder why you can't extend something, or why there are no showers. That's when you have to explain to them that those kinds of comments are exactly what we need for our future planning. But that doesn't help them right then, when they want a shower."

But do they take it in?
"Yes, I think so. We've become good at explaining, too. But sometimes things have to be allowed to be complex, you can't worry about the fact that not everyone will understand the prototype phase. It's good that the city is doing this. We have to be able to learn, reflect critically and see what goes well and what doesn't," says Ia Kjellsdotter.

For Anna Tidefelt, the challenges don't end when the prototype work is over.

"The transition to something permanent is what presents the real challenge. That requires a lot of effort. It's probably good not to be aware of just how big that challenge will be, because that could be daunting. The key is not to be daunted early on in the process, and to try to consider what lessons can be learned from what's been done," she says.

Art develops the city

Kolbjörn Guwallius in conversation with
Magdalena Malm, Secretary General of *Bildkonst Sverige*, Stockholm

Magdalena Malm is the first Secretary General of the trade organisation *Bildkonst Sverige*, which was founded in 2022. She used to be a director of Public Art Agency Sweden. She believes that artistically oriented prototypes, like the ones in the park area of Jubileumsparken, could play a much larger role in urban development.

"Art in urban development and urban planning is a major part of contemporary art. Not only in public art, but also in projects that artists themselves spontaneously engage in. This is one of the main strands of contemporary art," she says.

It is not unusual for artists to be hired to draw attention to assets that developers do not see.

"Architects and other contractors are usually client-driven. They do what they're asked to do, and they're loyal to their client. Although artists are being paid by a client, their loyalty lies with residents and societal issues, and they can look at a place with a great deal of integrity."

How would you imagine a prototype turning out?
"It could be anything from a physical design to hubs. Artworks can be used to test how we might create new public spaces. What happens during this activity? How do we program it?

"Art prototypes can also be used in discussions with residents," says Magdalena Malm.

"Art can engage the general public in many different ways. Instead of simply doing a survey to find out what people want, you can tap into how it feels to spend time in a place."

Do you think the role of art in urban development will evolve going forward?
"Definitely, yes. I believe it'll become even more socially engaging and address issues about what our public spaces are. I also think we'll see art being integrated into urban development projects in a completely different way. You can create great added value in urban development by bringing in the human perspective."

And work out from there how to take things forward?
"Yes. And to test the waters, you often need to start off with prototypes. This allows for a more organic process whereby you gradually come to understand the place before you create permanent solutions. You can adopt a listening approach towards the place and the people there."

Does art in a public space have to appeal to the many in order to be legitimate?
"People often refer to art as being appealing or beautiful, but I think the most interesting aspect is that it's relevant. Does it mean anything? Does it make a difference? We don't need meaningless works of art."

How do you know if it's relevant?
"This is something you know if you work with art, you can see it in how people relate to it. Do they care about it, look at it, talk about it? Art isn't decoration, as we used to say. I see art as content, something that stirs emotions and makes people think."

Does art need to be more participatory?
"A lot of the art created in the public space is participatory. When we talk about things like discussions with residents, for example, we don't mean getting people to decide exactly what a building or a street should look like. It's all about listening to what people want and need."

What emerges from discussions needs to be processed further. The idea is not to hold a vote, but to listen to what people have to say and interpret that.

"The notion that we have to achieve a majority and allow people to decide everything for themselves is simplistic. I reckon much more interesting ideas about participation can be identified by just listening. Many artists are good at understanding, translating, interpreting and listening."

Magdalena Malm has not been involved in the prototype work in Gothenburg, but she has been involved in the city's permanent art. As a former director of Public Art Agency Sweden, she chaired the team of judges who selected the artistic works for the infrastructural project of *Västlänken*.

One work that sparked widespread debate was the art work *Evig anställning* (Eternal Employment) by Simon Goldin and Jacob Senneby. The concept involved hiring a person whose job would be to clock in to a dedicated space at Korsvägen Station, after which they could make their own decisions on what to do with their working hours. Some critics felt this was cynical. Magdalena Malm disagrees.

"It wasn't about putting the person on public display. It was a person who was to clock in and clock out, and choosing what to do with their day. I think a lot of us will face that situation as AI develops, a situation where not everyone will have the same level of employment. We'll need to find new ways of distributing our resources going forward."

The artwork was later withdrawn on legal grounds, as the State was not allowed to fund a foundation that pays salaries. But the other works are going ahead. Perhaps more subtly thought-provoking is Danh Vo's work at the Central Station. This is integrated into the building by means of elements such as furnishings and is based on what is known as a Chinese wooden knot, a kind of puzzle. This is a nod to Gothenburg's early history as a trading port with East Asia. But the wooden knot structure also uses the same technique as in buildings that are designed to withstand earthquakes.

"It's a multicultural society, there are frictions. But we can build houses on structures that are able to withstand friction. So this was a very strong conceptual idea about a multicultural and pluralistic society that can hold together, as long as we build it correctly."

Several of the *Västlänken* works push the boundaries of what public art might look like or be designed.

Is this an important discussion to have?
"Yes, because public art has lagged behind contemporary art for a long time because it's tied to a building or a place. It has to be permanent, while all other art can be absolutely anything. Embellishments have provided an important source of income for artists for a long time, but they're not necessarily a field in which artistic ideas are developed."

At the Public Art Agency, Magdalena Malm aimed to broaden public art in a way reflecting contemporary art more accurately. In doing so, she believes it can be just as relevant as the independent art presented at institutions. Public art does not have to be merely pleasing to look at.

"Art has many other values. It can raise questions and remind us what it means to be human. Sometimes you want to create a positive and caring environment. But in other parts of a city, there may need to be a sense of resistance, something that jolts people awake and helps them understand certain issues."

According to Magdalena Malm, restricting public art on the basis of notions of what is beautiful would be a dangerous path to take.

"There have been proposals for referendums on public art. But the arm's length principle is important, and not just in culture. We don't want the general public deciding who gets to go first in the queue for healthcare. We need to return to the idea that people with expertise make certain decisions."

So you're saying that participation in public art needs to go beyond direct decision-making?
"You can incorporate dimensions of participation into public art and keep the processes more open. But if the majority were to decide what kind of art we should have, the necessary knowledge would be missing; just as doctors have to be the ones to decide how healthcare should be organised."

But that said, aren't people forced to encounter public art, in a way?
"Sure, but they're also forced to encounter the environment in a bus shelter, or at a clinic. I don't think we want referendums on exactly what a bus shelter should look like. We want to understand what people want to do in the bus shelter and let professionals design it on that basis."

From prototype to permanent

Kolbjörn Guwallius in conversation with
Jan Liesgang, architect at raumlaborberlin, Berlin

The prototype *Allmänna bastun* (the public sauna) looks like something that might have been there since the industrial harbour was built. That was also part of the idea behind its construction and choice of materials. This experimental project, led by Berlin-based architectural collective raumlaborberlin, gave the park area of Jubileumsparken a building that became both a success and a demolition project. In 2023, the sauna will be replaced by a new structure based on the same concept.

Raumlaborberlin also led the work on the prototype *Allmänna badet* (the public pool) next to it. This is a pool that rests on pontoon bridges out in the larger harbour basin of the river *Göta älv*. It is also being remodelled to create a larger swimming facility with more pools, but based on the same concept.

Raumlaborberlin came into being in the 1990s after the fall of the Berlin Wall. A team of architects, several of whom had known each other since their student days, saw the opportunities in the abandoned public spaces that suddenly opened up across the city.

Slowly but surely, their spontaneous activities turned into a professional practice where they were commissioned for projects at points where architecture, art and urbanism met. Their early work included a project in Halle-Neustadt, near Leipzig in the former East Germany, where the city was shrinking as the population moved away after reunification. That project required the involvement of local residents.

"There was no other choice. It was the only way to find out what was going on. The people living there wanted positive social development. As architects, we often think we have the solutions, but we need to involve residents, the local experts, to truly understand what's going on," says Jan Liesgang, one of the founders of raumlaborberlin, who led the work in Gothenburg along with colleague Francesco Apuzzo.

That particular project did not result in any major practical changes. A municipality that is downsizing has little in the way of opportunities to invest. But when raumlaborberlin helped to organise a theatre festival, they realised that something can be done even without having lots of money or influence.

They have carried that mindset with them ever since. They have consistently continued to involve amateurs in the work processes.

"It's all a matter of making it possible for non-professionals to play their part in the world of planning and architecture, in the development of their residential areas, and allowing their voices to be heard in the public space."

When Gothenburg contacted raumlaborberlin, they initially thought they would not have time to get the job done. But in the end, they headed over there – and essentially encountered a tarmac surface.

"It looked more like a big car park. There were a few artworks, but very few people. And it was very windy. We were a bit sceptical. Who is this meant for? Will people perceive it as a park? A few trees or a playground would be needed."

Jan Liesgang and his colleague asked to be allowed to build right beside the water, where there were at least a few trees. And then they got to work on the outlines. They made a digital model of the sauna and built a physical version before construction began. Many of the solutions were created on site as the project progressed.

"There was a time when project manager Kristoffer Nilsson told me a lift was needed. We hadn't realised we needed one for a prototype, but it had to be accessible. So we had to rework the design, moving from four narrow legs to one thick leg to accommodate the lift."

The fact that many decisions were made along the way made the building process organic. Back in Germany, raumlaborberlin found a company that had experience of building pools with natural water treatment. They had no experience of pool construction themselves, and so they needed to learn quickly.

The job took just over six months, from the start of planning to the opening of the facility. This required new working methods and short lines of communication between the architects and the contractors required.

Altering the design to accommodate a lift was not the only aspect that changed as the work progressed. Other accessibility aspects had to be adjusted as well. But the worst part was that the sauna had the wrong insulation.

"The protective membrane was placed on the outside to shield it from the rain, but it should have been somewhere else."

After a few years, *Allmänna bastun* (the public sauna), which was once nominated for Swedish annual architectural award, was damaged by mould. This made it impossible for the prototype to become a permanent building. Otherwise, there was a chance it could have remained in place. Instead, the sauna had to be made permanent by building it from the ground up using materials recycled from the prototype. But Jan Liesgang does not consider that to be a major issue: he views it more as a learning process.

"It was intended to be a temporary structure, after all. Of course, we double-checked everything anyway. We were conscious of the fact we were spending public money. We talked to sauna experts, we talked to engineers. But if we'd known from the outset that the sauna could have been left in place, we probably would've looked at everything one more time. It's a bit unfortunate, but these things happen even with permanent buildings."

One major success, though, was that the sauna and pool actually became really popular with the public.

How did the sauna work as a public space?
"I think it worked very well, as a weird kind of incubator that brought together people of all ages, from very different backgrounds. Sometimes visitors to the sauna would keep to themselves, while at other times they'd start chatting about the city, the area, things like that."

Jan Liesgang is of the opinion that the prototype sauna provided a valuable learning experience ahead of the work on the permanent pool facility, which raumlaborberlin has also designed. One pool will now become three, and a footbridge is being built that people can jump from.

"The prototype has definitely influenced the permanent facility. That would never have looked the way it does now if we'd just been given a straightforward design brief from the outset. It's all so organic and landscape-oriented now. In a way, it both interacts with and challenges the image of the harbour," says Jan Liesgang.

Urban activism

Kolbjörn Guwallius in conversation with
Kristian Koreman, architect at Zones Urbaines Sensibles, ZUS, Rotterdam

The *Luchtsingel*, a word meaning something along the lines of "elevated walkway" in English, is an unusual pedestrian walkway in the heart of Rotterdam. It begins 250 metres east of the central station, as a passage through a building. Above the entrance, visitors are welcomed with the words "Test Site Rotterdam". Anyone who enters finds themselves in a backyard and are directed through the block 150 metres further on to a staircase where the *Luchtsingel* turns into a yellow-painted wooden bridge via a cut-out on the second floor of a building.

This bridge then links together a handful of points along a 400-metre stretch, allowing pedestrians heading east from the central station to completely avoid road traffic on a route that would otherwise be up to three times as long, depending on the destination.

But the main point of the *Luchtsingel* is that it connects the city centre with the disused Hofplein railway station, formerly the terminus of a separate elevated railway between The Hague and Rotterdam, on the other side of the tracks.

The listed viaduct remains intact over a 2.4-kilometre section heading northwards, although the actual railway tracks have been removed. Beneath it are a number of underpasses, but also small commercial businesses in the premises underneath the archways. The first part of the viaduct, the station itself, has been turned into a green rooftop park. The idea is that over time, it will become a green walkway through and out of the city, similar to The High Line in New York City.

It all began in the early 2000s. Property speculation in the heart of Rotterdam was causing rents to rise, but without activating areas of the city. The historic, bustling city centre that had been destroyed during the Second World War had been replaced in the post-war period by huge, modern buildings that were eventually abandoned over time, and large-scale infrastructure that created barriers in the fragmented fabric of the city.

"You could sense that a crisis was coming even before anything had actually happened. We thought the property market wouldn't be able to cope with the need for activation in the area, so we suggested allowing the public space and its infrastructure to serve as a catalyst for urban transformation," says Kristian Koreman of Zones Urbaines Sensibles (ZUS).

In 2001, he founded the architecture firm together with colleague Elma van Boxel. Referring to ZUS as an architecture firm is maybe something of an understatement, as it is so much more than that. Not only do the architects take on commissions, they also carry out independent research and experiments in urban design and urban landscapes.

Initially, they took on a kind of short-term lease in the Schieblock, an abandoned office block right next to the railway, which they renovated and made their own. And before long, ideas for revitalising the district began to take shape. Crowdfunding meant they were able to get started on the first parts of the yellow bridge, which was their own initiative.

"The first thing that was built was just the hole in the building, a platform and a staircase down the outside of the building down towards the road," says Kristian Koreman.

That was in 2012. The following year, the platform was extended into a bridge over the road, and the full section as it stands now was completed in 2014.

The bridge was built in the aftermath of a number of financial crises. As a result of these, there was a sense that public authorities could no longer be relied on to manage public spaces as a matter of course. Instead, private initiatives began to take the lead in a number of cities in Europe and the US, explains Kristian Koreman.

"We felt that prioritising public space also addresses the fundamental democratic values of our cities. The *Luchtsingel* was about highlighting the need for public space, indicating that this is something we should value. It was never just about the bridge itself."

Building the bridge made other related projects possible, too. Part of a car park inside the Schieblock was turned into a *Biergarten*, the back of another building was turned into a new entrance and that rooftop park was made possible. These were just a few of many initiatives.

Did all of this happen as part of the same project?
"The word 'project' is misleading. It was more like a movement of interventions. I'd almost call it an avalanche of interventions, little prototypes that just grew and grew.

In the book "City of Permanent Temporality" (2019), ZUS describes its 'urban activism' in Rotterdam over a period of 18 years. The city is described as a place in constant motion without ever intending to reach a final destination.

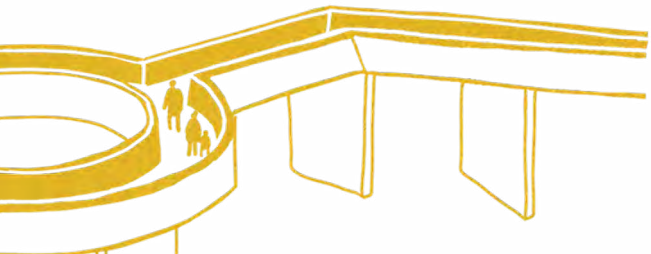
"We showcase 77 projects in this book, of which the *Luchtsingel* is just one. But of course, this is the most obvious and large-scale intervention. It was a success because it made so many other things possible."

The *Luchtsingel* was intended to be a temporary structure when it was built in 1843. Kristian Koreman says things could not have happened any other way. It would never have been possible to obtain a permanent permit for an independently initiated experimental structure that was not adapted for accessibility.

“The idea was for it to remain in place for a decade and then be demolished. But we hoped it would last longer, of course we did. We built it out of wood, which technically has a service life of several decades.”

As the tenth anniversary approached, numerous new plans for densification of the area had emerged – largely thanks to the *Luchtsingel*, perhaps. In any case, property developers assumed that the bridge would remain in place and began to ask for guarantees that it would not be going anywhere.

“Of course, their plans extended well beyond the decade. And eventually, the municipality stepped in and said the bridge could stay where it was. Discussions are now focusing on long-term maintenance. Eventually, the materials may be replaced with steel, concrete or new timber.”



Prototypes in Gothenburg

ILLUSTRATIONS: Lukas Hamilcaro, raumlaborberlin
TEXT: Cecilia Helsing

03

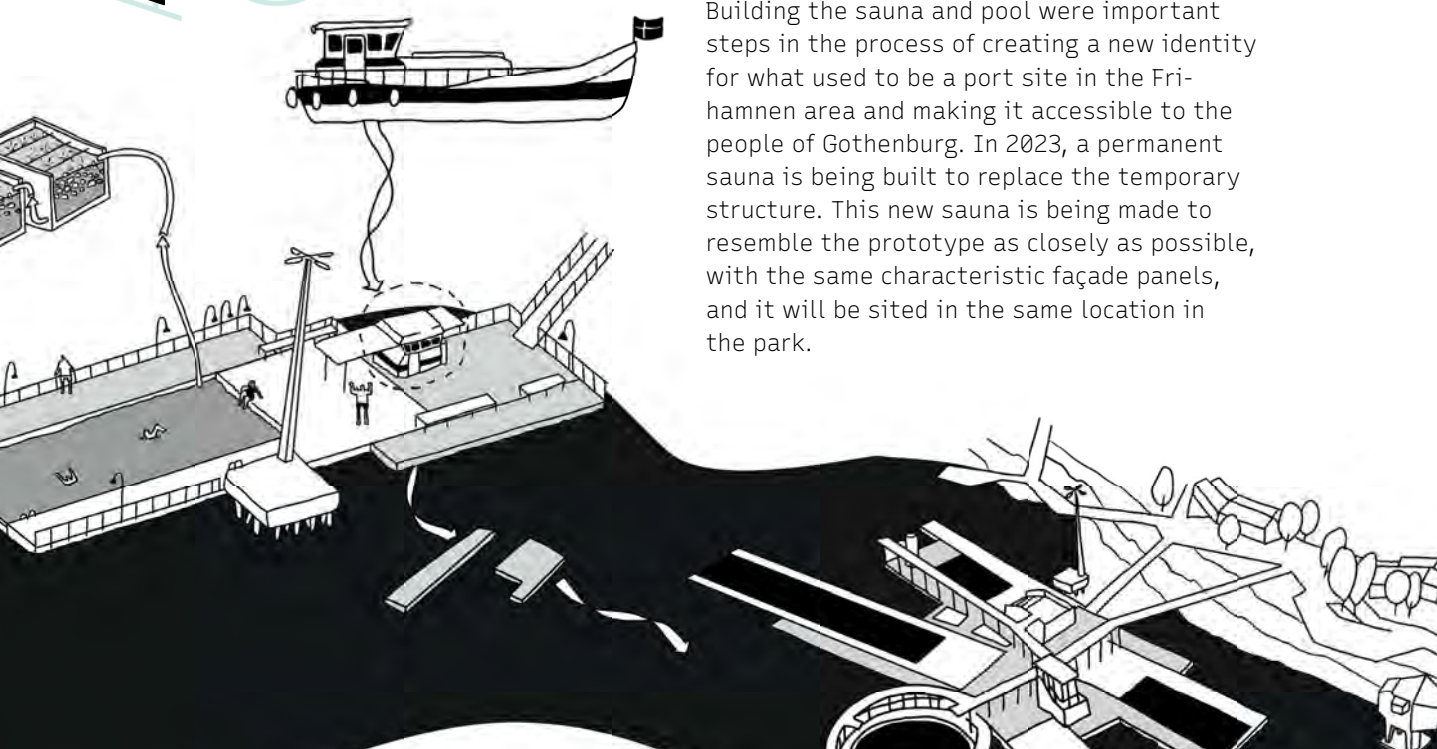
Allmänna bastun (the public sauna)

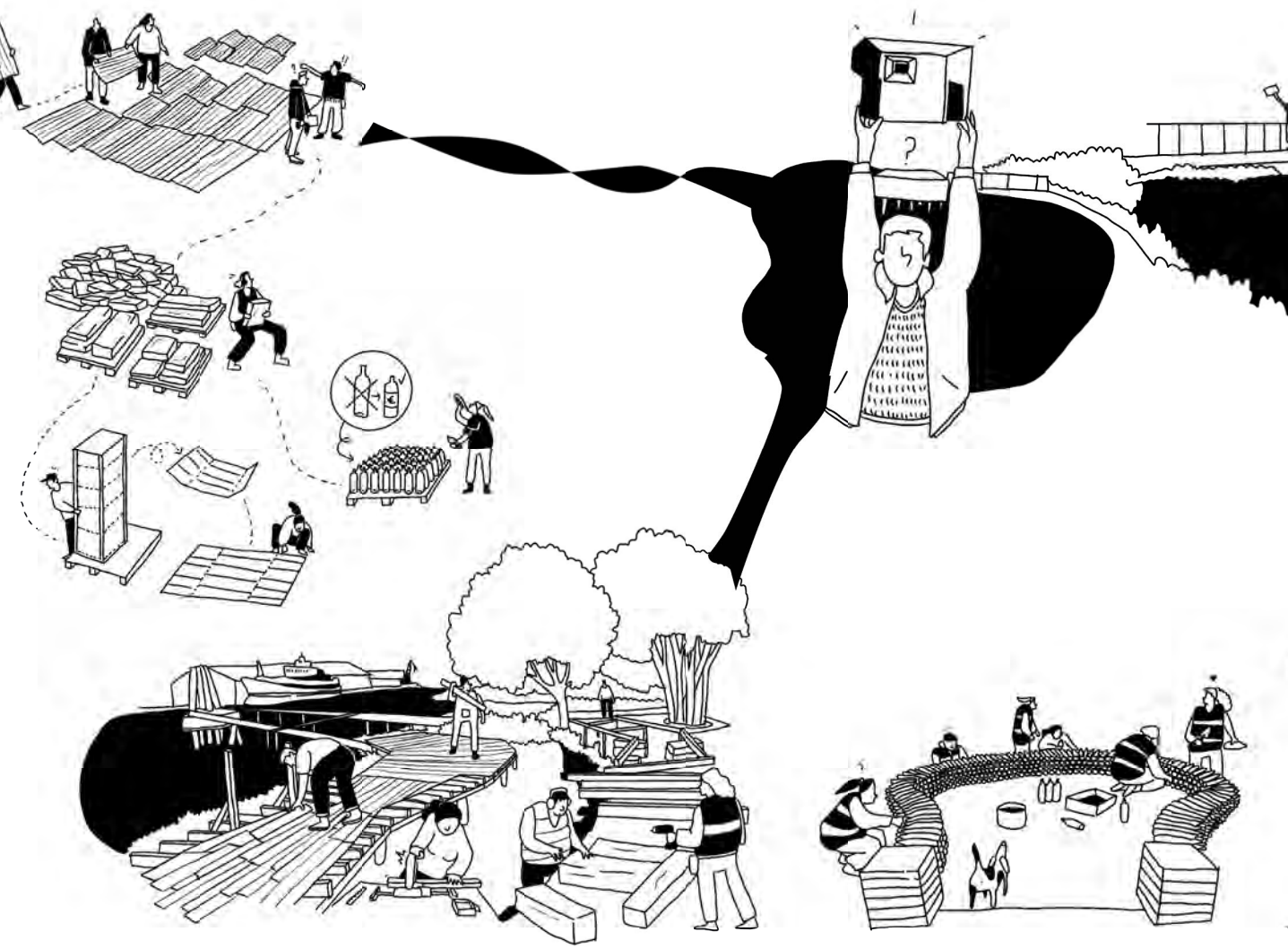
TEAM: raumlaborberlin
YEAR: 2014
LOCATION: Jubileumsparken, Gothenburg

The park area of Jubileumsparken has been gradually developed as part of the transformation project *Älvstaden* since 2013 thanks to open dialogue and collaboration. The park has served as a test bed for placemaking, a strategic approach whereby public spaces are shaped by testing functions together with the general public on a scale of 1:1. The prototype *Allmänna bastun* (the public sauna) was one of the first temporary prototypes that was developed on site as a result of this process.

The sauna was designed by raumlaborberlin and built together with members of the general public. Raumlaborberlin is a German architectural collective that has been working since 1999 with temporary and permanent structures and interventions in urban environments. The projects pursued by the collective are based on the 'activation through use' approach. In the Frihamnen area, the team worked on site for a number of weeks so that they could get to know the area and the people who use it. They opted to focus on developing the sauna as a social hub where people can get together, socialise and discuss life (see page 61 for more information).

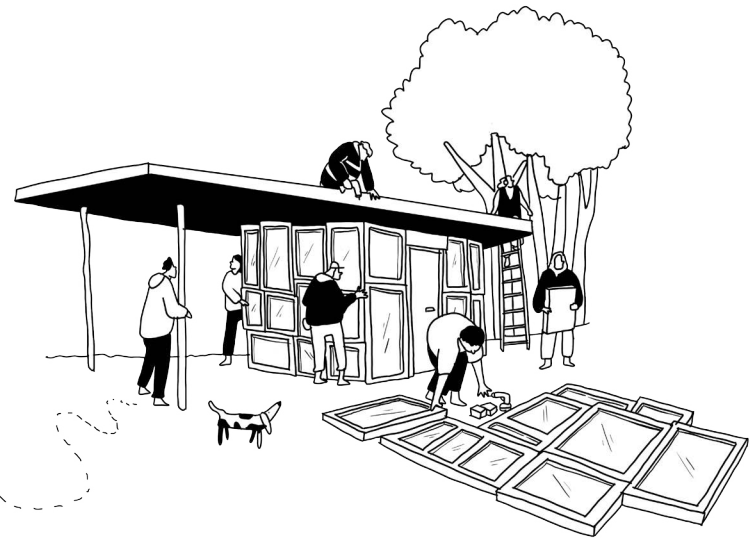
Building the sauna and pool were important steps in the process of creating a new identity for what used to be a port site in the Frihamnen area and making it accessible to the people of Gothenburg. In 2023, a permanent sauna is being built to replace the temporary structure. This new sauna is being made to resemble the prototype as closely as possible, with the same characteristic façade panels, and it will be sited in the same location in the park.

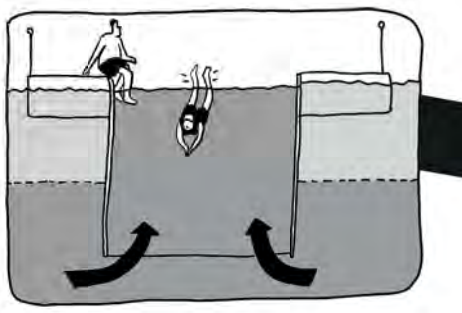




Allmänna badet (the public pool)

TEAM: raumlaborberlin, feasibility study by MYCKET YEAR: 2018
LOCATION: Jubileumsparken, Gothenburg

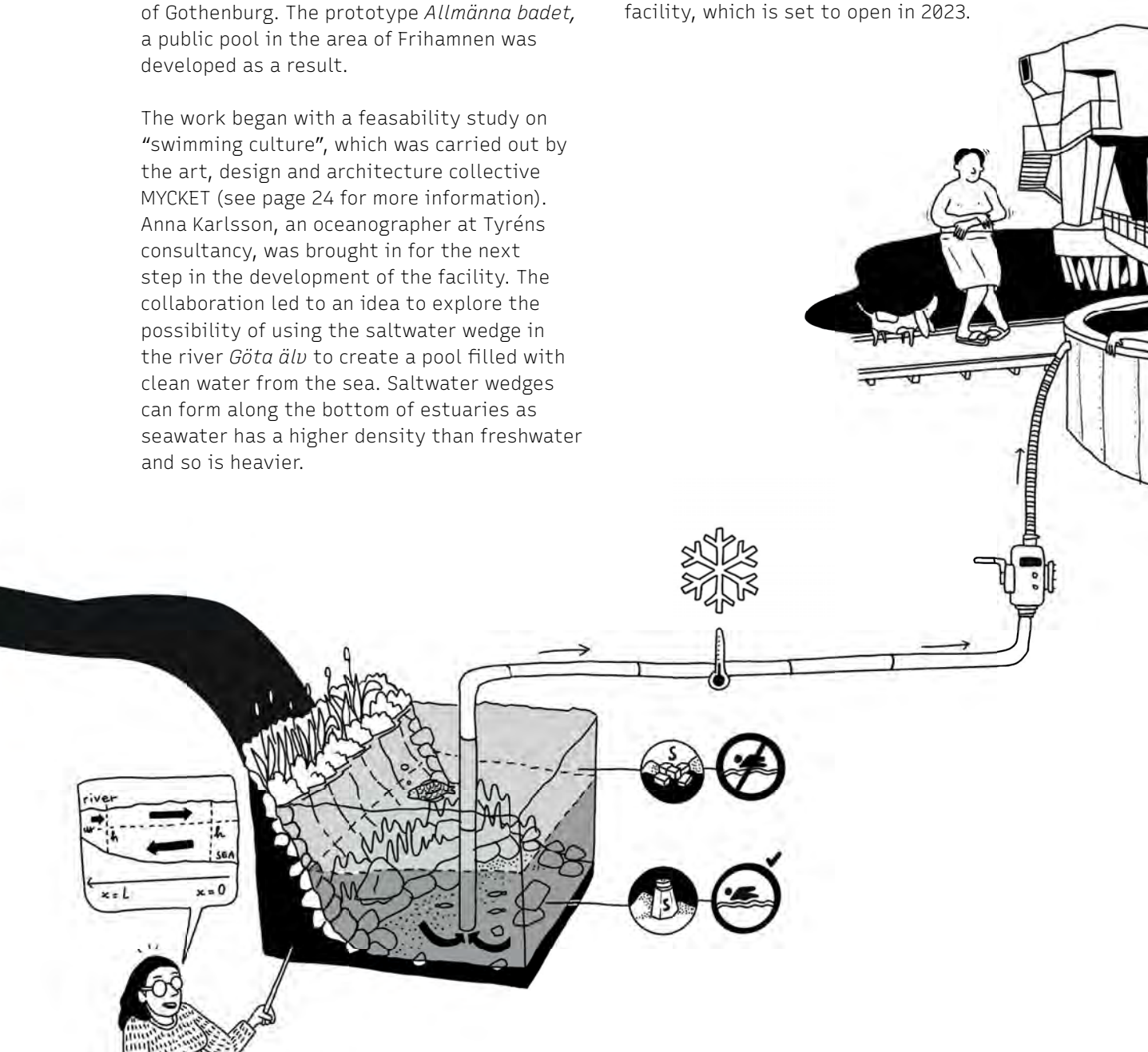




An extensive process of dialogue and idea-gathering was carried out in preparation for Gothenburg's 400th anniversary and the development of the transformation area of *Älvstaden*. This included a number of discussions with residents, expert workshops, international experience exchanges, surveys and studies. One of the conclusions of this work was that many people involved in the discussions wanted to see more public spaces along the waterfront, and to have the opportunity to swim in the heart of Gothenburg. The prototype *Allmänna badet,* a public pool in the area of Frihamnen was developed as a result.

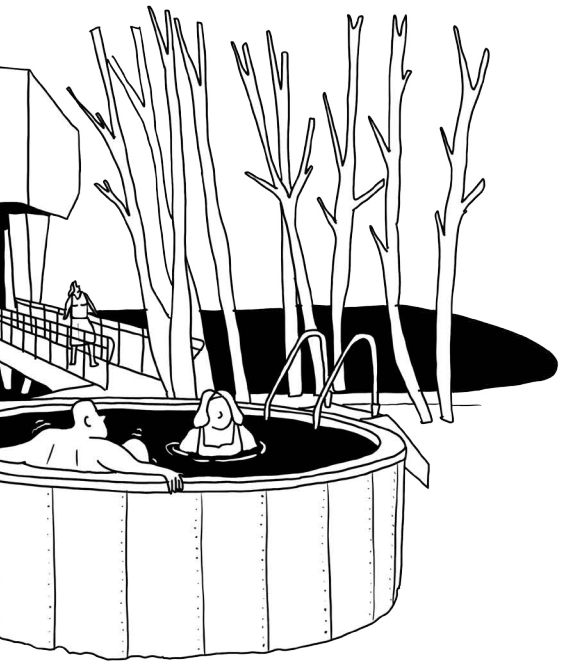
The work began with a feasability study on "swimming culture", which was carried out by the art, design and architecture collective MYCKET (see page 24 for more information). Anna Karlsson, an oceanographer at Tyréns consultancy, was brought in for the next step in the development of the facility. The collaboration led to an idea to explore the possibility of using the saltwater wedge in the river *Göta älv* to create a pool filled with clean water from the sea. Saltwater wedges can form along the bottom of estuaries as seawater has a higher density than freshwater and so is heavier.

A prototype was built in the park area of Jubileumsparken, where seawater from the river's saltwater wedge was pumped into a pool. This made it possible to swim in clean water without using chlorine or any other purification system. The test was conducted over a period of three years, and regular water analyses showed that the water quality in the pool was as good as in the archipelago outside Gothenburg. As the prototype worked well, this principle has also been used in the development of the new permanent swimming facility, which is set to open in 2023.



Berget

TEAM: E.B. Itso and Akay
YEAR: 2015-2019
LOCATION: Jubileumsparken, Gothenburg

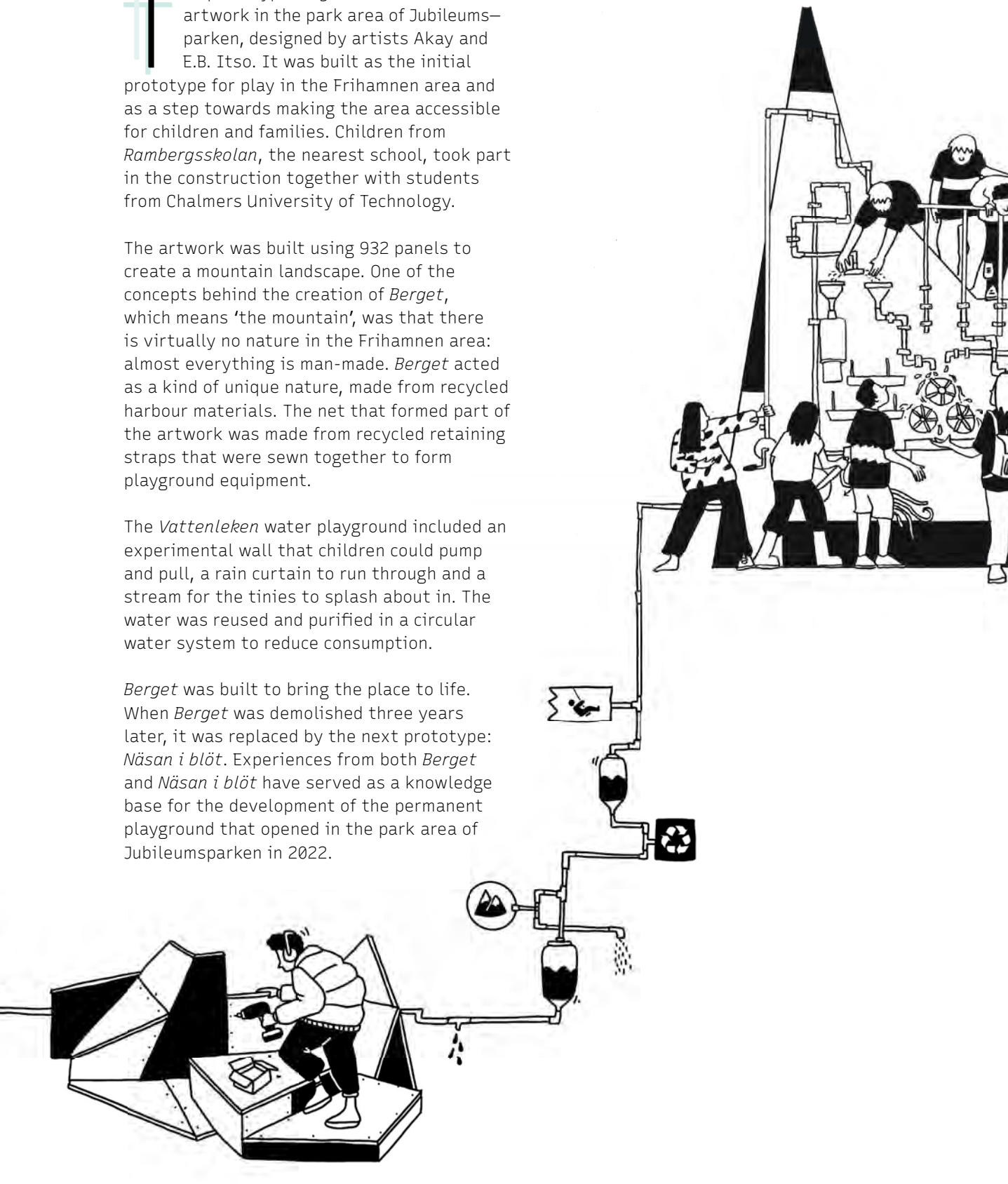


The prototype *Berget* was a water artwork in the park area of Jubileums–parken, designed by artists Akay and E.B. Itso. It was built as the initial prototype for play in the Frihamnen area and as a step towards making the area accessible for children and families. Children from *Rambergsskolan*, the nearest school, took part in the construction together with students from Chalmers University of Technology.

The artwork was built using 932 panels to create a mountain landscape. One of the concepts behind the creation of *Berget*, which means 'the mountain', was that there is virtually no nature in the Frihamnen area: almost everything is man-made. *Berget* acted as a kind of unique nature, made from recycled harbour materials. The net that formed part of the artwork was made from recycled retaining straps that were sewn together to form playground equipment.

The *Vattenleken* water playground included an experimental wall that children could pump and pull, a rain curtain to run through and a stream for the tinies to splash about in. The water was reused and purified in a circular water system to reduce consumption.

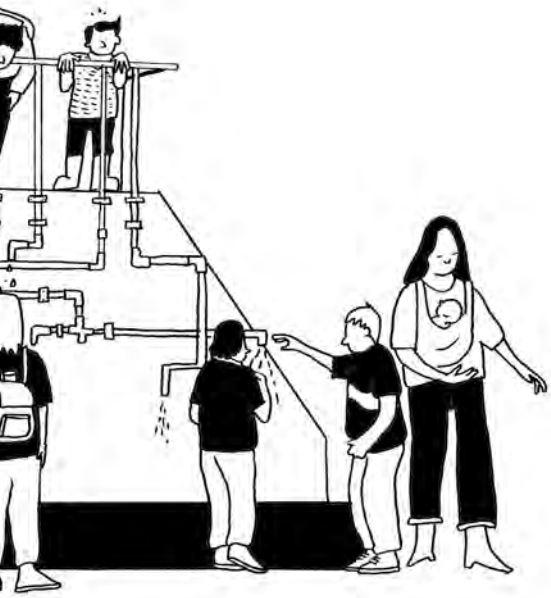
Berget was built to bring the place to life. When *Berget* was demolished three years later, it was replaced by the next prototype: *Näsan i blöt*. Experiences from both *Berget* and *Näsan i blöt* have served as a knowledge base for the development of the permanent playground that opened in the park area of Jubileumsparken in 2022.

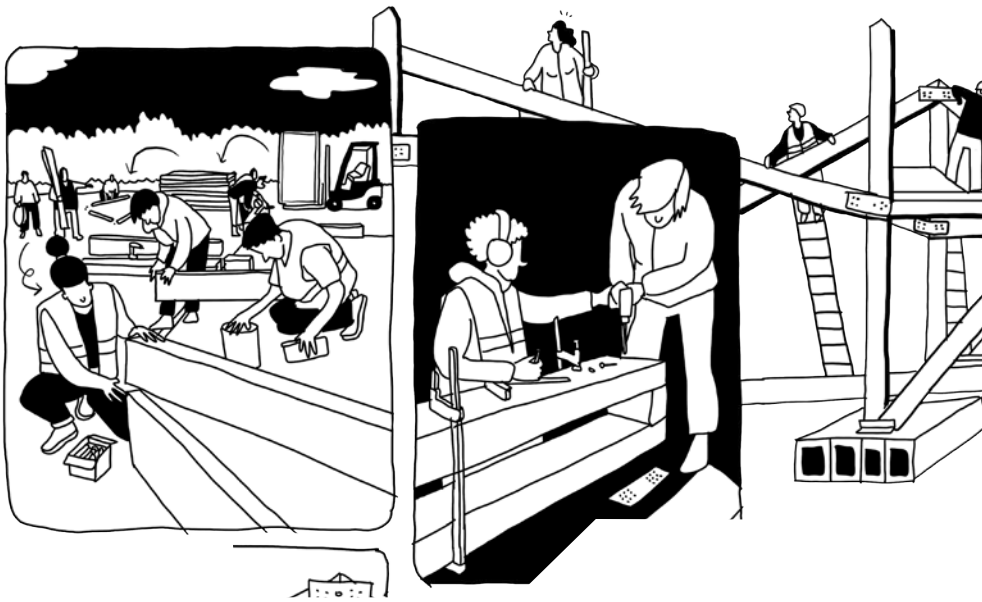


Näsan i blöt

TEAM: Recetas Urbanas (outdoor classroom), Mareld arkitekter (landscape), Boll Smedja (water play equipment)

YEAR: 2019
LOCATION: Jubileumsparken, Gothenburg

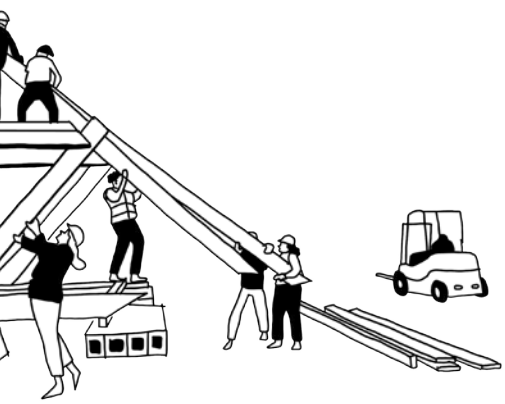


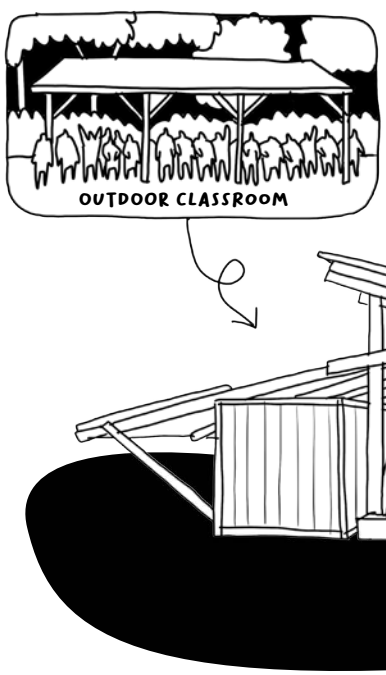


The prototype *Näsan i blöt* is a prototype focusing on water management in urban environments. Cities are particularly vulnerable to the negative effects of flooding, heat islands, poor air quality, and other risks associated with more extreme weather conditions. That is why there is a need to identify and test new blue-green infrastructure solutions, such as green corridors, permeable surfacing and rainwater harvesting.

Näsan i blöt focuses on how these topics can be introduced and explored in schools and leisure activities for children. A number of water play tools are available on site, and a guide for teacher can be downloaded to assist with teaching. Besides the outdoor classroom and water play equipment, the prototype includes a playground, a weather shelter and a container with a small kitchen and storage area. The surrounding landscape also forms part of the prototype, with urban cultivation, a test bed for plants, and permeable surfacing.

Like a number of other prototypes in the park area of Jubileumsparken, the outdoor classroom has been built together with the general public. In the spring of 2019, more than a hundred people took part in a construction workshop led by architectural collective Recetas Urbanas, which is based in Seville, Spain. This collective has carried out self-build projects with local participation in various locations all over the world.

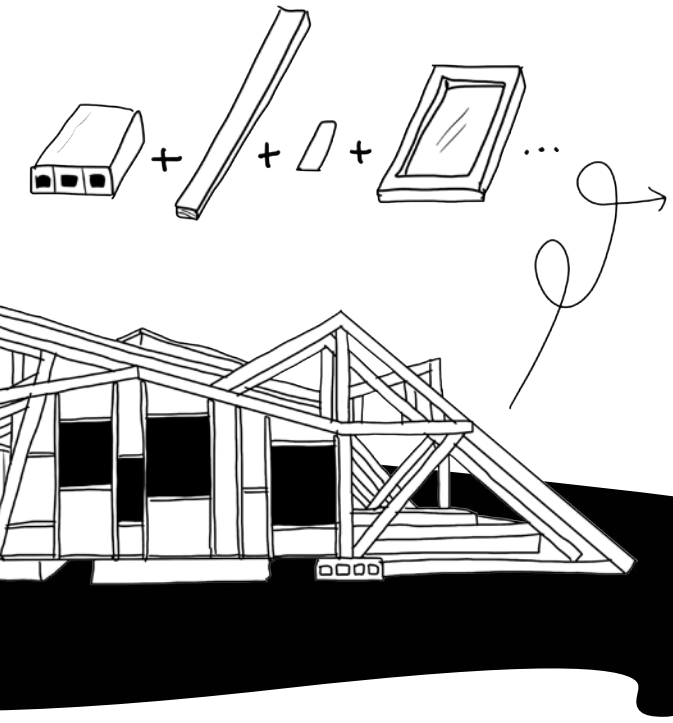




IOP

TEAM: Passalen and the City of Gothenburg
YEAR: 2014
LOCATION: Jubileumsparken, Gothenburg

IOP stands for *Idéburet offentligt partnerskap*, Non-profit public partnership, and is a partnership model that can be used when the public and non-profit sectors want to work together on a challenge that neither can handle on their own. This form of cooperation can only be used when neither traditional association subsidies nor procurement are suitable. IOP was developed in 2010 by the National Forum for Voluntary Organizations. The first IOP agreement in Sweden concerned support for the homeless and was concluded between the municipality of Västerås and the Swedish City Missions. This way of creating new forms of collaboration can also be viewed as a kind of prototype as the goals, objectives and processes are similar to those of physical prototypes.

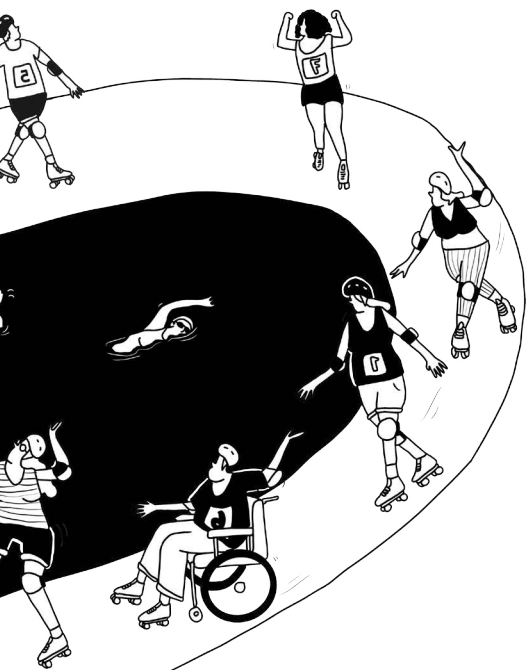


In Gothenburg, the collaboration between the City of Gothenburg and the non-profit association *Passalen* is one example. This partnership focuses on developing new solutions facilitating accessibility and inclusion for children and young people with disabilities. The collaboration has also played a key role in the development of Jubileum-sparken as a new urban park and community hub. The parks of Gothenburg are important hubs as they are open to all and free to visit. Every summer season, *Passalen* recruits upper secondary students with different backgrounds, disabilities, skills and interests from the various Gothenburg districts to work as park keepers. They receive training in sailing, motorboat operation, lifesaving, CPR, leading small groups, fire safety and theory on norm-critical perspectives. They then have the job of welcoming visitors to the park and helping to develop the space further.

Omställningslabbet

TEAM: City of Gothenburg, Chalmers University of Technology, HDK-Valand Academy of Art and Design, Egnahemsfabriken, Frame colectivo and artist Onofrio Chillemi.

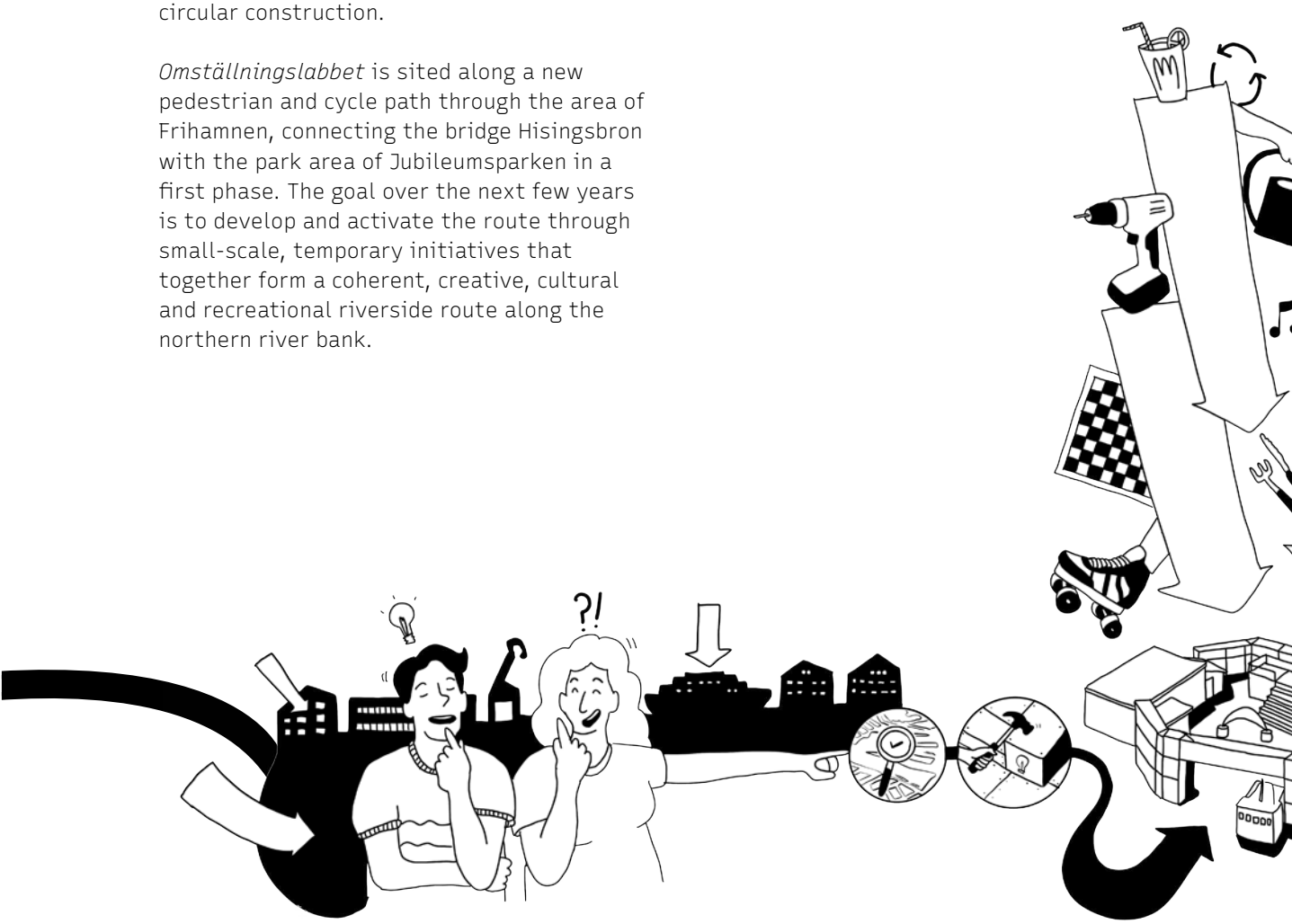
YEAR: 2023
LOCATION: Södra Frihamnspiren, Gothenburg



Development of *Omställningslabbet*, the Transition Lab prototype, began in the area of Frihamnen in the spring of 2023 with a view to strengthening, exploring and testing co-creation and inclusion methods linked to sustainable transition. *Omställningslabbet* is testing the concept of a 'citizen lab' function by providing a public hub that continuously invites participation from the general public. There is also a workshop area where other prototypes can be co-created and developed.

The first phase of the lab has been developed along the lines of a collage of different teams and student groups, all contributing their notions of what a transition lab might be. Recycled materials are used as much as possible in order to visualise transition and circular construction.

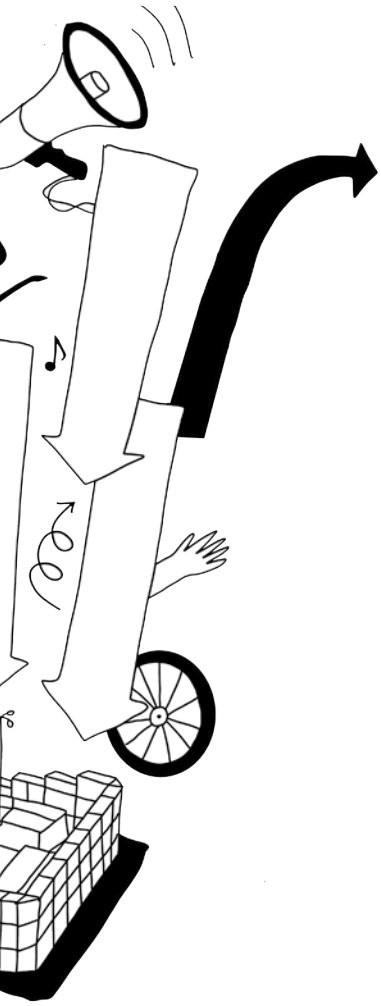
Omställningslabbet is sited along a new pedestrian and cycle path through the area of Frihamnen, connecting the bridge Hisingsbron with the park area of Jubileumsparken in a first phase. The goal over the next few years is to develop and activate the route through small-scale, temporary initiatives that together form a coherent, creative, cultural and recreational riverside route along the northern river bank.

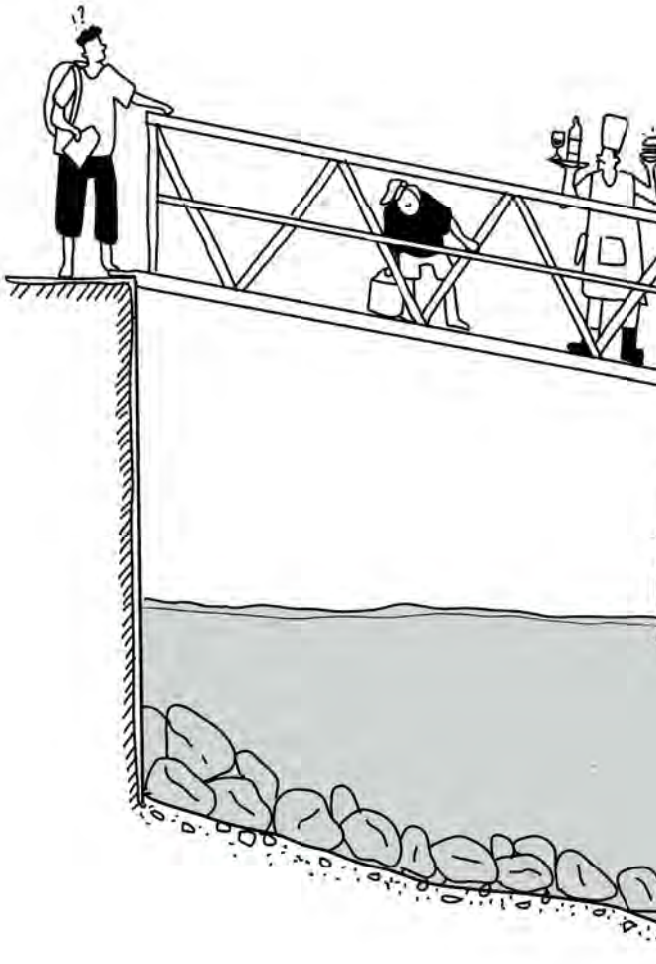


Flytevi – a marine allotment

TEAM: Centre for Sea and Society at the University of Gothenburg, and City of Gothenburg.

YEAR: 2022
LOCATION: Södra Frihamnspiren, Gothenburg

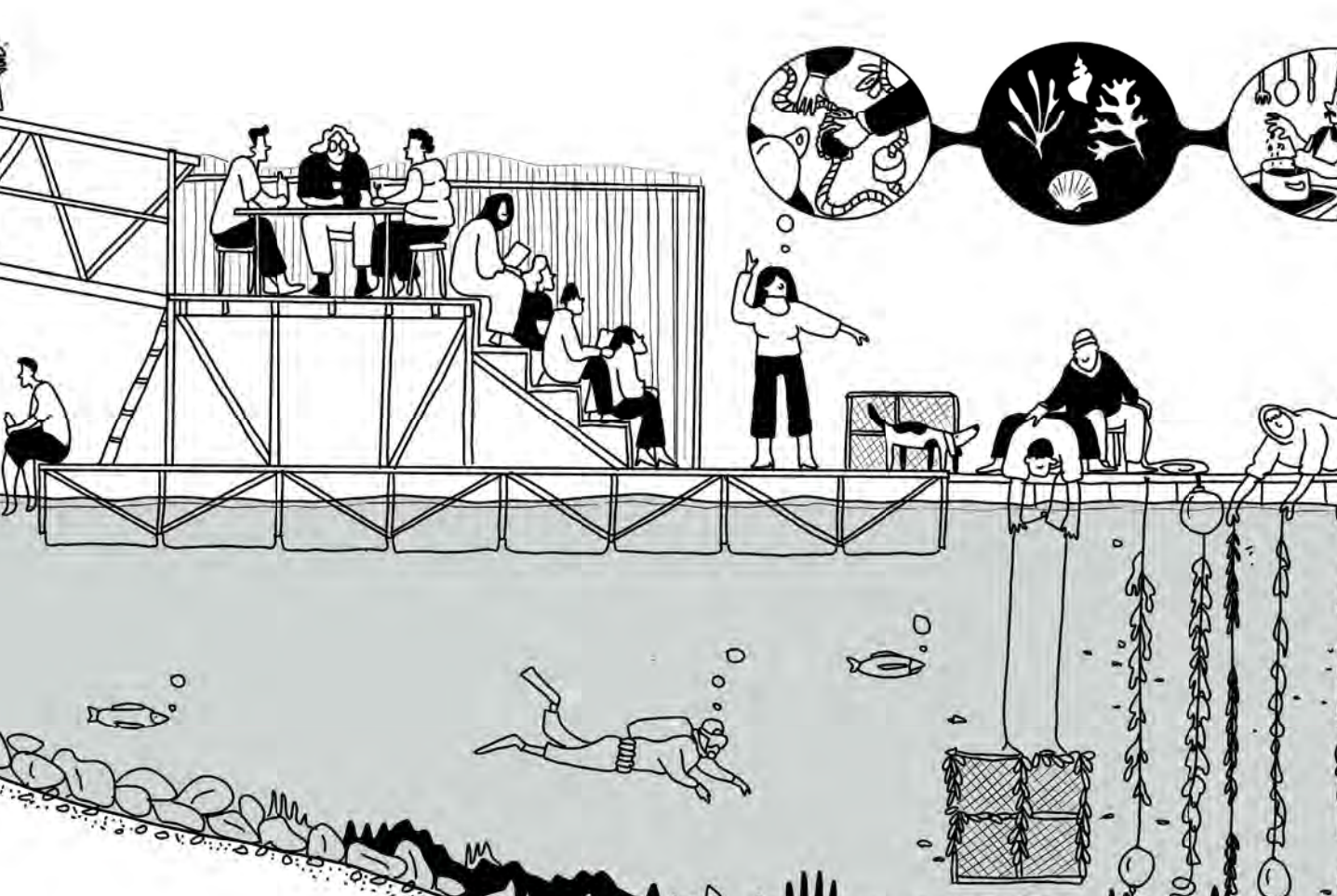




The *Flytevi* prototype was built primarily as a research and teaching platform for exploring the future of food from the sea. A marine allotment is similar to an allotment on land, but mussels and algae are grown instead of carrots and potatoes. It is still difficult for private individuals in Sweden to establish a marine allotment, even though there is plenty of potential for production of sustainable raw materials with minimal environmental impact along the long coastline of Sweden. Multiple permits are currently required to start marine cultivation, and size is not taken into account: the process is the same regardless of the scale. One aim of the prototype is to raise awareness about this and spark conversations that could lead to a review of the laws and regulations surrounding marine farming.

The marine allotment in the Frihamnen area also serves as a hub where people can explore the future of food from the sea. This is a place where visitors can cook together using ingredients from the sea and engage in discussions about new solutions. Which products, services and ingredients will truly resolve the major challenges of our time when it comes to sustainable food consumption? How should they be produced, and by whom?

The allotment is sited in central Gothenburg so that it is more accessible to schools and the general public than if it were located at the coast. It has been possible to build a marine allotment in the Frihamnen area thanks to the use of a saltwater wedge in the river *Göta älv*, the same feature referred to earlier when we were describing the prototype *Allmänna badet* (the public pool).

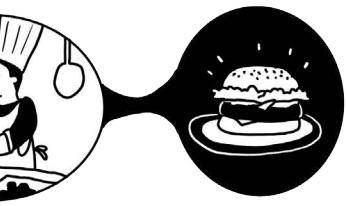


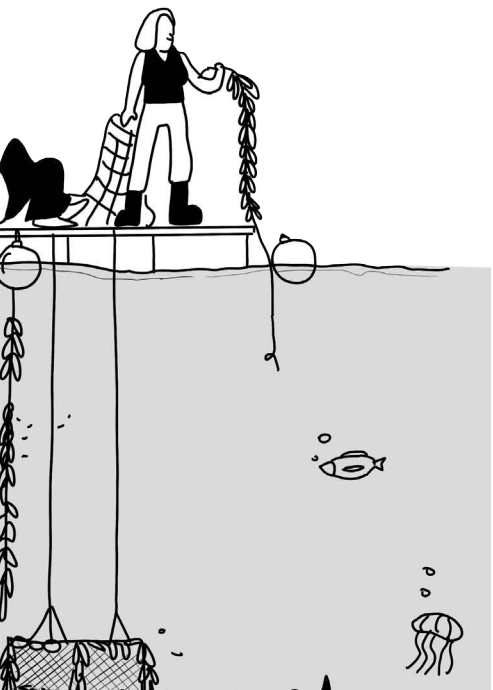
TEAM: ON/OFF

Starting in 2012 and still under construction

LOCATION: Several locations all over Europe

Co-machines





Co-machines are mobile prototypes that are co-created and activated on the initiative of Berlin-based interdisciplinary design studio ON/OFF. Experimenting with different techniques and tools challenges conventional notions of how we should live together and create room in the public space.

Several co-machines have been activated in Gothenburg, in both the area of Frihamnen and the district of Hammarkullen. During the Gothenburg City Triennial in 2021, building façades in the district of Hammarkullen were transformed into a movie screen using a co-machine known as Kopf Kino, a mobile live projector. The project began back in 2021, when a series of experimental excursions took place in Berlin using Kopf Kino. The idea was to activate the urban environment, the empty façades, the vibrant streets – all the characters that go to make up the city. Kopf Kino has also visited Istanbul, Venice, Milan, Sarajevo, Birmingham, Frankfurt and Mannheim.

The *Rök'n'roll* co-machine has also been active in both Frihamnen and Hammarkullen, as a way of exploring cooking in the public space. This is constructed as a mobile fish smoker, made up of two parts: a smoking 'tower', which also includes a stone oven, and a 'staircase' leading to the top sections of the tower. The NGO *Hoppet* is a non-profit association that provides employment for long-term unemployed women in suburban areas; and in Hammarkullen, it participated by preparing the menu and cooking the food.

The Fixotek

TEAM: Dare to build (Chalmers University of Technology) and Bostadsbolaget, Gothenburg

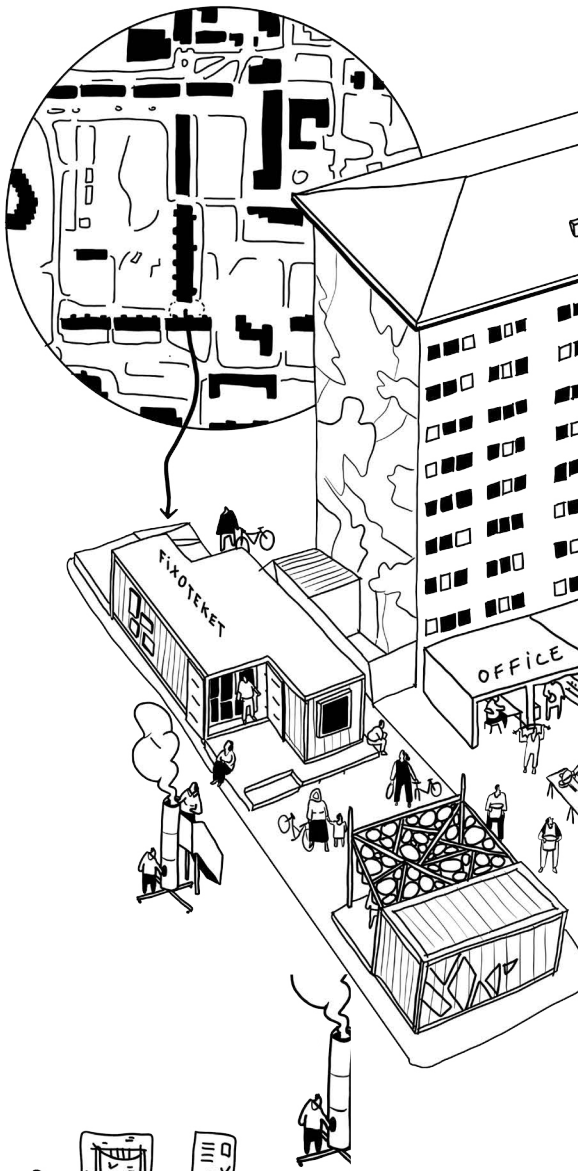
YEAR: 2018
LOCATION: Hammarkullen, Gothenburg

The Fixotek in the district of Hammarkullen is a place where people can borrow tools to repair and modify their belongings such as furnishings, electronics, clothing and bicycles. Some tools and machines can even be borrowed for home use.

The site was developed in 2018 as part of a larger project aimed at testing the Fixotek concept in several different parts of Gothenburg: Majorna, Rannebergen, Hammarkullen and Bergsjön. The idea was to reduce waste by giving people access to tools so they could repair their clothes and other items themselves. These places were also intended to serve as social hubs. The Fixoteks were well received, and an evaluation conducted showed that thirty-one per cent of residents living in districts that had a Fixotek felt they had gained a better understanding of the importance of reusing and sorting.

The Fixotek in the district of Hammarkullen was built by students from Chalmers University of Technology as part of the summer course "Dare to Build". This course is aimed at both students of both engineering and architecture and involves them working together to design and construct a structure/prototype in close collaboration with the local community and stakeholders.

After the project ended, three of the four Fixoteks in the districts of Hammarkullen, Rannebergen and Majorna, were able to remain in place so that they could go on being run by local housing organisations.



Hammarscapes

TEAM: Dare to build (Chalmers University of Technology) and the City of Gothenburg

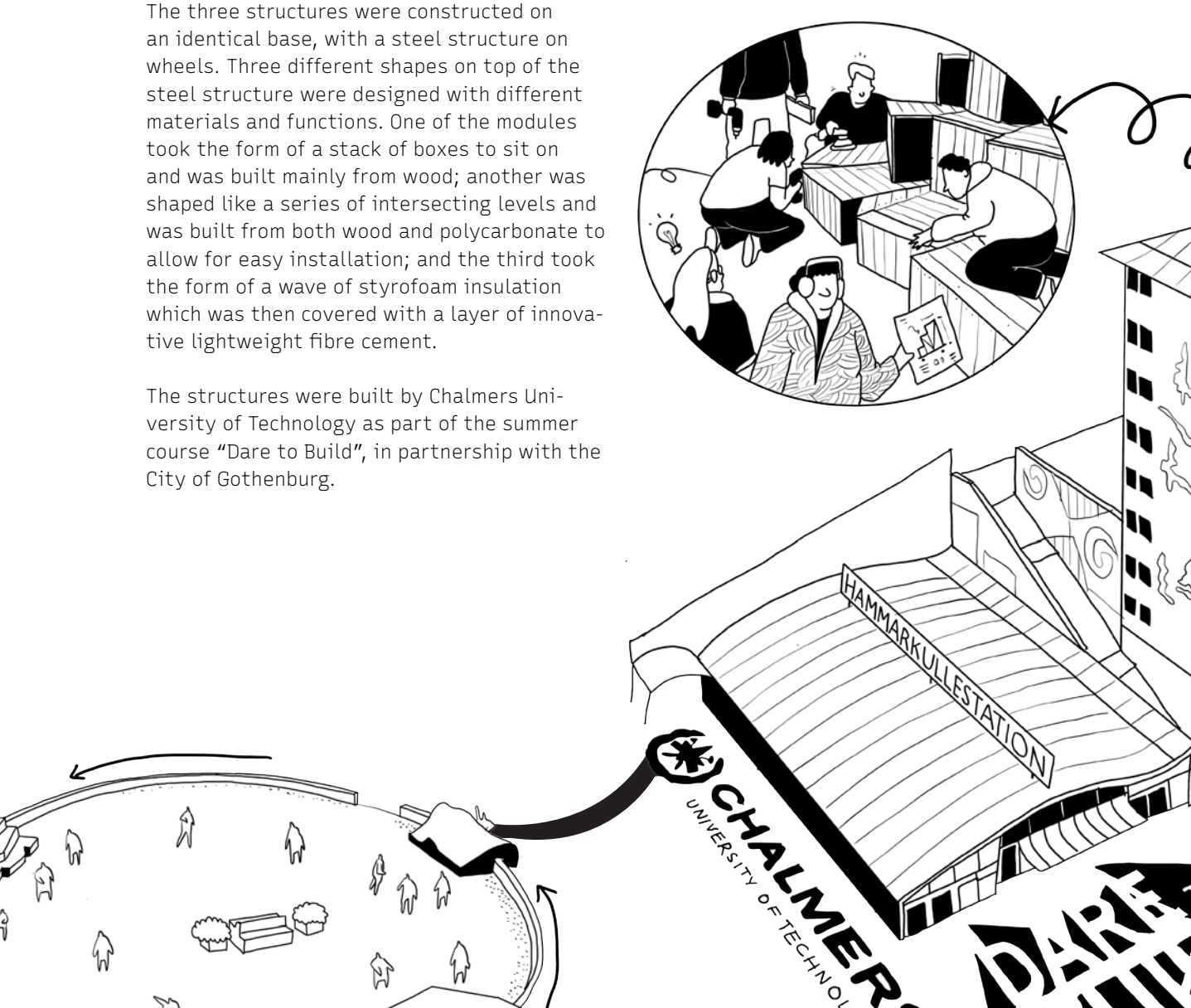
YEAR: 2020

LOCATION: Hammarkullen, Gothenburg (the prototypes are located in Frihamnen from 2023)

Hammarscapes are three mobile seating structures designed for the square Hammarkulletorget. These were built as part of the "Chalmers Dare to Build" course, with a view to creating activity in the square, helping to give the place an identity of its own and assisting in linking a fragmented public space with a station building. The aim was to create an inclusive and interactive hub that would bring a sense of playfulness to an otherwise fairly inactive space. The initiative had to be developed within a socially, economically and environmentally sustainable framework.

The three structures were constructed on an identical base, with a steel structure on wheels. Three different shapes on top of the steel structure were designed with different materials and functions. One of the modules took the form of a stack of boxes to sit on and was built mainly from wood; another was shaped like a series of intersecting levels and was built from both wood and polycarbonate to allow for easy installation; and the third took the form of a wave of styrofoam insulation which was then covered with a layer of innovative lightweight fibre cement.

The structures were built by Chalmers University of Technology as part of the summer course "Dare to Build", in partnership with the City of Gothenburg.



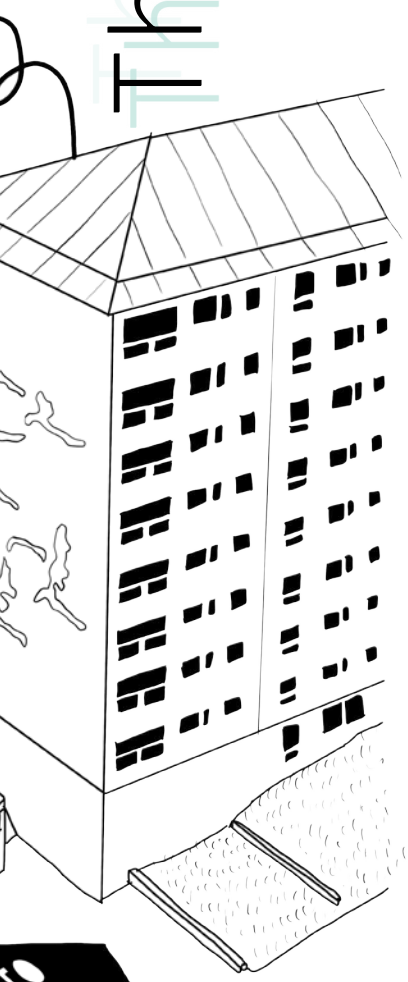
The Breeze

TEAM: Kragh & Berglund, Pontus Johansson, Julia Andersson/Blivande and RISE Research Institutes of Sweden.

YEAR: 2023
LOCATION: Södra Frihamnspiren, Gothenburg

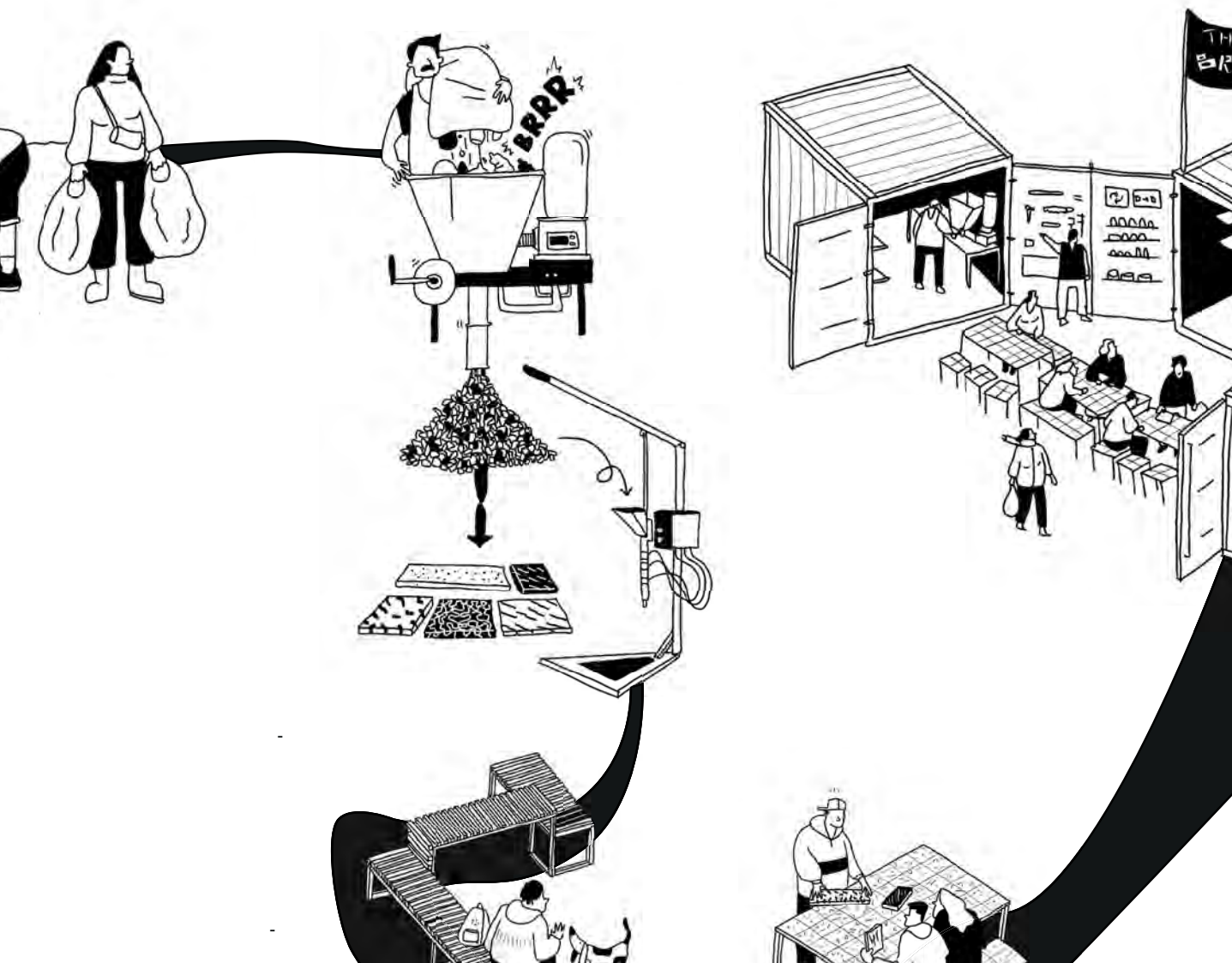
The Breeze is one of two prototypes to be developed in the Frihamnen area in 2023 as part of the City of Gothenburg's *open call* for proposals for the southern pier of Frihamnen. This call for proposals aims to activate the new pedestrian and cycle path running through the area between the park area Jubileumsparken and the brigde Hisingsbron.

The name The Breeze refers to both the term *marine debris*, which is used to mean various types of man-made materials that have been discarded or abandoned in the marine environment, and the word *breeze*, due to the frequent strong winds in the area of Frihamnen.



The project involves collecting plastic from the sea and transforming it into an installation along the pedestrian and cycle path. The aim of the project is to raise awareness of marine littering and how materials can be recovered and reused. The materials collected are being used to build a prototype on site in the area of Frihamnen in order to explore whether marine waste can be transformed into new items that can be used in the public environment. Schoolchildren and the general public are invited to take part in both the collection of plastics and the design phase itself.

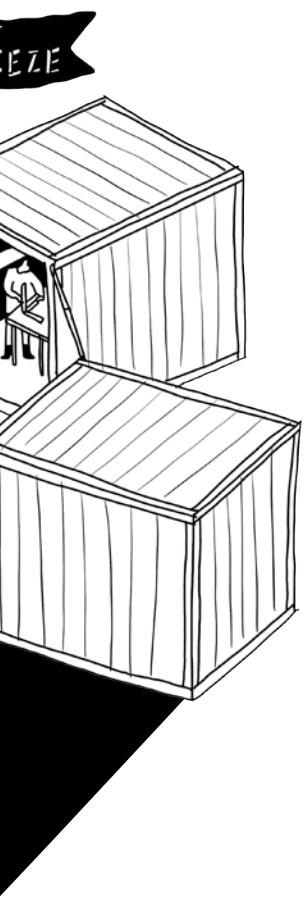
The path and the open call for proposals are the first steps in a longer-term effort to create a cohesive, cultural, and recreational riverside path along the northern river bank.



The Wind Park

TEAM: Rumgehør Studio, Maja Linnea Wendel, Luka Murovec and Brad Downey

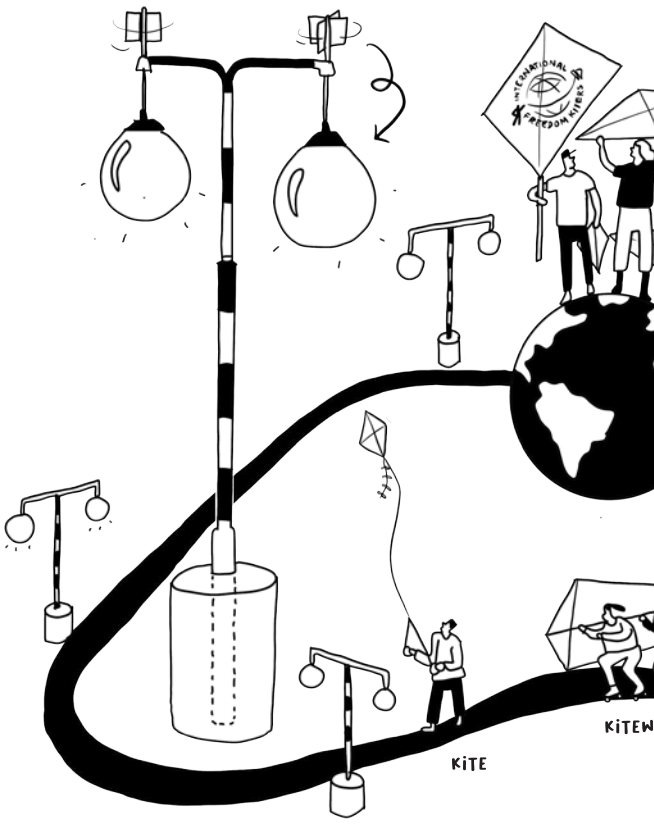
YEAR: 2023
LOCATION: Södra Frihamnspiren, Gothenburg

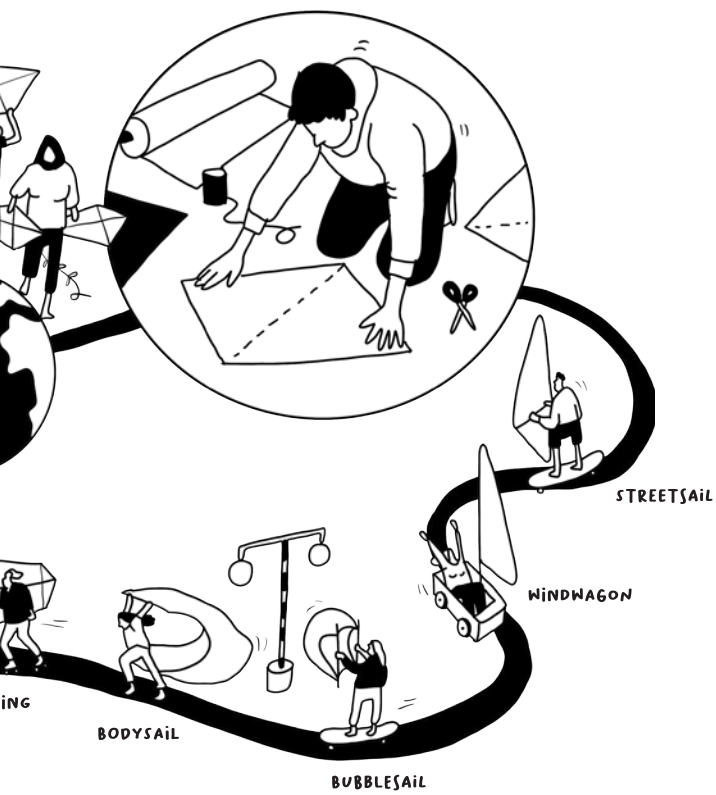


The Wind Park is one of two prototypes to be developed in the Frihamnen area in 2023 as part of the City of Gothenburg's *open call* for proposals for the southern pier of Frihamnen. This call for proposals aims to activate the new pedestrian and cycle path running through the area between the park area Jubileumsparken and the brigde Hisingsbron.

The project aims to make the invisible visible by redirecting the wind in the area of Frihamnen by means of various techniques and installations. As the project progresses, architectural remnants in the area will be transformed into wind installations along the new pedestrian and cycle path. Instead of occupying a single, specific location, this project is working with a number of smaller installations, some of which are mobile. These installations serve as a base for collaborations and workshops together with other stakeholders working with wind for *street sailing* and kite-flying purposes, for example.

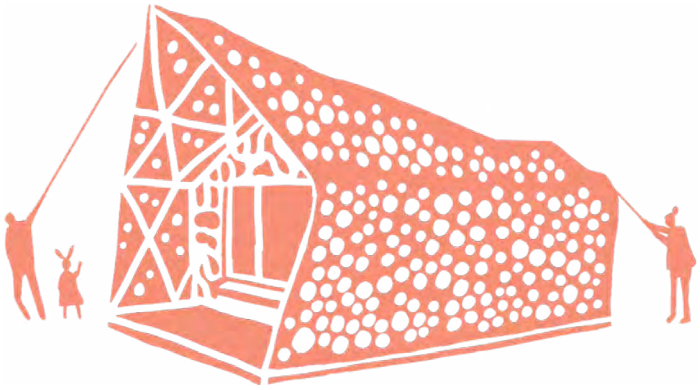
The path and the open call for proposals are the first steps in a longer-term effort to create a cohesive, cultural, and recreational riverside path along the northern river bank.

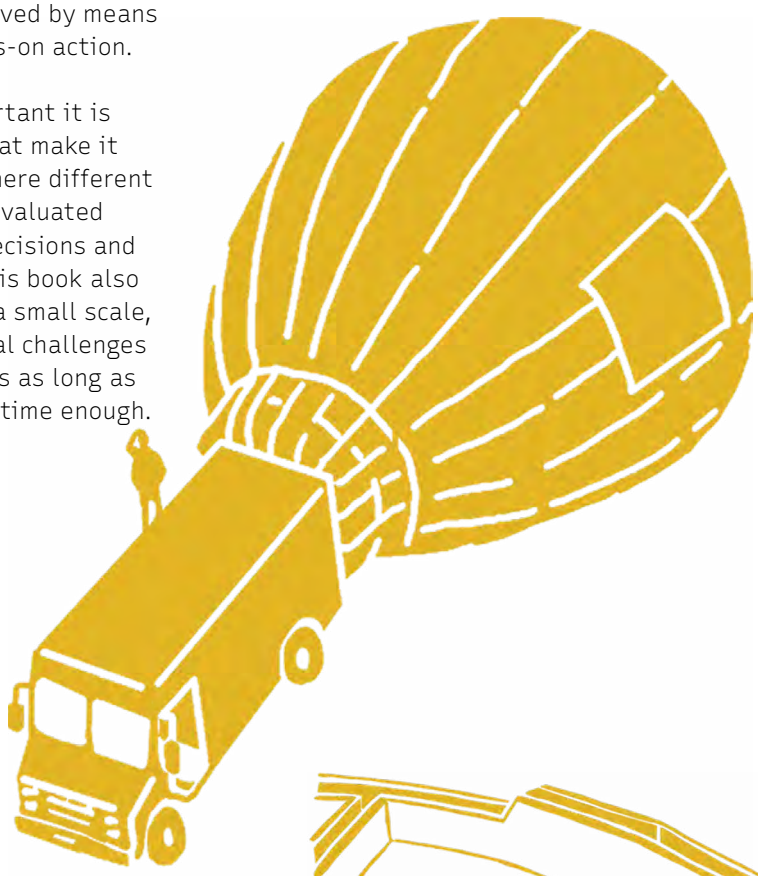


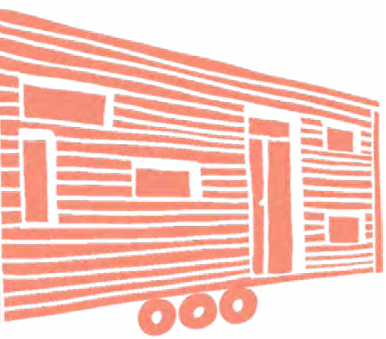

STREETSAIL
WINDWAGON
BODYSAIL
BUBBLESAIL

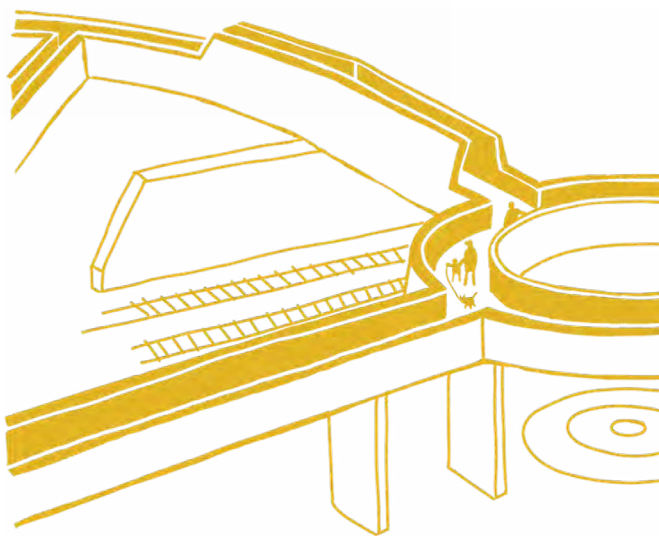
Prototype!
The interest in exploratory work and testing new approaches in urban development is growing, both in Sweden and internationally. Experimenting and learning from experience – with a prototyping approach – requires both courage and patience. Gothenburg, Sweden is one of these pioneers and has used prototypes to explore new approaches to urban development, often in collaboration with the general public or various interest groups. Conflicts arising have been resolved by means of active collaboration and hands-on action.

Experience shows just how important it is to be equipped with the tools that make it possible to cope with change, where different temporalities are explored and evaluated before it is time to make final decisions and investments. The examples in this book also show that prototyping, even on a small scale, can help to resolve major societal challenges and restore impacted ecosystems as long as we trust the process and give it time enough.









This book was published on the occasion of the 400th anniversary of Gothenburg, Sweden. The book is the result of a collaboration between the C and is linked to the exhibition *Show me don't tell me*, which was on display at Frihamnen, Gothenburg, in summer 2023 and at Bundeskunsthalle in Bonn 2025.

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This book is published as #204 in the SLU Movium Think Tank's series Stad & Land.