





**The Alvar Aalto Silo Project and  
the Re-urbing of Meri-Toppila, Oulu:**  
Ecosystem Design in the Calibration\_  
of an Urban Area through Flagship\_\_  
Architecture\_\_\_\_\_



Fig 1. View of the Alvar Aalto Silo from the parking lot, Meri-Toppila, Oulu

## ABSTRACT

The aim of this Diploma Thesis is to present a model implementation of “Urban Calibration”, meaning : a series of design, policy and strategic decision-making actions located in a depressed city sector applied in order to configure its development into an acceptable range of progress and innovation.

In order to materialise a prospective implementation model of Urban calibration, the following study will present a real life work in progress case, The Aalto Silo project in the Meri-Toppila neighbourhood, Oulu, Finland; as a vehicle to explore following topics: Adaptive Management, Ecosystem Design and Urban Narrative.

Moreover, a tentative definition of the term “Re-Urbing”, as the projectual process of reactivating a deprived city area will be addressed.

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Fig 2. Satellite image of Meri-Toppila

“Here the wind always blows from the north- a filthy place- plain land, former seafloor, where the despicable rusty hay and willow grow by the ditches, and the weather, in constant low pressure, when it rains even just for a bit, he can feel it in his throat.

And lousy people, indifferent, act like they are better, like they come from a better place.”

“Täällä tuulee aina pohjoisesta, saastainen paikka, tasankomaata, entistä merenpohjaa, jossa kasvaa kurjaa ruosteista heinää ja kurjia pajuja ojanvarret täynnä, ja ilma, ainainen matalapaine, kun on vähänkin sateista, hän tuntee sen heti kurkussaan.

Ja kurjia ihmisiä, penseitä, niinkuin olisivat parempiakin, paremmalta puolen kotoisin.”

Paavo Rintala: Pojat (1958, s. 40)



## INTRODUCTION

The following Diploma Thesis “The Alvar Aalto Silo Project and the Re-urbing of Meri-Toppila, Oulu : Ecosystem design in the calibration of an urban area through Flagship Architecture ” is based on an Urban Design Narrative approach. Urban planning and designer theorists have been debating the importance of the creation of narratives and storytelling (among others: Ferraro, 1990; Fisher and Forester, 1993; Eckstein and Throgmorton, 2004; Forester 2009).

In the social sciences narratives are generally used to help groups and organisations make sense out of certain sets of events and, when it comes to urban planning, also to explain how and why certain processes evolve and affect the transformation of the city (Ponzini, 20010).In this dissertation, the use of an Urban Narrative strategy will be presented as a product of the implementation of a cultural Flagship Architecture project as Aalto Silo is in a deteriorated area of the city. As the project has begun to materialise,an improved narrative for the neighbourhood has been generated. From this a new set of networks have developed, enabling the area to organically grow its own positivescenario. Both the Aalto Silo project and the Meri-Toppila neighbourhood as a whole serve as an interesting example of a post-industrial spatialized composite with great potential to be revitalised using an Urban Narrative based strategy.

Through the following work, an hybrid practical-theoretical approach will display a research framework based on

Urban and Ecosystem Design sources linked to the experience and goals of the Aalto Silo project. This will be supported by diagrams and infographics showcasing the project’s future application with the aim of transforming Meri-Toppila in a vibrant part of Oulu and how it dialogues with the theoreticalframework through its design lay out.

These diagrams will illustrate how the proposed design layout will encourage dialogue with the rest of the city and beyond. The practical and theoretical structures that set the boundaries of the thesis are divided between what’s related to the Aalto Silo and Meri-Toppila (Practical) and what is meant to explore definitions, concepts and related premises regarding Urban Transformation strategies such as Ecosystem Design and Flagship Architecture (Theoretical),

It should be noted that although part of the concepts have some base in Urban Branding and Place Marketing disciplines, the core idea behind the implementation of the Aalto Silo project is to generate an Urban Narrative more to re-establish a damaged Ecosystem than generate a commercial product that could be use as such to attract investors or public funding.

The main case of study of this dissertation will be the ongoing renovation and refunctioning project of the Alvar Aalto designed Wood Chip Silo by Factum Foundation and Catling Skene de la Peña studio located in Meri-Toppila, Oulu, Finland and the Design, Policy and Management strategies that are needed to conduct this type of operation on site.

Methodologically, following a hybrid practical-therotical structure, The concepts described in chapter

1.1 Theoretical Framework (Ecosystem Design, Flagship Architecture, Urban Calibration and Re-Urbing) will be used as Analytic Lenses to filter information and synthesise new concepts and applications that will be described through sketches, charts and written reflections. Both Theoretical (Chapters 3,4 and 7) and Design (Chapters 5 & 6) documentation is provided, concluding in an implementation model and concept definitions provided to function in future similar scenarios.

Accordingly, this diploma thesis can be divided in three parts: First part (Chapter 3 ) analyzes the case of study from its historical, societal and organisational point of view through the analytic lenses of : Oulu city, Meri-Toppila Neighbourhood and The Aalto Silo Project. Moreover, it also provides a description of its ramifications as a source of information and sets a boundary for the work's scope and scale.

Secondly, (Chapter 4 & 5) presents diagrams, sketches and technical documentation related to the Site (Oulu City and Meri-Toppila Neighbourhood), the Project (Aalto Silo architecture design and plans for other plots of land) and the Linkage between Architecture, Urban Design, Urban Narrative and Ecosystem Design.

Thirdly, Chapter 7, presents an implementation model for a Meri-Toppila "Re-Urbing " based on the Aalto Silo project.

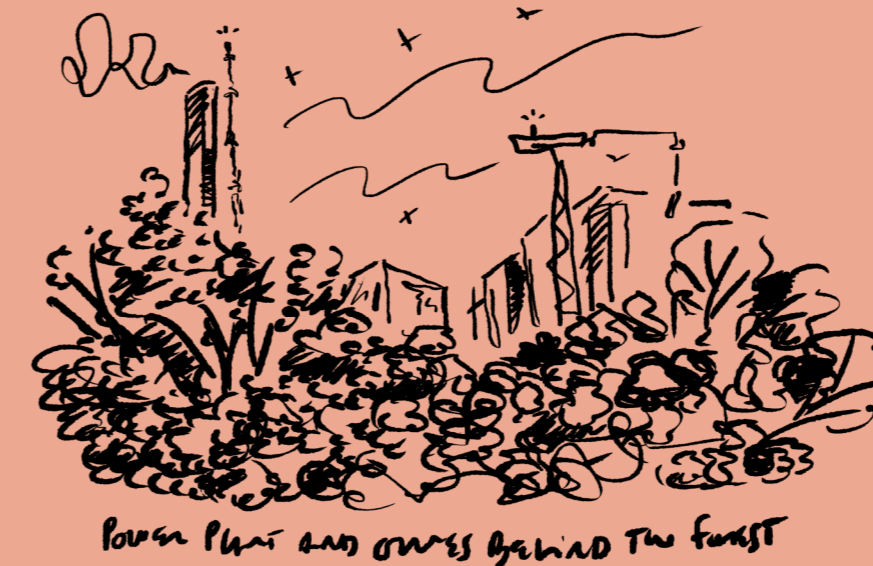
Finally, further discussion ideas around the dissertation chapters will be addressed at the end of the document. topics displayed in the later dissertation's chapters.

Moreover, as the Aalto Silo transformative process in the area is still a work in progress this thesis will highlight potential actions on site and link them into a cohesive Implementation Model for large scale Architectural & Cultural based Urban Transformations.

Part of the theoretical framework of the dissertation is based in already established concepts with a vast and diverse bibliography as Ecosystem Design and Flagship Architecture while other notions like Urban Calibration and Re-Urbing are of an exploratory substance and used novelly for this work. Ensuing this reasoning, the thesis main aim is to explore these novel concepts and how they can impact the practicalities and particularities of an Urban Narrative large scale Architectural and Cultural project placed in a Post-Industrial Neighbourhood.

The graphics, diagrams and symbols displayed in this document were designed to reflect the implementation model idea that is central to this dissertation narrative. The design process of the charts had an essential role side-by-side with the thinking process of the content.

This thesis was produced independently based on my experience working for Factum Foundations's Aalto Silo project as Project Manager and my personal interest in the Meri-Toppila Area at Oulu, Finland.



"The delta of the Oulu river is wide, the river divides itself into three branches and flows to the Bothnia sea Gulf. Between them there are islands where small and big bushy alder forests grow.

The boys were hopeful that in the luckiest scenario they would get into these bushes this evening."

"Oulujoen suisto on leveä, joki laskee kolmena haarana Pohjanlahteen. Niitten välissä on saaria ja saarissa kasvaa pientä ja suurta tuuheata lepikkoa.

Näihin saariin pojat uskoivat vielä sinä iltana onnellisessa tapauksessa joutuvansa."

Paavo Rintala: Pojat (1958, s. 22)

## THEORETICAL FRAMEWORK

The methodological process carried out in this dissertation is based on a Hybrid Practical-Theoretical approach: meaning that the products of the thesis are both grounded in a conceptual framework as well as in indagatory projectual proposals. Due to the nature of the topic, the material implementation of an Urban Narrative, this approach seems to be the most efficient and flexible as it allows an iterative comeback from theory to practice without the usual restraints of a formal research based dissertation or a fully projectual proposal.

In the Architecture and Urban Design field “jumping” from one category to another without fully exercising traditional scientific analytical protocols can be found for example in Binder et al (2019) where an important line is traced in their opening statement: “Urban systems design seeks to blend the beneficial elements of systems thinking, rationalism and metric-based analysis, while tempering them, and to focus on the social interactions and design”.

This line of thought is especially interesting for this dissertation as it relates both to the design of an Urban Environment as a system and also as it synthesises the duality between image, narrative and symbolism with materialisation, analogic proceedings and actual building.

Another source of an Hybrid approach is the text of Trancik (1986) where he describes a model of Urban Transformation implementation based on the following notion:

“Where the Urban Design discipline is between the design of site-specific building and that of the urban land-use plan. It is centred on the concept of urbanism as an essential attitude in urban design, favouring the spatial connected public environment over the mere master planning of objects on the landscape”

Taking these premises in consideration, a safe assumption can be made that an “Hybrid” approach will always carry a high degree of transdisciplinarity. Landman (2009) article serve as cementing example when she states that: “Transdisciplinary research implies a fusion of disciplinary knowledge that creates a new hybrid that is different from any specific parts; hence it requires the principle of “transcendence””; And that “Transdisciplinary approaches are conceptual frameworks that transcend the narrow scope of disciplinary world views, “Breaking through disciplinary boundaries”

These research complementary appendices serve as methodological framework and constitute the core bibliography to which interpret the dissertation’s structure and the product of its outcome: As a result, an Hybrid Theoretical-Practical approach means that the descriptions, charts and drawings materialised in this Diploma Thesis are meant to be read as exploratory documentation.

Then, in order to understand fully the limits and scope of the concepts used in this dissertation, the notions of Ecosystem Design, Flagship Architecture, Urban Calibration and Re-Urbing will be used as Analytic Lenses to filter information from the study case and context in an orderly, efficient and practice orientated way.

In order to clarify these notions, following definitions will be used (fig 3):

Ecosystem Design (ED): ED can traditionally be related to a diverse array of disciplines such as Biology, Industrial Engineering, Ecology Conservation and Management practices. In all cases, use of ED analysis is meant to establish a map of interactions between actors and a determined context and how they pattern behaviours, processes and systemic responses to each other.

Tsujimoto et al (2017) stipulates that “Ecosystem research might be at its strongest when the analyst applies a hybrid view of biological systems and industrial engineering systems at the same time. In an ecosystem, each actor has different attributes, experiences, and beliefs. This path dependency creates inertia.

The differences in decision principles can cause unintended results at the ecosystem level at a given point in time. If we find repeated patterns in the behavioural chain at the ecosystem level, we may be able to find ways to avoid or reinforce the pattern as required”

As the ED research field is broad and heterogenous this dissertation will focus on the Multi-Actor ED network model: The research in this cluster (Multi-Actor ED) analyzes the dynamic networks among actors with different attributes from private firms. (Tsujimoto et al., 2017) Although the core of the Multi-Actor ED theoretical build up is based on scientific articles related to private company ED networks, the concept can be expanded easily to include public and state owned organisations as for the purposes

of this work they will act on the same level of participation as their private counterparts. Also, this definition examples more precisely the role of ED analyst from a Design Project point of view as the way its process is diagrammed can be related to Product, Architecture or Urban Design.

Equally important, as how ED implementation relates to the particularities of this Diploma Thesis is in providing a structure for the linkage of the creation of an Urban Narrative with an specific project being developed in the area, as quoted by Tsujimoto et al (2017): The role of ecosystem designers is to create a new entrepreneurial social business and/or revitalise the declining existing ecosystem. In this situation, the ecosystem designers aim to take a leadership position in the ecosystem and orchestrate the whole ecosystem (Gawer and Cusumano, 2014; Hong and Snell, 2013; Leten et al., 2013; Wareham et al., 2014; Wei et al., 2014).

Flagship Architecture (FA): For the correct interpretation of this dissertation is important to clarify and differentiate some categories related to “landmark buildings” such as the ones explained by Smith and Krogh (2011) In their work, they separate the terms Iconic Signature Buildings, Destination Icons and Cultural Flagships.

Following the aforementioned article, Iconic Signature Buildings are described as a building sufficiently innovative or famous to represent a movement, style or era and with their main focus placed on a “distinctive” design and “imageability” that’s easy to communicate in media. On the other hand, Destination icons act as synecdoches for a place - they are part of a city but represent it as a whole.

Finally, Cultural Flagships are catalytic projects designed to generate new activity and subsequent development in a place and therefore, Flagships play a more fundamental role in urban development than Icons, which principally act as symbols.

This last description, the association of Flagship Architecture (FA) with a catalytic process: A construction with “triggering” influence to the Urban Space is the one that will be used in this dissertation to address the Aalto Silo project and its ramifications for the Meri-Toppila area.

Urban Calibration (UC): This definition is purely practical and it's taken from the dictionary description of tool calibration as in “The process of checking a measuring instrument to see if it is accurate” This term is useful to picture an action of “setting up” an instrument to its better capacity. Hence, as this dissertation study object takes place in an Urban Context, “Calibration” of a city area will be addressed accordingly as “Urban Calibration” (UC) and used to describe a coordinated process where actions are directed on the public and private space of a deprived part of the city in order to configure its social fabric and site dynamism to an optimal range of effectiveness.

Re-Urbing (RU): The idea that urban areas and places deteriorate on time because of socio-economic transformations is as old as cities have existed.

From the classical ancient city analogy to a human body, through the Haussmannian XIXth grid spatial supremacy over the territory, to the Postwar Modern Movement liberal city segmentation,

urban transformations reflects the socio-economic momentum and phase of civilization (Hall,P. 1998). And when this socio-economic system collapses, most certainly the cities designed to serve are to be affected as well.

However, what these former design experiences share in common, the control through physical occupation, the perennial (almost “eternal”) conception of Architecture over the context and the filling of space as favoured strategy can be, in the light of a Post-Industrial world, being revised, changed and updated.

The return to a scenario where a determined city area corresponded efficiently to the socio-economic structure of current times is very similar to “Rewilding” strategies used in Natural Parks around the world, specially the experiences located in Europe and North America (Lorimer et al., 2015) “Rewilding” is a plastic term that has been applied to a vast range of visions and land management practices (Lorimer et al., 2015).

But, most of these practices share a similar pattern related to introduce or erase actors in a determined Ecosystem, to enhance or minimise interactions between context and actors and to generate an outline of self-management where the Ecosystem could function without further intervention from the designated decision maker (Lorimer et al., 2015)

Of course, the extrapolation of significance from a Rewilding project -that mainly tries to erase human presence from a natural context to re-establish it to an “idyllic” state- and the realities of an derelict urban area- where the main goal is to increase the connection of the social fabric

Fig 3. Thesis concepts chart

<i>Concept / Analytic lenses</i>	<i>Definition</i>	<i>Main Bibliographic reference</i>	<i>Relation to its implementation in an Urban Context</i>	<i>Relation to the Aalto Silo project</i>
Ecosystem Design (ED)	analysis meant to establish a map of interactions between actors and a determined context and how they pattern behaviors, processes and systemic responses to each other	Tsujimoto et al (2017)	a multi actor model network can work as a helpful tool in order to categorize, analyze and syntethize the variables on site	used as a layer of Meri-Toppila analysis + useful to explore prospective outcomes of the Aalto Silo renovation and its changes to the neighborhood
Flagship Architecture (FA)	architecture based catalytic projects designed to generate new activity and subsequent development in a determined part of the city	Smith,A., Krogh Strand,. (2011)	by definition, a FA project affects its urban context invariably. Its completion can have a strong ripple effect in how the area urban narrative changes	the Toppila Oy silo designed by Alvar Aalto being currently renovated by the Factum Foundation and SCDLP studio is a FA project located in Meri-Toppila, Oulu, Finland
Urban Calibration (UC)	“The process of checking a measuring instrument to see if it is accurate” This term is useful to picture an action of “setting up” an instrument to its better capacity.	“Calibration” definition retrieved from <a href="https://dictionary.cambridge.org/dictionary/english/calibration">https://dictionary.cambridge.org/dictionary/english/calibration</a>	using this definition in an urban context it means the description of a coordinated process where actions are directed on the public and private space of a deprived part of the city in order to configure its social fabric and site dynamism to an optimal range of effectiveness	the Aalto Silo project work as a triggering force that can start or accelerate a change of the perception of the urban narrative of Meri-Toppila through changes on site
Re-Urbing (RU)	implementation model where spatialized maps of the urban area actors are linked through design practices in order to present a precise set of management and projectual urban context decision's toolkit with specific focus on improve latent capacity and potential	novel concept but supported by Adaptive Management practice models, like the ones found in Rist,L. Campbell,B. Frost,P.,(2012)	unknown parts of the project's theoretical framework are filled with exploratory, projectual and practical decisions and so the uncertainty surrounding lack of data is replaced by anticipatory measures directed on site.	Re-Urbing is the implementation model itself, the idea is that the use of these guidelines can help to perform successfully in an ever changing urban environment, specifically related to how the perception of the place can change through the work in progress of an impactful project.

to the public and private spaces in an economically sustainable way presents a practical and theoretical conundrum.

This issue -although addressed accordingly- will stay tangentially as a fertile ground to explore Urban Transformation strategies outside traditional tools of the disciplinary field.

Even so, just like deteriorated Urban Spaces, natural ecosystems that used to be thriving spaces for production and overall quality of life of their inhabitants “deconfigures” over time and need some precise action to trigger their positive development again.

Taking this in consideration, and for the purpose of using this RU concept as an Analytic Lense for the current Diploma Thesis, an RU strategy will be defined as an implementation model where spatialized maps of the urban area actors are linked through design practices in order to present a precise set of management and projectual Urban Transformation decision’s toolkit with specific focus on improve latent capacity and potential.

As this action doesn’t mean to be a continuous form of management but an operation made in spare and specific moments of the Urban Area development process, it can be linked to the description of “Adaptive Management”(AM), found by Rist,L. Campbell,B.Frost,P.,(2012):”AM(...) is resource management conducted in a manner that purposely and explicitly increases knowledge and reduces uncertainty (Holling 1978; Walters 1986).

The core idea of AM and its relationship with a RU model implementation is that the unknown parts of the theoretical framework are filled with exploratory, projectual and practical decisions and so the uncertainty surrounding lack of data is replaced by anticipatory measures directed on site.



Fig 4. Original logos of the Toppila Oy company



Fig 5. Center of Meri-Toppila



"It was the sea that opened up Oulu to the world and the world to Oulu. It was sea traffic in and out of its port that made Oulu an International city at a very early stage in its history.

it was the sea that proved to the people of Oulu and their many trading partners that one can be close at hand even when located far away."

"Meri avasi Oulun maailmalle ja maailman Oululle. Merelle Oulusta on aina menty ja mereltä sinne on tultu. Tämä liikenneteki Oulusta jorhainkansainvälisen.

Meri todisti oululaisille ja heidän kauppakumppaneilleen, että kaukanakin voi olla lähellä."

Tauno Kohonen & Tuomo-Juhani Tapio: Oulu-400 vuotta kansainvälinen kaupunki



*The sea and the steam ship.*

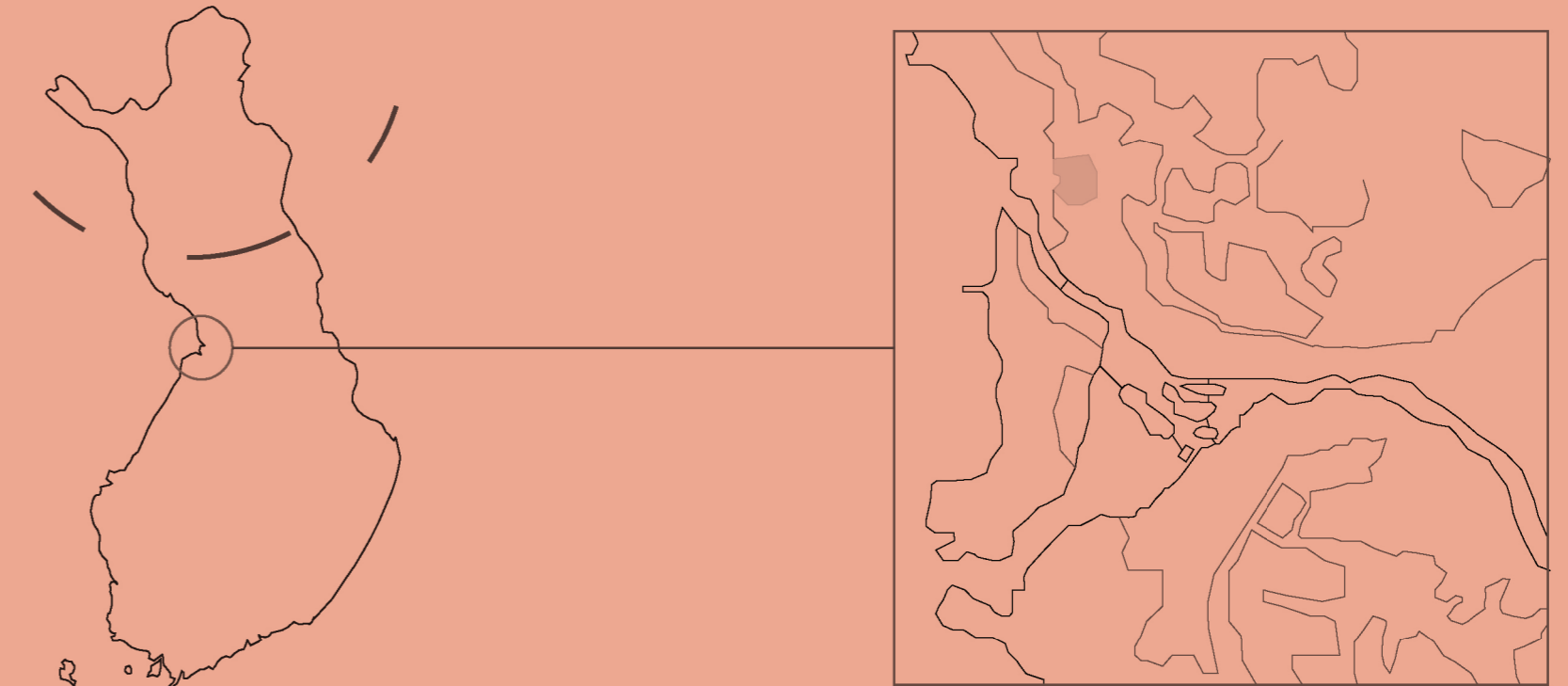


Fig 6. Location of Oulu in Finland and general topography of the city

OPERATING IN A POST-INDUSTRIAL SITE:  
MERI-TOPPILA

### 3.1 The City of Oulu

Oulu is a city of 200,000 people city located in the middle of Finland, around 600 kilometres north of the capital Helsinki, by the Gulf of Bothnia, in the Oulujoki river delta (Info Finland, 2022).

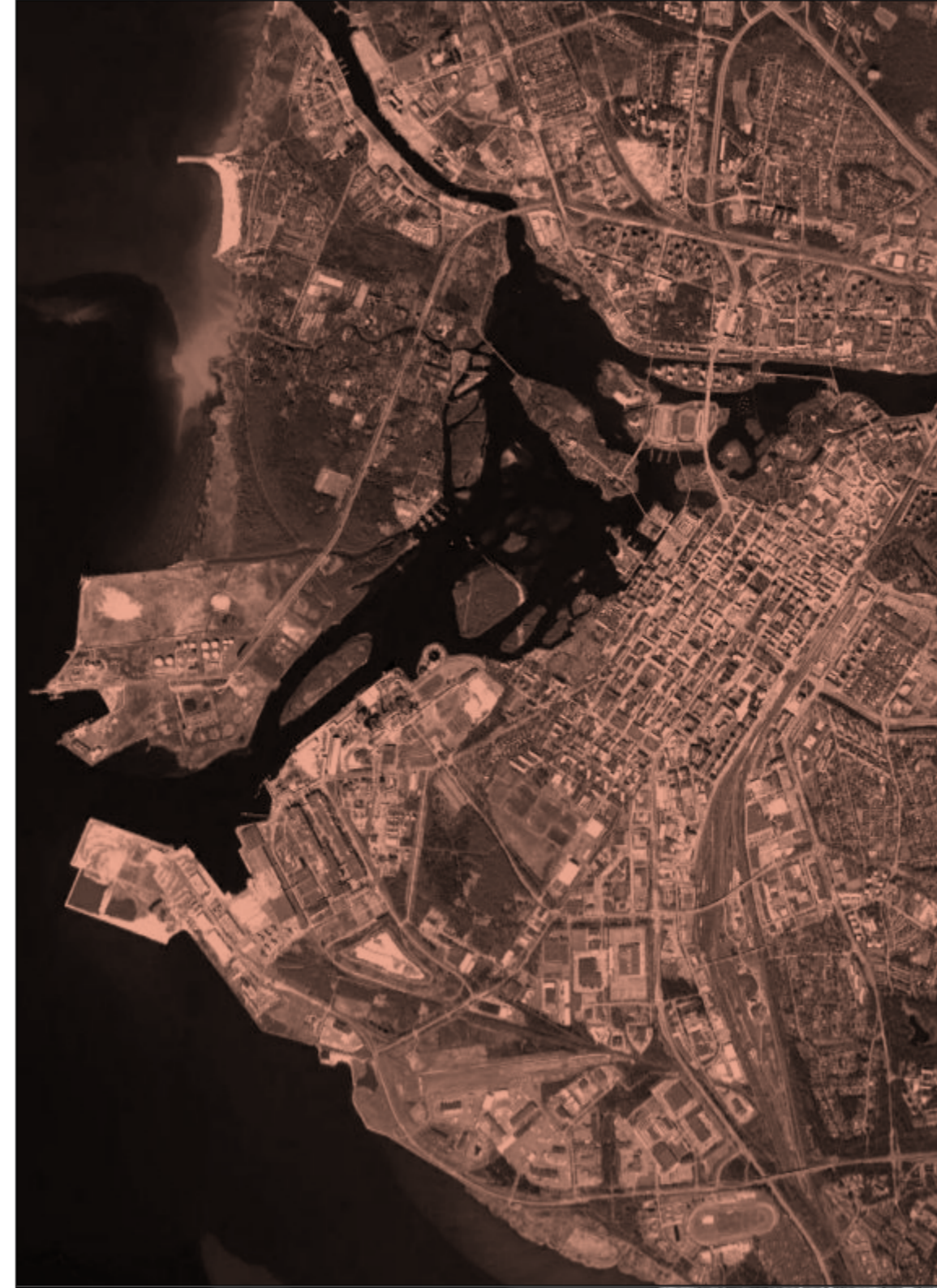
Although some populations temporarily inhabited the region during their migration from South to North before, the written history of Oulu begins in the late mediaeval period (XIV century) as a place of conflict between the Swedish crown and Novgorod (city-state that will later form part of Russia). In 1375 the Swedes built a fortress on one of the islands guarding the delta entrance and from there their power was established in the area (City of Oulu,2022).

Next to that island, modern Oulu was founded in 1605 by King Charles IX of Sweden and it rapidly became a commercial hub between Northern Finland and Europe. By the XVIII century Oulu gained rights to export from its port directly to foreign countries from and goods like tar, timber and salmon started to bring increased profits to the village. (City of Oulu,2022).

At the turn of the XIX century a fast industrialization process began and shipyards, mills and workshops started to appear alongside the increasingly important tar export business. So many mills appeared that an edict was needed were already in town that an edict had to be done to close them during the salmon migration so they could not affect fishing activities.

By the last quarter of the XIX Oulu had the greatest commercial fleet in Finland and was the main exporter of tar in the world. This material was of great importance at the time as it was used to waterproof wood ships (City of Oulu,2022).

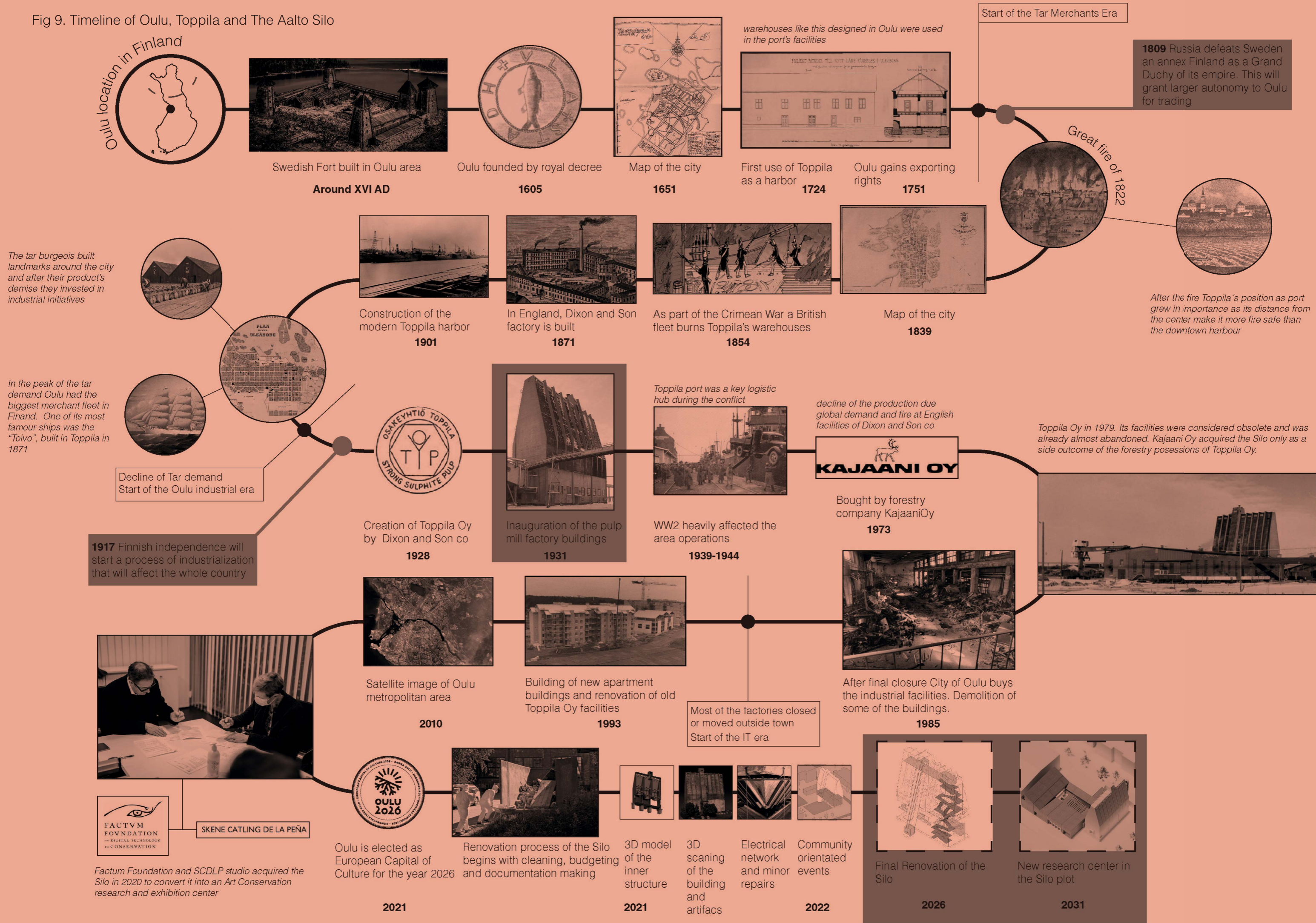
The tar and timber business created an infrastructure of warehouses, workshops and facilities that later on would be of importance for the modernization process carried on in the interwar period. The first port was located in the centre of the city, but as exports increased a second one was emplaced in the Toppila Area. In 1910, Toppila harbour became the property of the City of Oulu and stone quays, rail lines, and harbour warehouses were built..



△ Fig.7 Oulu downtown and its symbol: the Toripolissi statue.

◁ Fig.8 Satellite image of Oulu urban spread

Fig 9. Timeline of Oulu, Toppila and The Aalto Silo



### 3.2 Oulu industrial past, present and future

Foucault. J (1978) describes a territory as an “area controlled by a certain power”, and in the city of Oulu one can see how the forces of its incumbent economic structure are straightforwardly materialised in buildings, urban spaces and infrastructural geography. As well, the XIX and XX century industrial footprint still affects Oulu urban fabric and its former factories, warehouses and logistical in-betweens continue to command how the city configuration guidelines evolves and grows.

The second industrial revolution (mid XIX century to the beginning of the XXth) had a tremendous effect in the shaping of Oulu's downtown, surrounding neighbourhoods, their urban layout and physical appearance.

To name a few, the constellation of mills and stockrooms that was old Myllytulli continues there, now occupied by offices and housing apartments. While, maybe not all Heinäpää's original worker's wood houses are still standing, as two hundred years ago, their contours rows keep signalling the area grid. As well as Pikisaari, where an entire island served as a factory ground, former shipyards, workshops and labourer dwellings continue to define to set up the island skyline view from the river. However, instead of foundries, textiles and timber now they produce cultural and creative industry services.

Nowhere in Oulu is this interrelation of industrial past and urban layout so visible as in Meri-Toppila, where the ground plan of a pulp mill factory compound

-designed by renowned architect Alvar Aalto- is the base of a whole neighbourhood. In the centre, its cathedral looklike concrete silo depository, an icon of one era, and possibly, of another.

### 3.3 Meri-Toppila

Located five kilometres from Oulu downtown, Meri-Toppila is in the historical port quarter of Toppila. It literally translates from Finnish as “Sea Toppila ” as it lies next to the Bothnia delta. Four thousand people live in this district that has a marked material difference with the rest of the city as the majority of its architecture is composed of renovated industrial facilities.

All of these original factory facilities were constructed in 1931 by British based Dixon & Son Paper Company and designed by renowned Finnish master Alvar Aalto.

Meri-Toppila has a strong connection to the city's past, but its history as a residential area is relatively new (as these former factory buildings were transformed into apartments in the late 1980s and early 1990s after the closing of the Dixon Paper Company). From there on, factors like lower rent prices, a strong multicultural community, big unemployment rates and extended social difficulties among its population generated a negative stigma that is still strong in the collective imagination of Oulu city inhabitants.



Fig.10 *Oulun vapaakauppa* (Oulu free trade area)(1974) △ by Paavo Tolonen depicts the end of the industrial era of the city and its transformation into a service economy. The old and new collides in the market square where the modernist teather looms over a pair of traditional dressed shop women scolding government bureaucrats.



△ Fig 11. Old tar warehouses in Oulu's downtown now touristic attractions



△ Fig 12. *Lato* (Barn) (1974) by Paavo Tolonen Similar landscape of small warehouses was the one of Meri-Toppila at the turn of the 20th Century.

“The international seafaring with its wooden sailing ships was already a nostalgic thing in the past during the decades of 1920 and 1930.

One could only reminisce the times when the navy of Oulu had ploughed the faraway seas.

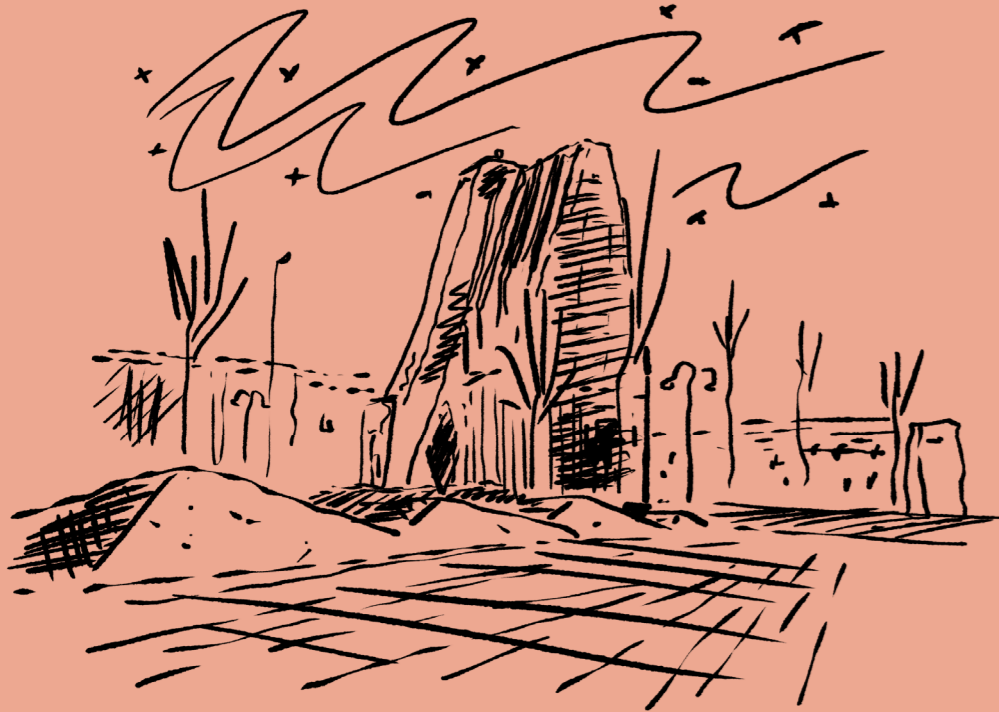
However the port of Toppila remained still a important connection between the cities and the seas of the world, and sailors were an inseparable part of the Oulu streetscape.”

“Oululainen kansainvälinen merenkulku puisine purjelaivoineen kuului 1920- ja 1930-luvuilla jo kultaiseen menneisyyteen.

Vain muistoissa olivat ne ajat, jolloin oululainen laivasto oli kyntänyt kaukaisia meriä.

Toppilan satama oli kuitenkin edelleen kaupungille tärkeä yhteys maailman merille ja merimiehet kuuluivat jatkuvasti oululaiseen katukuvaan.”

Olavi K. Fält: Valkea kaupunki 1920-1939 (s.114)



## THE AALTO SILO PROJECT

### 4.1 Toppila Oy

Peter Dixon was a Scotsman who began making paper in 1866. Dixon & Son company was founded for his son Joseph in 1871 in Spring Grove, Sheffield, United Kingdom. A second mill was built at West Marsh, Grimsby, in 1904; and the first paper was made on 20 July 1906. The mill was subsequently extended and at one time employed 800 workers. It produced different kinds of paper and exported it all over the world. Joseph Dixon had three sons in the business, William, Oscar and Cuthbert, besides grandsons who also became directors. Oscar (1883-1946) managed the Grimsby mill from its opening. After failing to agree terms locally with the Great Central Railway in 1926, the company started plans and economic manoeuvres to open a wood-pulp plant in Finland instead.

In 1931, Toppila Oy, a factory focused on sulphite pulp and other timber related products was inaugurated in Meri-Toppila, Oulu, Northern Finland. By 1935 it already had a staff of 225 workers and a production of almost 28,000 t of sulphite pulp. From the beginning of the 1950s wood chip production was included, and the silo interior was expanded .

Production continued until late 1960s when global need declined and the Grimsby mill burned down(1971), sharply reducing Toppila's quota. Toppila Oy ceased to exist in 1974 when was bought out by by Kajaani Oy, mainly

for its forestry resources as the factory and the silo became obsolete by then. The factory as a whole closed in 1984 and in the same year all the buildings were sold to the City of Oulu to transform they into a residential area.

Today the history of Toppila Oy survives in Meri-Toppila not only on the renovation of their former factory buildings but also in place names like Sulfiittikatu (sulphur street) or the local pub, named Dixon Klubi.

### 4.2 Aalto and the Industry

Paper and wood products are manufactured from raw timber materials in big facilities all around Finland, and although now the country's economy is more diversified than in Toppila Oy times - when forestry was Finland's main economic activity and leader of the industrialization process - this is still an important sector for the economy through all the land (2022 , Finnish Ministry of Agriculture and Forestry ).

During 1930-1960, Alvar Aalto worked with Finland's top forestry companies in order to build factories, workers neighbourhoods and office buildings. This relationship of Aalto with the forestry moguls and its contribution to give Finnish industry a symbolic vehicle through architecture is well documented (Quantrill, M 1983 ; Hipeli, M 2012; Vossoughian, N 2020).

Aalto's forestry industry infrastructure projects usually were located in rural areas or in the fringe of a small city and his office would materialise them between a mix of traditional and innovative construction products and shapes. Nevertheless, a flexible experimentation of materials



Fig 13. Alvar and Aino Alto cruising the Bothnia Delta near Toppila in 1930

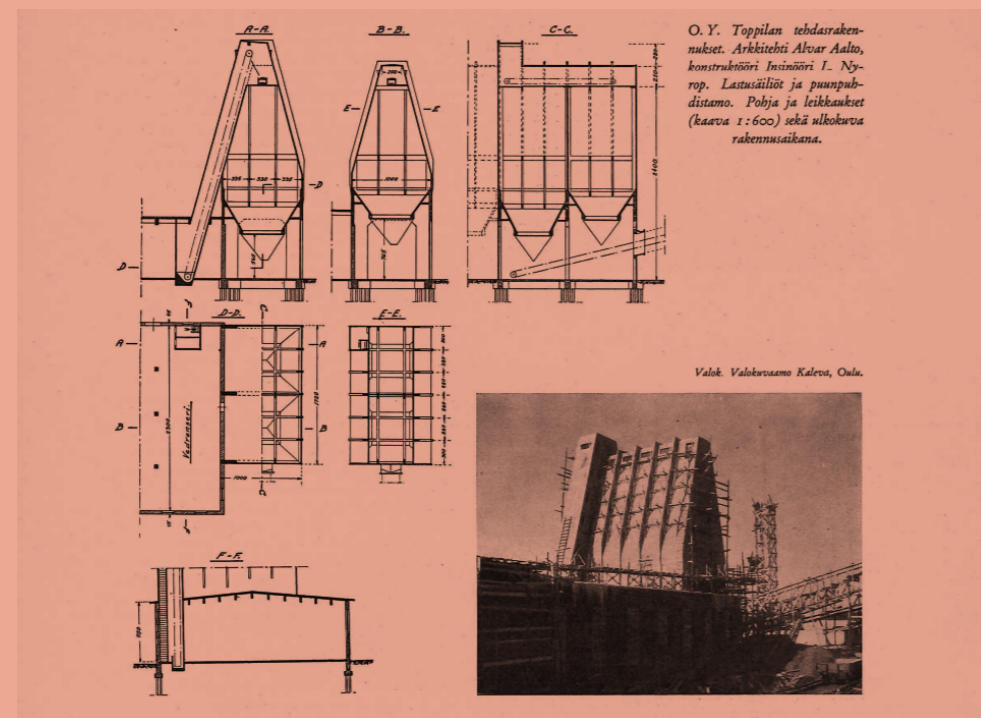


Fig 14. Original Drawings for the Silo and picture of its construction

Fig 15. Meri-Toppila in 1930, one year before the Dixon company



Fig 15. Meri-Toppila in 1930, one year before the Dixon company

and morphology, personal design gymnastics and the configurational need to give soul to factory programmes, are some of the romantic characteristics absent from the era's modern movement buildings that can be found in Aalto's work (Lewis, 1989). This sensorial approach- embraced by Finland's interwar industrialization process- will become a staple in Aalto's conception of architecture as a whole and his design.

Silos in particular, represent the purest architectural forms of 20th century industry, as they usually were erected as efficiency-orientated containers built in order to safe-keep some kind of commodity before it could be transformed into a commercial benefit. In fact, icons of the time explicitly mention them as precursors of modern architecture (Le Corbusier, 1923 ; Menelsohn, 1926; Taut, 1929 ) a statement clearly visible in the building typologies that would dominate the discipline landscape in that time.

Klemola (2021) describes the role of Aalto in the Toppila Oy project as "formgiver" as he became involved in the process in a later stage of its deliverance working mainly in shaping the outer shell of the silo and other design choices. Adding that Aalto was a major cinema buff and chairman of Projekti, the first Finnish film club (Karjalainen, 2020) one can assume that the Silo carries from its conception an audiovisual component to it and that a direct comparison with a German expressionist stage set design is not far fetched from reality.

The Toppila Oy silo was constructed at the limit of the engineering tolerances of the era, with a 10 centimetre thin wall shell covering the cathedral-looking morphology. It rises 28 metres high in an extruded nave fashion

from a rectangular base. The interior is divided into 3 identical bays of 10 x 10 metres each and although the exterior has a strong futuristic impression the inside is filled with wooden floors and hoppers design that were almost already outdated by the time it was finished.

Continuing with Klemola (2021), he points out that the Toppila Silo acted as a narrative device for Aalto as it gained control of the project by being published as the sole author of it in *Arkkitehti*, *The Architectural Review*, *The Architects Journal* and the 1938 MoMa exhibition titled *Architecture and Furniture: Aalto*. In fact, the Meri-Toppila large-scale industrial commission will become an inflection point in Aalto's career, allowing him to express his notion of architecture first through Finland, and then, the world.

It's not a minor detail that this was Aalto's first reinforced concrete project, and how its use in order to control shape and morphology will characterise his work in the following decades. For example, as discussed in Chapman and Roberts (2014), management of scale contrast can be seen in Aalto's design of the worker's neighbourhood in Sunila, made a few years after Meri-Toppila and next to another Sulphate mill factory. The correlation with an industrial world, its manufacturing process, the way society used to live around it and how all of this was materialised in architecture and urban spaces is of importance to understand the current Silo renovation efforts and its future impact on Meri-Toppila and Oulu.

As explained by lead architect of Aalto Silo project Skene Catling (2021): "These industrial sites once generated and



Fig 16. Silo under construction in 1931



Fig 17. Dixon company functioning in the late 1930s

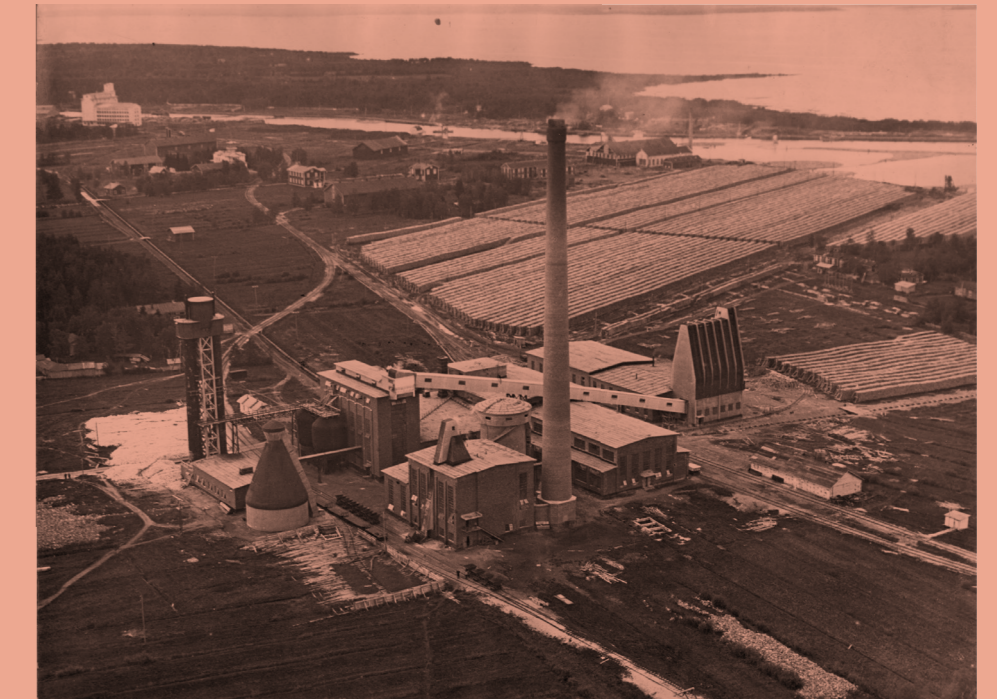


Fig 18. Aerial image of the site in the late 1930s

defined communities; physically, socially and economically. Abandoned, they are melancholy remnants of 20th century capitalism and architectural utopianism. It is time to rethink these spaces for a post-industrial era and to use them to help examine every aspect of the way we currently live.”

#### 4.3 Gateway to the World: Factum Foundation

Toppila Oy buildings gained a new life when Meri-Toppila was transformed into a residential area. While other buildings of the factory were renovated into services and businesses (the power station is now a youth centre, the drying hall a climbing facility, a warehouse is a kindergarten and the machine room where the Silo conveyor started is now a student's apartment) the Silo remained as a ruin for decades.

Although some activities were conducted in its interior by cultural groups (mainly Kulttuurivoimala Oy that organised some music events in the building) no major renovation of the site made it forward the planning phase and the building grew in deterioration alongside Meri-Toppila's reputation.

In 2020 Factum Foundation, the world leading organisation in art archive digitization, bought the silo for renovating it into an international art research centre. As explained in their website “Factum Foundation is at the forefront of rethinking the preservation of cultural heritage globally. They have initiated and been part of numerous exhibitions, studies, conservation training programmes, and unprecedented joint projects involving major artworks and monuments from around the world. sing awareness about the Bakor monoliths of Nigeria. The primary objective of the Factum Foundation is to ensure that future generations can inherit the past in a

condition in which it can be studied and emotionally engaged with.”.

The scope and scale of Factum (Jonathan Jones wrote an article for The Guardian calling the organization a “civilization saver”) - and its ambitious plans to renovate the silo and build new facilities in the area - will bring global investment and world recognition to the neighbourhood, it represents an important opportunity to transform Meri-Toppila through a flagship project. Following this interesting momentum, a need to create a sustainable urban ecosystem and image for Meri-Toppila seemed imperative: The Aalto Silo project could definitely trigger private and public investment attraction to the area, and with the right focus also facilitate local organisations to get funding to overall improve the living quality of the area residents, visitors and workers.

In the recent 2021 Alvar Aalto symposium “The Future of Industry” at Jyväskylä, Factum Foundation president Adam Lowe and Lead architect of the Aalto Silo project Charlotte Skene Catling gave a lecture about their plans to the Toppila Silo and Meri-Toppila neighbourhood. In that presentation, attention to the incoming centennial of the district (1931-2031), was highlighted as a realistic goal to reach a visible transformation of the area through cultural innovation tactics supported by architecture and urban space design.

For this to happen the actors of the area need to be coordinated, guided and inspired by a powerful narrative aiming to materialise onsite strong ideas of future, progress, inclusion and sustained sustainable collective growth. Moreover, it links with cities and urban spaces that need to ‘change’ their images or alter, transform or modify their



Fig 19. 1993 demolished part adjacent of the Silo



Fig 20. 1993 demolishing jobs on the Silo



Fig 21. 1996 Renovation of the Dixon buildings into housing



their socio-economic fabric, usually due to external factors that affected them profoundly, as in this case. Toppila is in the process of transformation from an industrial to a residential zone, a process that even after 30 years is still incomplete

And these categorizations could apply to a vast majority of cities (or particular sectors of town) that used to be dependent on sizable mono-sectorized industries that suddenly found themselves without an immediate replacement of their main source of income, identity and progress. This historical base is important in order to implement the Aalto Silo project and the understanding of Meri-Toppila neighbourhood structure as its urban narrative change is closely related to the notion of a post-industrial City.

#### 4.4 Silo Dreams

The Silo, as an image of a bygone era, can be a powerful vehicle to the start of a new one. As described by Lowe; Skene Catling (2021) The silo was built when exploitation seemed natural, resources infinite, and responsibility lay in satisfying human desire rather in preserving the environment. Now commercial sharks are once again circling, eyeing the natural resources being unlocked by the rapidly melting permafrost. Fortunately, positive change is in the air and encouraged in Finland. Tech- and gaming-related start-ups thrived in Oulu with the growth of Nokia, and now have their own identities.

The restoration of Meri-Toppila as an international hub cannot follow the same guidelines as it did almost a hundred years ago. While still some of the configuration can be maintained (in the form of materiality, shape, use of

urban and geographical features) just the realisation of a building is not enough: a story must follow underly it in order to construct a sustainable context that could carry on by itself in the following decades, and hopefully, adapt better to any new socio-economic circumstances it might encounter.

A structure of the Aalto Silo characteristics will inevitably affect its surroundings profoundly and disrupt how the people living in the area, and the rest of the city, perceives the neighbourhood. Clearly, it's important to restore the building correctly and complete it with an offer of innovative programmes open to the community and researchers. In parallel, there is a need to design how this catalytic event and the creation of a new narrative on site - will affect the area. This thesis asks how it can enhance local initiatives and projects that could be future guidelines for sustainable, self-managed and innovative urban regeneration processes.

The Silo restoration can function as a flagship of the conceptual change of Meri-Toppila as a whole. The disruption that its completion will bring to the area opens an interesting window of surprise that makes easier the process of urban ecosystem orchestration that could be organised, through the resources of Factum and the iconic nature of Aalto's aura and symbolism. In a project of this scale, ecosystem design in an urban setting means channelling existent efforts, initiatives and projects from local cultural, social and entrepreneurship organisations through an iterative network of site-oriented actions, in this case, commanded by a referential organisation with an identifiable footprint in the area.

The Aalto Silo project, since its conception, expands beyond the boundaries of the concrete silo into the neighbourhood - by history and design - and in order to fulfil its objectives of being a symbol of a new era needs to positively affect its environment. This urban orientation is the reason why aside with the actual renovation of the building, a narrative renovation needs to take place, an Urban Calibration of the city sector, like an organ technician testing the pipes, the correct tune of each should work at unison when the song is needed.

Syntonize the narrative of the neighbourhood again with the rest of Oulu: the technologically driven future European Capital of Culture. In order to fulfil this objective, a process of decision making is needed, a pragmatic set of actions connecting site actors and their own goals into a broader scheme of things. This action of Urban Regeneration (Bassett, 1993 ; Montgomery, 2003) -of reconnecting a city part with a structure that is not perceived as part of it anymore- is thought of an iterative part of the design process. The specific management model for Toppila will be called, for the purpose of this dissertation, 'Re-urbing'.

This is a sub-product of the Aalto Silo project, a model implementation that could be exported to other similarly derelict areas in post-industrial cities, introducing similar cultural flagship projects on their sites.

Expressed by Lowe & Skene Catling, (2021) There is an awareness of the urgent need to redefine a global role for this overlooked locality (Meri-Toppila), just as the world is being forced to confront its deepest prejudices around national boundaries, identity,

consumption, materiality, preservation and sharing. What is valuable – and the nature of value itself – is being rethought.”

The Aalto Silo project seeks to save the cultural heritage of Aalto's design whilst expanding its use and functions for Oulu and the rest of the world. The material aspect of this narrative change for Meri-Toppila has been conceived in three core parts: the restoration of the Silo, the construction of a new Research Centre next to the historic structure, and the development of innovative content programming and cultural network (Aalto Silo booklet, 2022):

Renovation of the interior of the silo will preserve as much of the original Aalto design as possible. It will facilitate a variety of exhibitions and events with international reach. The works include, full interior and exterior renewal, new horizontal and vertical circulation and some light-touch spatial interventions.

The construction of a new Research Centre adjacent to the silo will serve the conservation of art and culture, and the manufacturing of facsimiles. This building will welcome the public, with a cafe/restaurant, open air cinema and sauna. Productive workshops, offices, and residences for visiting collaborators will complete the program. Recycled concrete will be used in the building's construction, pioneering a CO2 reduction emission strategy in collaboration with different local and international actors. Content of the silo events will be focused on artistic storytelling about the anthropocene and climate change in the arctic region.

In addition, the Aalto Silo project is engaging in different initiatives for transforming the neighbourhood through collaborative experiences with the community and cultural institutions.

The restoration of the Silo and its new functionality as exhibition and international event centre, with new circulation and internal space in its inside is scheduled to be completed for the inauguration of Oulu capital of culture in 2026. The new research centre is aimed to be constructed for the Centennial of the Dixon Factory in 1931, alongside other possible renovations as -for example with the help of Oulu city hall- transforming the parking lot in front of the Silo plot in a new green cultural space.

The on site operations began in 2021, when the building was in a terrible state of decay, filled by trash, pigeon droppings and overall inhabitable conditions to continue the design process. By 2022 the building is clean, minor reparation actions were taken care of its inside, the plot surrounding the Silo has been levelled out, electricity is back again on the building and bi-monthly meetings with the city hall are taking place where the design phase for the restoration plan is almost done.

What's more to the physical transformation of the Silo, efforts in building a cultural network capable of interacting with Factum aims in Meri-Toppila- and complement the artistic programming on its interior- were done allowing the organisation to map the majority of these associations(specially the ones orientated to urban culture, youth services and art) to plan future coordinated events and joint funding projects.

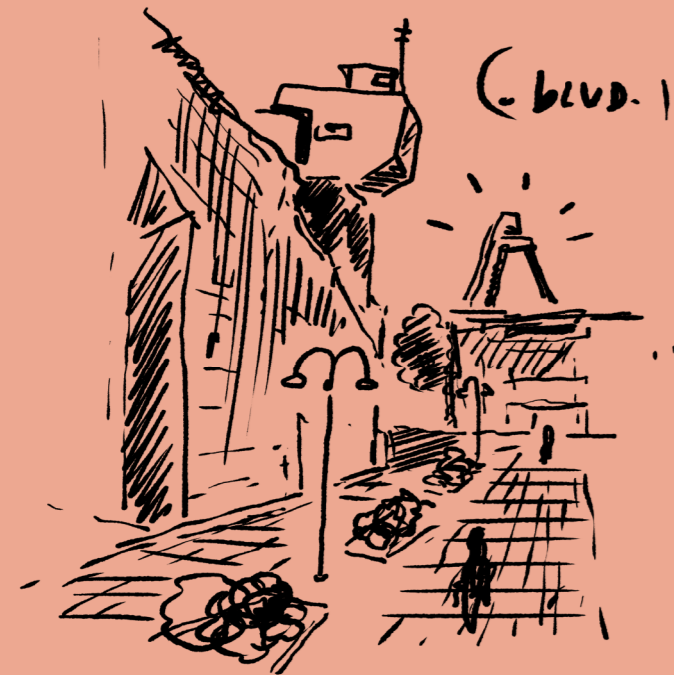
These local organisations and their past experiences in Oulu cultural landscape are of importance in modelling an urban ecosystem and to enhance initiatives surrounding the silo, making the principal action of the Ecosystem Design into developing a iterative map of actors on site that can play specific roles in the Calibration of Meri-Toppila.

To name a few, Oulu Urban Culture with its Untamed Office project: a series of artistic activities deployed in urban pockets around town. Kulttuurivaimala experience in Meri-Toppila as it operated on the neighbourhood for more than 10 years (and continues in relationship with the neighbourhood through Yhteisötila Alvari cultural centre), Northern Photographic Centre which organises local and international exhibitions operating in Oulu's main cultural centre, Tulva Ry a multimedia and music organisation that operates in Toppila, Radio Kro -a community radio based in Pikisaari island- and Kaltio Cultural Publication oldest cultural organisation in Northern Finland.

Related to extra regional organisations, Factum has already started collaborating with the Alvar Aalto foundation, Tampere University and OAMK to begin generating innovative ways to protect Aalto's heritage in Meri-Toppila. These organisations help extend the network outside Oulu, starting to exposing the Silo and the area to a broader audience.



Fig 22 Former power station of the factory compound now a climbing center



“The same factory on the horizon pushing shit on the sky/ reminding me of the fact that cash rules here”

“Horisontissa se sama tehdas puskee skeidaa/ muistuttaa mua siit et täällä määrää vaan cash”

Olli PA & Funksons - Perusjannu

## SITE ANALYSIS

As in traditional urban development projects, any urban image change narrative initiative needs to encapsulate spatial information in proper scale, measurement and material characteristics in order to operate on site with a high degree of efficiency.

For contextualization purposes a series of plot use layer diagrams were created: presenting Toppila's general morphology and its socio-economic physical fabric. Also in this chapter, a map showing the location of Toppila, Meri-Toppila and their relation to Oulu's downtown and other former industrial districts is displayed.

However, following diagrams are of exploratory use and thought as preliminary studies to be improved over time and by nature of their use in different type of projects.

(fig 15) Toppila layers

A. external parking slot parks and buildings

A1 around the center of meri-toppila

A2 next to residential buildings

B. Roads and connection

note: disconnection between the bay and the neighborhood- not enough transport lines

C. Education facilities

D. Green Areas

E. Special blocks

E1 Aalto Silo

E2 ex train water pump building

E3 new city residential housing area

F. significant water bodies

F1 little streams

F2 ponds

F3 former industrial canals

G. Spaces not owned by anyone

G2 between parking slot and silo

G3 plots of shore next to the bay

H. Terrain

I. Service buildings

I1 bike shop, thrift shop, sale supermarket, youth gym, climbing center, Dixon klubi pub

I2 pharmacy, pizzeria

I3 reception hall for weddings and other events

I4 car shop, k supermarket

J industrial facilities

J1 water plant

J2 export explanade

J3 toppila power station

note: meri toppila is “encircled” by these large scale industrial operations

K Sport facilities

K1 disc golf park

K2 ice hockey field

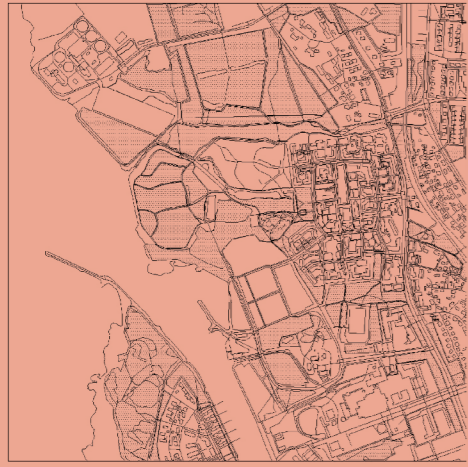
K3 running tracks

L residential areas

L1 compact configurations

L2 ex factory sites differentiation

Fig 23- Toppila layers

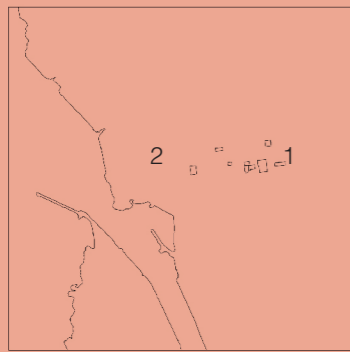


### 5.1 Layers of Toppila

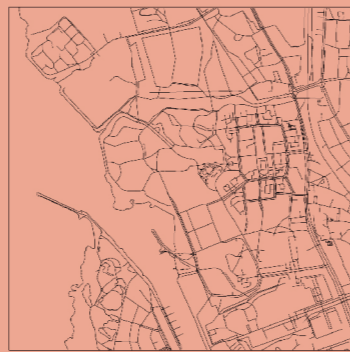
The understanding of the material components of the surroundings of Meri-Toppila -the broader area of Toppila- allows decision makers to activate specific areas through policy, design or infrastructure actions.

These layers of land use and other plot properties information are of indicative nature and can work as boundary sets for further project implementation ideas: limiting the scope of resource use and materialization characteristics of a new Urban Narrative.

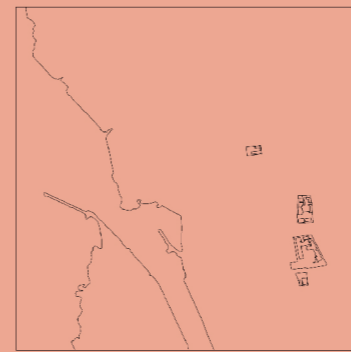
- A / external parking slots
- B / roads and connections
- C / education facilities
- D / green areas
- E / special blocks
- F / significant water bodies
- G / empty blocks
- H / terrain
- I / service buildings
- J / industrial facilities
- K / sport facilities
- L / residential areas industrial facilities in operation



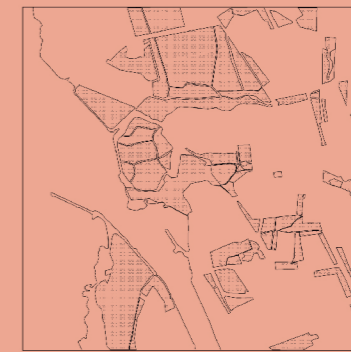
A.



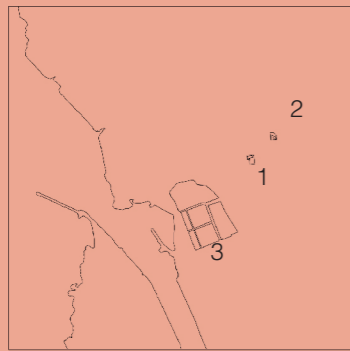
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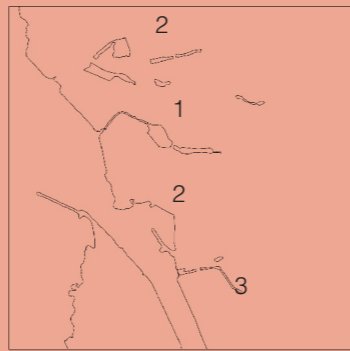
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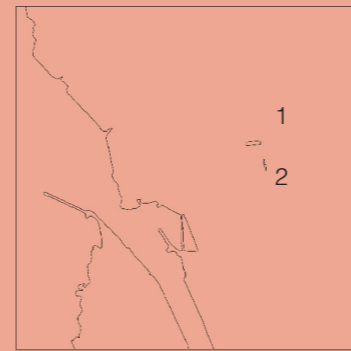
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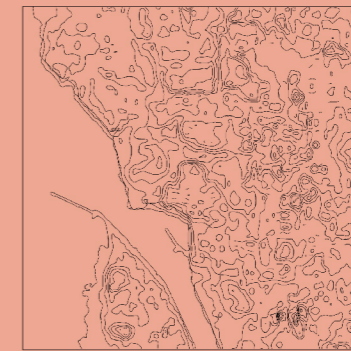
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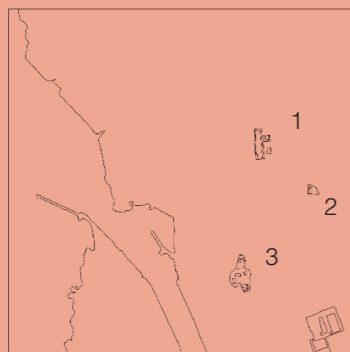
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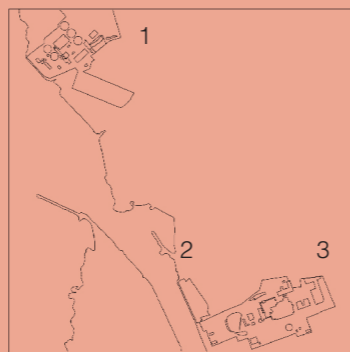
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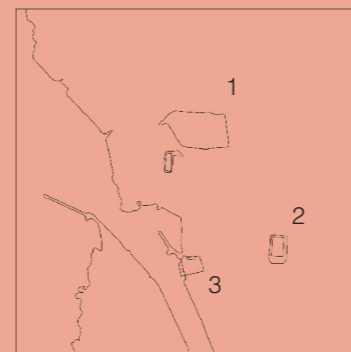
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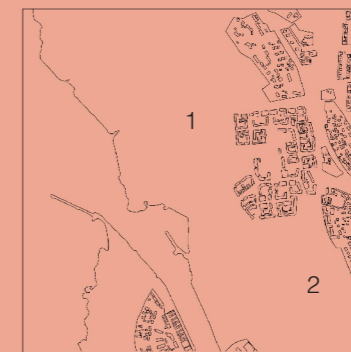
I.



J.



K.



L.



Fig 24- Oulu downtown and Meri-Toppila

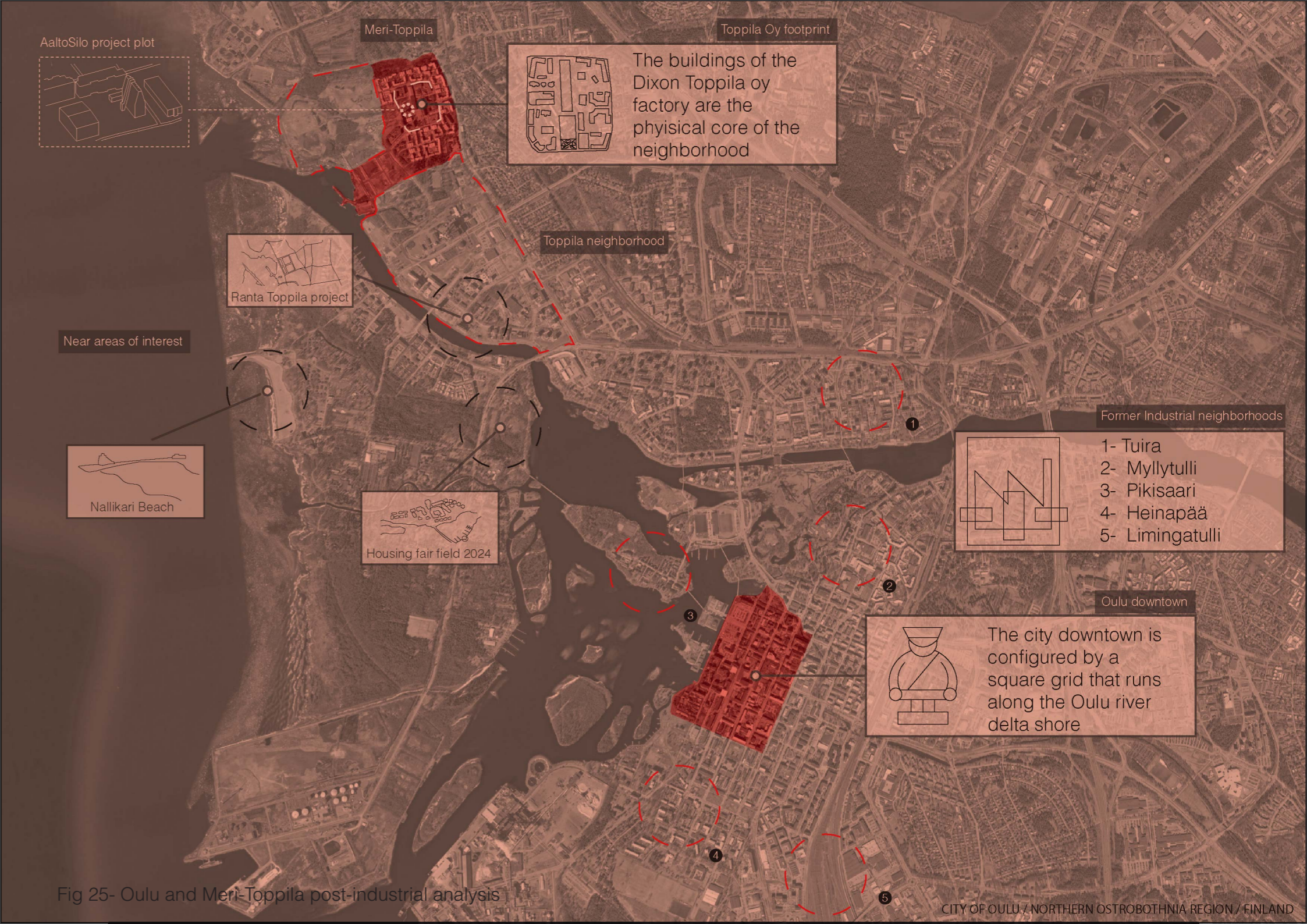
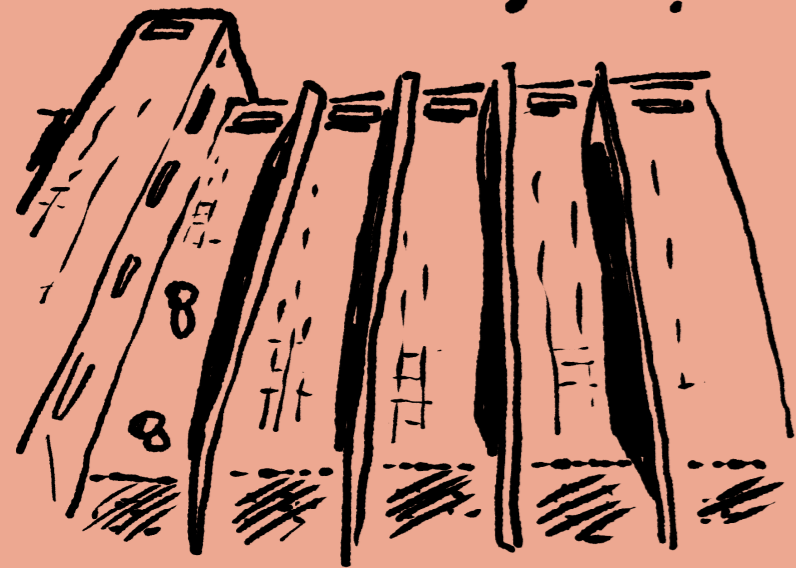


Fig 25- Oulu and Meri-Toppila post-industrial analysis

look & sow!



“Meri-Toppila, Sea forecast,  
storm, tornados in a water glass/

jungle drums beat anger and  
disappointment that keeps  
ringing in your ears”

“Meri-Toppila, merisää, myrsky/  
vesilasis on tornadoit/

viidakkorummuis on vihaa ja  
pettymystä kun ne korvaan soi”

Olli PA - Myrsky



Fig 26. View of the Silo

## AALTO SILO IMPLEMENTATION

### 6.1 Flagship architecture and Urban Narrative

Flagship Architecture (FA) describes a scheme that works as a catalyst project designed to generate new activity and subsequent development in a place and therefore, Flagships can play a fundamental role in urban development. Large scale architecture, especially if come from creative industries or cultural backgrounds, has a powerful effect in changing the image of a site, as their programme generates a steady flow of formerly absent actions to the place (Aubry, A., Bien, A. and Vivant, E. 2015). This description fits well into the Aalto Silo project, as its size and dominant stance over the Meri-Toppila neighbourhood gives it a prominent role in the area landscape.

This transformative effect as Aalto Silo has carried the spark of the site's change of narrative and its materialisation can set the layout of a large interaction network between local actors that would gravitate around its presence. This interaction network can be thought of as an integral part of the project, where different public and private organisations can merge and enhance between each other.

The final goal of the implementation of this Urban Narrative through a FA project will be the change of conception of the place in a positive, organic way. In order to achieve this, a consensus produced by a network of local actors needs to be achieved.

A successful ED network of actors will benefit from how the FA can trigger its development as it disrupts the now inert site with sufficient strength to force a palpable and indistinguishable change in it. Yet, the linkage between the triggering action of a FA and the materialisation process of its architecture needs to be taken in consideration.

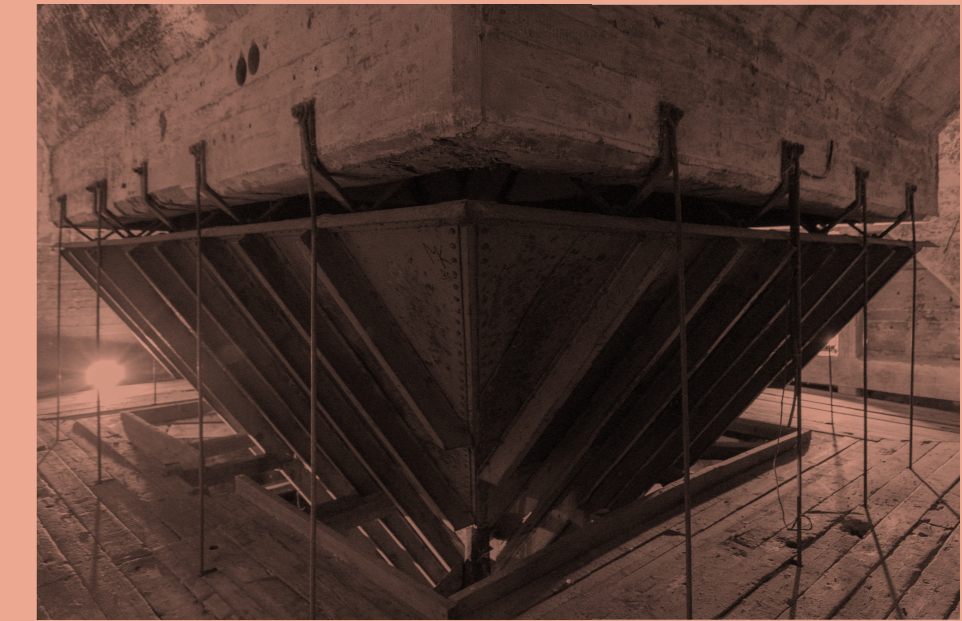
Also, how the urban narrative fits in this design, is of equal importance as discussing shape, material, function or programme. In terms of the Aalto Silo as being a triggering effect of design, at this stage (or part) of the project a connection to Place Marketing and Urban Branding is useful as Urban Narrative needs to be created as a rational response to needs of market and residents.

According to the findings of Pikkujämsä (2018) branding works best when the official message matches the image that message recipients already have. However, although useful as a starting structure to build an encapsulated image of a specific Urban Space an Urban Narrative project will depart in following stages from an Urban Branding or Place Marketing one in how this "official message" is materialised.

In Urban Branding and Place Marketing cases, a city area is a product to be consumed and transacted (Beunen, R. 2019). In an Urban Narrative project, the new symbolism works as the context itself. As Urban Narrative doesn't have an "owner", the final goal is to change the perception of the city area in a way that will transcend a marketing campaign or a specific time and age.



△ Fig 27. view from below one of the Silo hoppers



△ Fig 28. Silo hopper interior

Fig 29. Groundfloor of the Silo ▷



### 6.2 Ecosystem Design and the Urban Calibration of Meri-Toppila

The Meri-Toppila neighbourhood provides a suitable scenario for a narrative-led enhancement of itself. As Liberrstorn (2017) explains the new capital being the human capital and therefore, the large-scale industrial approach needs to be exchanged for the human scale and a focus on “culture” (of a certain meaning). This description is pivotal for Meri-Toppila, as a former factory neighbourhood born on the Second Industrial Revolution situated in a IT digital economy based city.

In fact, the Aalto Silo was already the differentiable part of the sulphate factory layout in its former industrial times. Its distribution in the centre of the industrial layout, its cathedral shape scale and hierarchized use in the pulp making operation highlights it over the area’s other buildings, which are all designed in the same industrial pavilion variation.

This meant that the Aalto Silo was always the “calibration piece” or “turning key” of the Meri-Toppila machinery: And this is expected to be enhanced in the area as an essential part of its renewed narrative. Moreover, the idea that history has its own materiality, and that architecture should function as a dialogue between past and future, a sort of forensic exercise where the site gives clues to solve through design, is central in the Aalto Silo project. Even more, this forensic iteration appears repeatedly in the design discourse by the project’s lead architect Charlotte Skene Catling, and can be seen already expressed in her practice, visible on the creative process and materialisation of the Dairy House and Flint House where the role of past within architecture, as form and narrative generator - recent agricultural past (Dairy) and ancient geological past (Flint)- is implemented.

Even so, as the Aalto Silo project extends beyond its architecture shell and overflows into the urban context, the history of Meri-Toppila as Oulu’s gateway to the world, is meant to be a primary axis through all the project’s implementation. There is an idea of material reconnection that transcends the building proper and can be seen in its development, construction, process and implementation.

Next, as described before, departing Place Marketing and Urban Branding from Urban Narrative lay in its final use, but their morphogenesis remains similar as in the beginning stages. In this line of thought, Meri-Toppila displays some characteristics that are globally linked to creative spaces: the look and feel, particularly the industrial heritage, grit streetscape, and street art contribute to the area’s appeal.

Thus, successful place branding depends heavily on the distinctive characteristics of a place and is used as a powerful marketing tool associated with the creation of unique identities (Gregory, A. 2009) In the work of Prilenska (2012) one can find two main categories of city image communication: A primary one consisting of a project’s direct intervention through spatial (urban design, public spaces, large scale redevelopment, public art and infrastructure) or non spatial (community networks, citizen participation, public-private partnerships, financial incentives, service provision and event organisation) actions and a secondary communication strategy consisting on direct advertising and promotion through different media. The combination of these actions should decant in a tertiary communication category that will emerge by itself (organically) that is the word of mouth: an uncontrollable image that becomes part of the public domain.

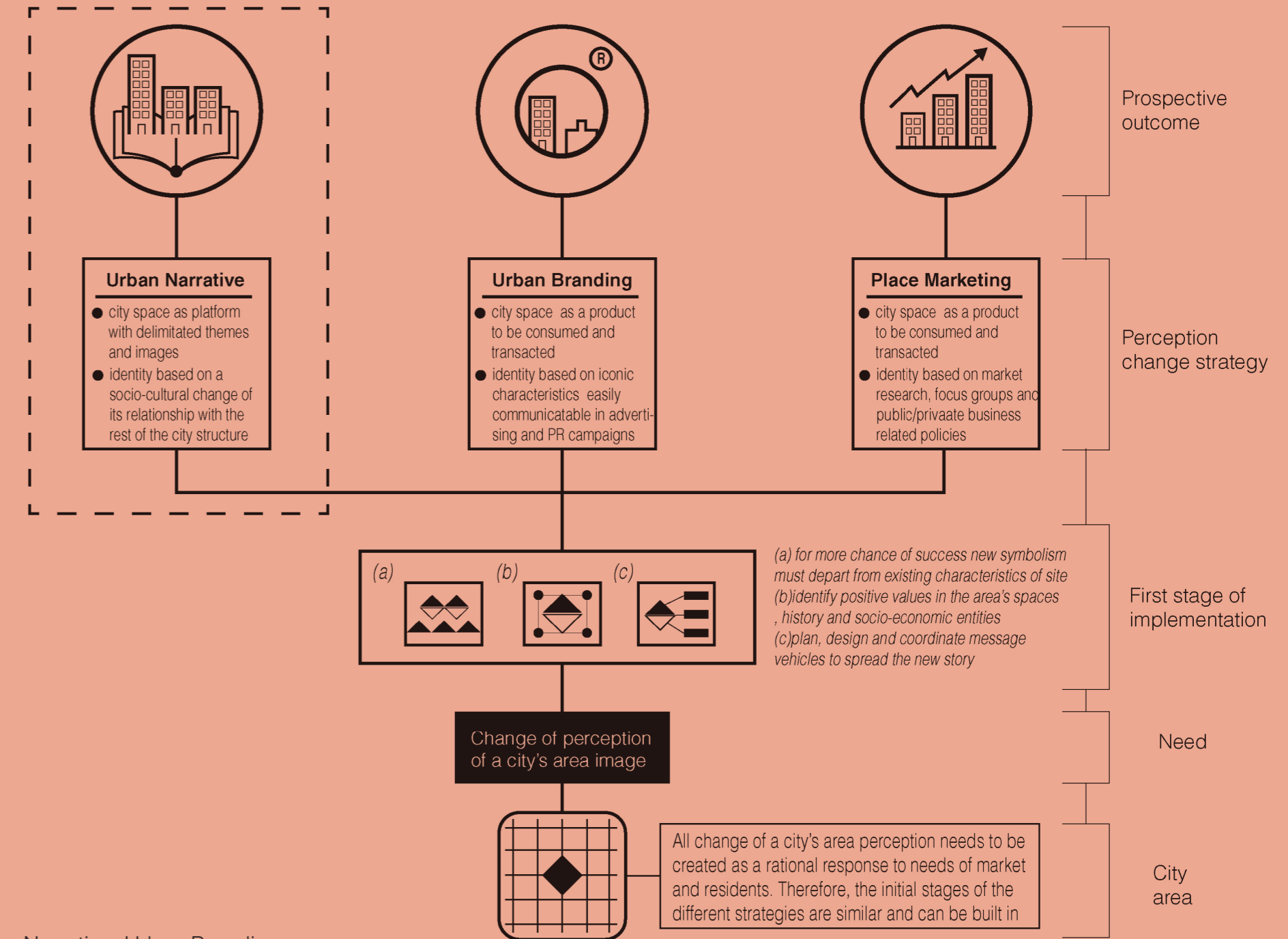


Fig 30- Urban Narrative, Urban Branding and Place Marketing chart



Adapting Prilenska's (2012) chart of City Image Communication to the implementation of the project, a similar framework can be built, focused on the particularities of the Aalto Silo and Meri-Toppila.

From Prilenska's work, following parts of the project can be categorised:

First, the characteristics of the city image (or sector of it) describing it as a separate entity from the other areas. The way to synthesise its symbolic and physical attributes in a simple and effective manner; Second, two productions depart from this city image, a Primary Communication strategy, related to spatial and non-spatial interventions on site, and a Second Communication strategy, related to the making of a unique story for the area. In the primary communication area. Both of these strategies, according to Prilenska (2012), will affect a third communication strategy that works indirectly as word of mouth, media which is beyond the control of the project.

For the project purposes, and analysed through the analytic lenses outlined at the outset of this dissertation (Flagship Architecture (FA), Ecosystem Design (ED), Urban Calibration (UC) and Re-Urbing (RU), Prilenska's chart will work as a support structure. In order to categorise particular implementation steps of the Aalto Silo project on site can work as follows: In terms of FA, main focus on physical design described in the chart's strategy will be the building and plot relationship with the neighbourhood, from an ED point of view, a description of Community Coordination, Support and Interlinkage strategy will be added,

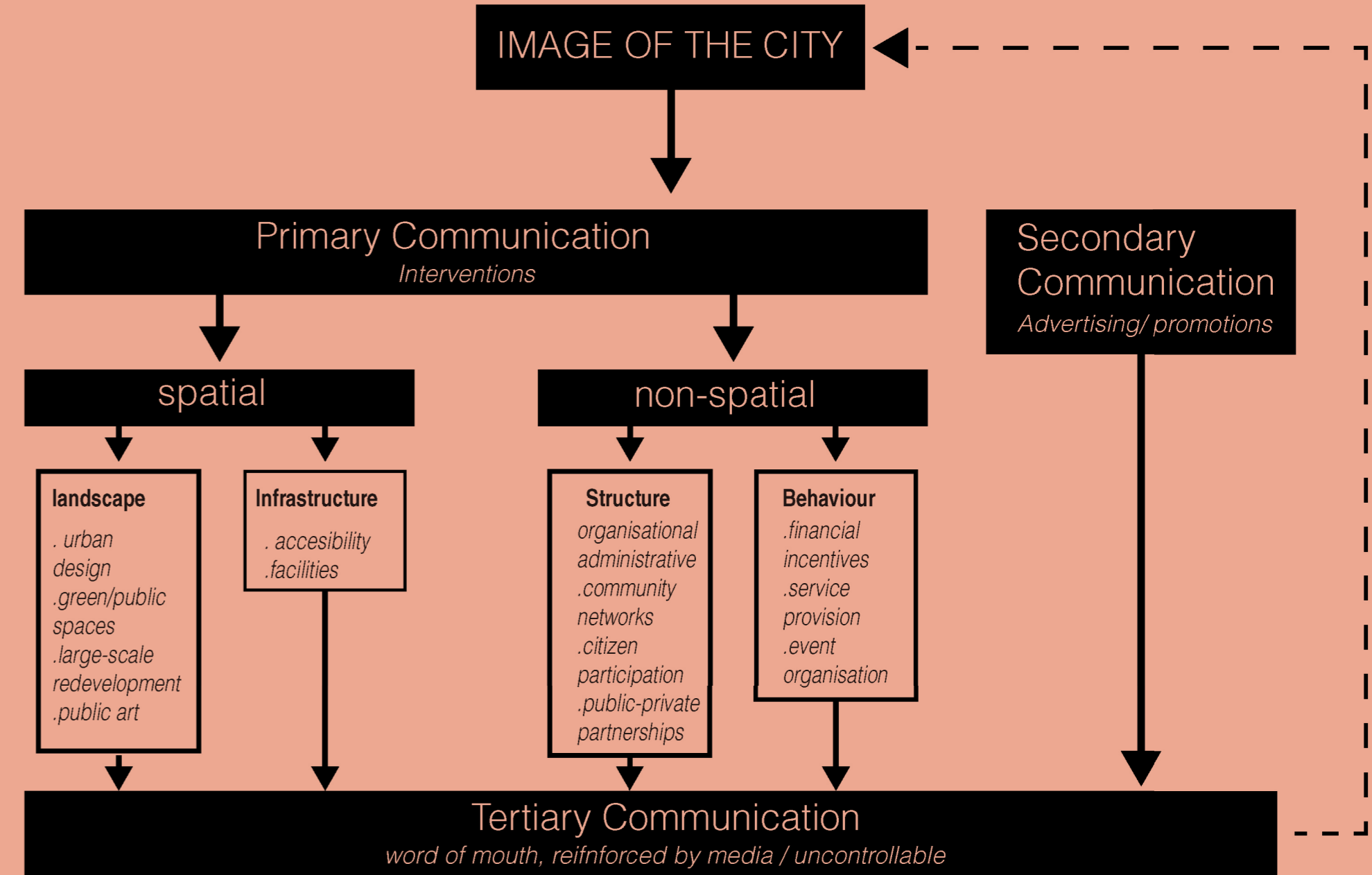
Next, UC will be presented as a series of transversal actions directed on site in order to regain a consensus of "improvement" of the local actors.

Finally, RU will be presented as the specific Adaptive Management tools needed to implement a project of these characteristics: its particular challenges and the contribution of a project/design based decisions in a Project Management role.

Nevertheless, one important question arises from linking the Calibration part of the UC concept, a "Mechanical" term that denotes a way to measure effectiveness, in a sort of intangencial entity: A city area.



Fig 31- Image of the city chart



How can one 'measure' successful implementation or a change of perception? How can the extent of actual innovative, positive transformation in an urban context be gauged?

In order to analyse the effectiveness of a strategy, particularly keeping in mind that the Aalto Silo is still a work in progress, and that its results will be open for the following years, a qualitative assessment appears the strongest choice in order to validate UC actions on site and to establish a configurative matrix to reflect actions and responses in an orderly matter.

In addition, as the city changes continuously, qualitative assessments appear to be more accurate than quantitative ones, as the latter only provide a snapshot of the urban structure, while qualitative categorizations tend to be more flexible and akin to projectual design processes and methods (Garau, C. and Pavan, M. 2012)

Following this line of thought, tools like the Egan Wheel (Egan, 2004), a well established instrument for sustainable development practices, act as a fair compass for evaluating the notion of "area calibration" into a successful arrangement of effectiveness. The use of the Egan Wheel is meant to be a "Chasing the horizon" scenario, used at different times of the implementation assessments: Usually this framework works as indicator of further analyses and should be taken in consideration as a set of mobile boundaries that allows decision makers to orbit effectively around specific parts of the project (Bell, S. Lane, A. 2009, Rogers, C. et al. 2012, Yakoub et al. 2019)

The Egan Wheel describes a series of categories from which one can analyse, in terms of sustainable development, the level of growth of a determined Urban Area.

These categories are as follows: Governance, Social and Cultural, Transport and Connectivity, Housing and the Built Environment, Economy, Environmental and Services. A successful UC practice would address these categories and elaborate precise actions to achieve an organic growth scenario where the city area will perform positively in future similar evaluations.

One could differentiate the concept behind UC from similar Urban Transformation, Branding or Design strategies in that the idea is to, as in a mechanical instrument, to exercise the action of "Adjustment" only once in a long period of time, and then let the city apparatus to function as it is.

The "Act once and let the system take its course", is well documented in Adaptive Management strategies (Stringer et al. 2006 ; Benvie, S. 2005, Johnson, B. 1999) and in combination with a Ecosystem Design (ED) Multi Actor Model tools like linkage mapping, process networking and system design (Vink, J 2019; Pickett et al 1997) can help a determined organisation to orchestrate an impactful change on their field of action.

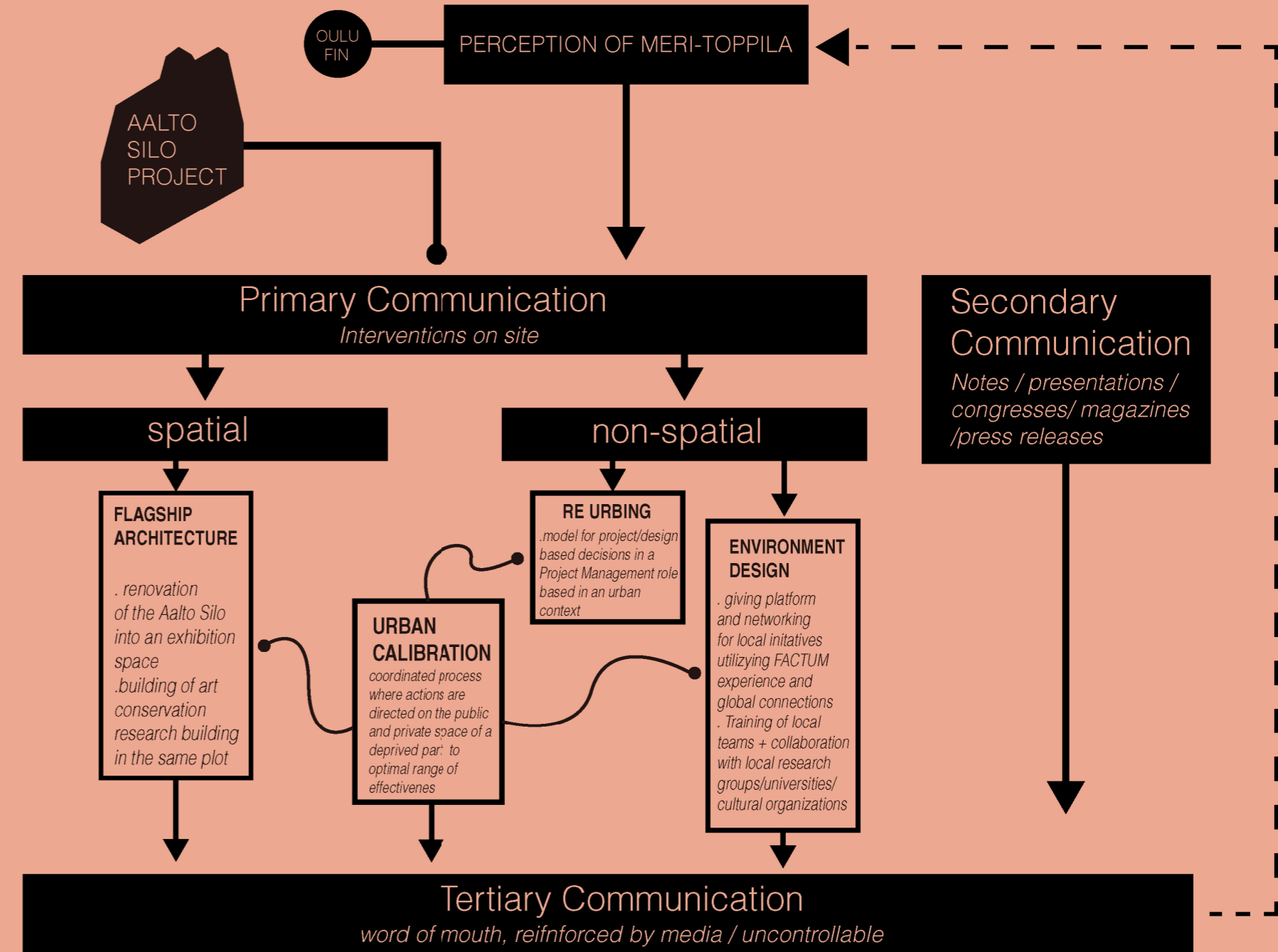


Fig 32- Aalto Silo project and the Image of the city chart

Although traditional ED models are applied to Governmental Business Policies, Natural Resources Directions and Systemic Economic Analyses (Fu, B. Wang, S. Forsius, M. 2013) The Aalto Silo project presents a set of different challenges and particularities, specially regarding how the interconnection of the site actor's can take place.

In the traditional applications of ED listed before, an Ecosystem is created by enforcing a suitable environment for actor's interaction that will generate positive changes to all organisations involved in a determined period of time (Koenig, G. 2012). As ED can relate to multiple fields of action, the way a successful implementation is achieved closely relates to that particular environment: For example a city in need to attract software industries will act through economic incentives on a specific area, an altered maritime natural reserve will increase or decrease trophic chains, etc.

But, In the Aalto Silo, traditional management tools cannot be enforced directly as the project it's a private initiative consisting of a physical object and acting on the sidelines of official governmental policies. Similar Flagship Architecture (FA) experiences in derelict city areas, like the ones found in the work of Coletti (2020) shows that usually the triggering effect of the FA needs to be addressed in the design of the building, and its main impact will happen on the initial times of its completion.

Through these reflections, it becomes apparent that this FA based "calibration" of Meri-Toppila, will need to ride the waves of its first impact (the Aalto Silo renovation completion) with a matching, strong and powerful

Urban Narrative discourse: A hands-on story heavily based in community practices, sustainable programming, local based linkage and a laboratory approach to its formal use as a local and international cultural scene and business opportunities collaboration hub.

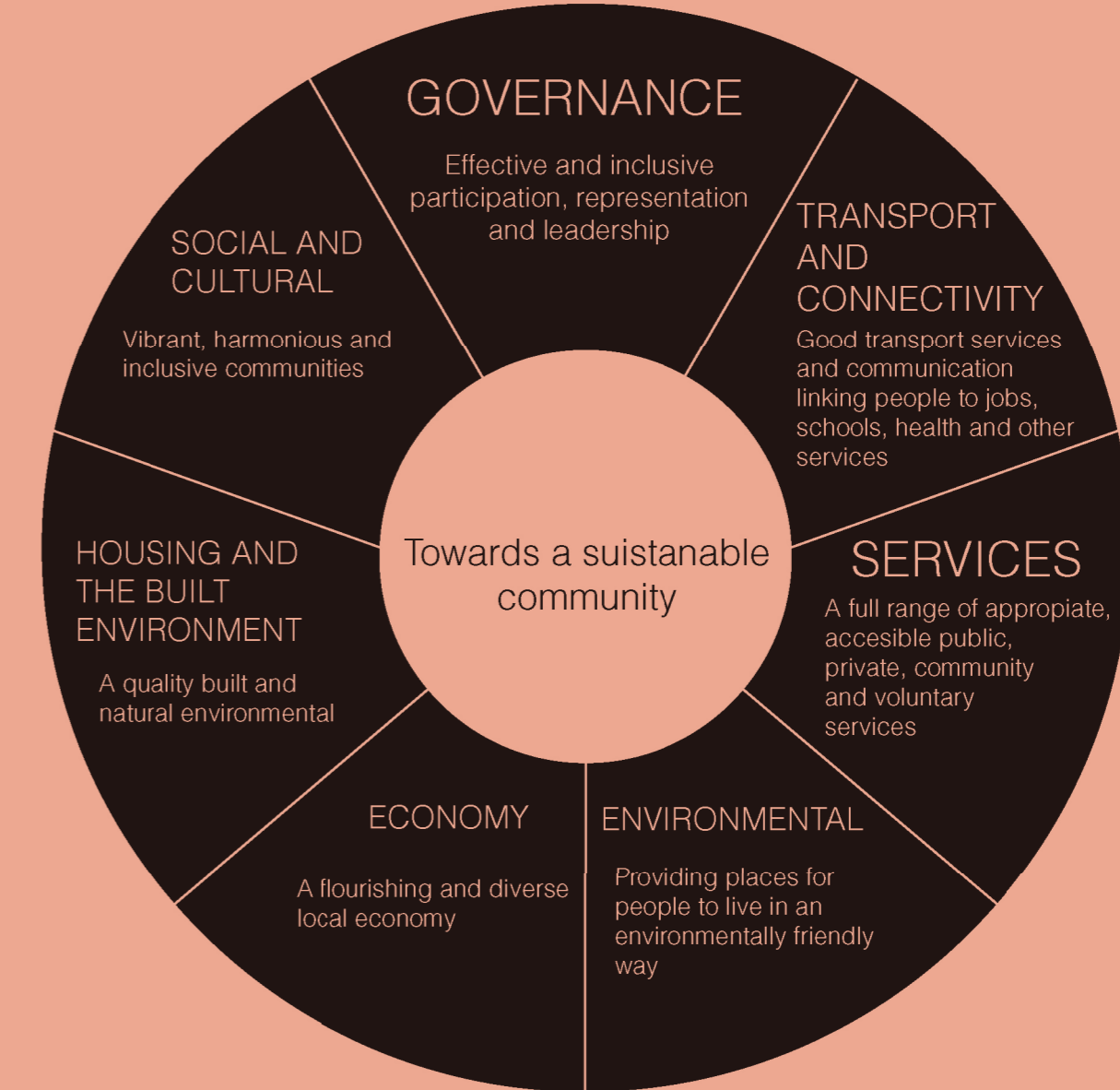
### 6.3 Triggering Meri-Toppila

Urban Narratives are based on physical places, real stories and a combination of symbolic and empiric collective experiences (Budd, L. 1992). Regarding to the Meri-Toppila area, the current Urban Narrative surrounding the neighbourhood tends to picture the site as an area of conflict, an place of socio-economic problems and decades long history of being thought by Oulu residents as a segregated area excluded from its core structure (Vuolle, J 2019 )

In 2018, Helsingin Sanomat, Finland's biggest newspaper, made a report about Meri-Toppila, using a widespread vernacular derogatory wordplay in its title: *Veri-Toppila* (meaning "Bloody Toppila" in Finnish). Through inhabitants reportages and fieldwork the article lists the site socio-economic problems as drug use, unemployment, lack of infrastructure and connectivity to other parts of the city.

There were hard responses from the cultural field to this representation of the area (Hänninen, S. 2018). This narrative transaction reflects how a big part of Oulu citizens perceive the site and how the neighbourhood imagery relates to the rest of the city.

Fig 33- Egan wheel chart



This segregation supporting attitude seems to be also shared by Oulu governance, as despite the fact there are several cultural initiatives operating in the area, the Aalto Silo is the only Meri-Toppila based project financed by the "Oulu Capital of Culture 2026 Bid Book" .

On the other hand, this overall attitude towards the area creates one of the strong anchor points for the Aalto Silo project: It hierarchies the project in relationship with the area its operating and allows it to further solidify an orchestra conductor's place in a planned revitalization of Meri-Toppila.

Triggering the Meri-Toppila neighbourhood is all about a sudden catalytic action that could swift this long-time Urban Narrative. The Aalto Silo is an opportunity to generate sufficient activity on site to alter the segregation supporting discourse through a renovated image, for the local inhabitants and even more important, to the rest of the city. One could draw an analogy between the jumpstart of a machine, and its calibration into an effective use. A similar effect could be achieved in a deprived urban area when a sudden source of interchange and resources enters the scene, in this dissertation case, a Flagship Architecture project Aalto Silo.

The change of perception of the rest of Oulu citizens towards Meri-Toppila presents itself as an important goal in the development of an improved Urban Narrative, as introduced by Özer-Kemppainen and Suikkari(2012): Many people living in Oulu have a certain image of these residential areas. The poor reputation of residential areas is widely acknowledged and talked about also in other areas such as Meri-Toppila.

The segregation supporting attitude certainly has an impact on how residents of the area experience their living environment: increasing feelings of insecurity, even if the person does not have a personal experience of these negative events.

According to Özer-Kemppainen's and Suikkari's(2012) findings that the vacant old industrial buildings in the middle of Meri-Toppila signal indifference. However many respondents have also shown that they are aware of the importance of the local industrial building heritage for the region's identity. The refurbishment and re-use of these buildings would strengthen local identity and facilitate the involvement of residents. The central symbol and landmark of the area - the Silo - is also seen as a resource, despite the currently dilapidated outer shell (Özer-Kemppainen And Suikkari 2012).

It is important to remark on the idea of re-use of the industrial heritage as a fundamental part of the site identity. Even more, the awareness of the area residents on the matter signal an advantage on any strategic program. These vacant facilities and factory lay-out urban space design, rather than considering it as a problem, it is a source of uniqueness, a sense of identity.

And maybe in the near future, with the right set of actions, Aalto Silo could be built up as a pride for Meri-Toppila residents first and then to Oulu citizens in general.

Kotimaa

## "Kenenkään ei tarvitse esittää, että menee hyvin, jos ei mene" – "Veri-Toppilassa" näkyy rikosten koko kirjo, ja se voi nostaa Oulun räikeisiin otsikoihin

Oulu on joutunut otsikoihin apteekkiryöstöjen ja pyörävarkauksien kaupunkina. Poliisin mukaan ongelmat johtuvat huumausaineista. Eniten virkavaltaa huolestuttaa Meri-Toppilan alue, josta poliisin mukaan löytyy rikosten koko kirjo.



Pia Olkonemi asuu Meri-Toppilassa, jonne muutetaan usein silloin, kun tarvitaan syystä tai toisesta nopeasti vuokra-asuntoa. KUVA: PEKKA FALI

◁ Fig 34- Helsingin Sanomat piece about Meri-Toppi-

The idea of Meri-Toppila as a somehow, isolated, urban island separated from the rest of the city forms a powerful fiction that is difficult to untangle (Eskola, J ; 2012). Although socio-economic issues are part of this place's conception there are certainly unavoidable physical aspects of the area lay out that need to be addressed both from narrative and infrastructural point of view. narrative and infrastructural point of view.

However, these reflections point out to a distinctive Urban Calibration (UC) strategy that with the use of the Egan Wheel's six categories (Governance, Social and Cultural, Transport and Connectivity, Housing and Built Environment, Economy, Environmental and Services) can be displayed on site with a limited, but coherent scope. On this line of thought, an specific application of the Wheel's categories on Meri-Toppila could work as follows:

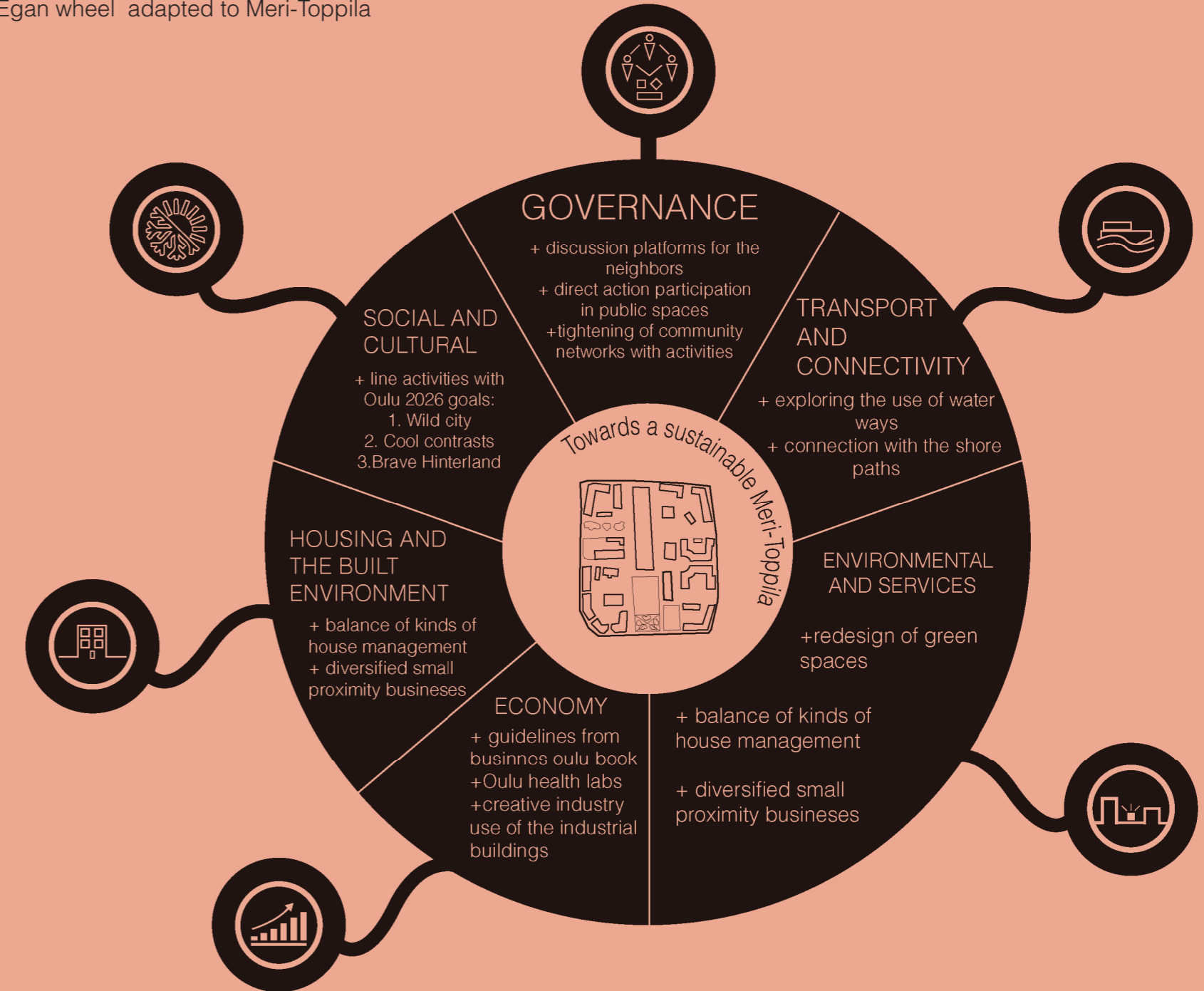
Governance, The majority of inhabitants of Meri-Toppila are immigrants, Roma people, university students and unemployed working class residents. This means that Meri-Toppila has a low number of apartment owners and thereby the collective decision making processes affect an overall atmosphere leading town-participation. This process tends to create a snowball effect over time and lead to careless attitude with the common spaces. (Eskola,J. 2012) Tightening of community networks could help to face this problem and to build up a strong identity sense of participative open to discussion and work in progress transformation of the neighbourhood.

Social and Cultural, Meri-Toppila cultural future has a big opportunity to ties its development to the Oulu 2026 Europe's Cultural Capital goals into revitalise and enhance different aspects of its cultural infrastructure. The goals of Oulu 2026 are divided in three themes: Wild City, Cool Contrasts and Brave Hinterland, and each of those can become key to Meri-Toppila development through its location, needs and potential. Taking these lineaments as part of the UC strategy will help the area as a whole to sync to the Oulu 2026 foundation goals and become easier to generate a collaboration hub between the neighbourhood organisations and city's institutions.

Transport and Connectivity, According to the workshops carried by Özer-Kemppainen et al (2010) Transportation is a top concern on citizen's needs and an important subject related to Meri-Toppila's isolation to other parts of town. Although an UC project focused on urban narrative should not focus on design infrastructure layouts of any sort there is a chance to highlight these service deficiencies through specific actions and collaborative activities. For example, the notion of water transport appears several times in Özer-Kemppainen et al (2010) workshops.

In Meri-Toppila, as in the rest of Oulu, the relationship with the water is negated, and although there are several plans to recover this connection to the Bothnia delta and seaA much more focus should be done in order to establish a significant need from the general population that will make city officials pay attention to the area in a proactive way towards new lines of transport (boats, buses, bridges and bikes). Water, shore and harbour story-making actions should be central in the design of a UC Meri-Toppila strategy.

Fig 35- Egan wheel adapted to Meri-Toppila



Housing and Built Environment, Findings in Özer-Kemppainen et al (2012) shows that Meri-Toppila neighbours are actually quite happy with the interior of their apartments, as they were renovated or constructed far recently and that the former industrial atmosphere of the red-brick facades and close inner streets is appealing. However, what's lacking in the area is a more community based public actions, and considering the large pieces of inner streets and spare public pockets between the ex factory buildings, there is an already good setup for using them as pop up scenery for cultural activities. These actions could both amplify local voices and be a good opportunity to bring outside performances to the neighbourhood.

Economy. Several categories of the official Business Oulu "Invest in Oulu" Books are suitable to use as guidelines to a narrative improvement in the Meri-Toppila area. In the book, Business Oulu highlights the logistic importance of Oulu between continental Europe and the Arctic's trade, Meri-Toppila is still of great value in terms of built capacity for transport, regarding its closeness to the sea delta, the train and highway. Even if some of these facilities had become obsolete, Meri-Toppila geography and industrial history can be picked up by interested parties in order to configure a suitable comeback to a "productive" neighbourhood motto.

Another example is the concept of Oulu Health Labs which Business Oulu have launched. It's a series of initiatives combining technology and health sciences enterprises. Oulu Health Labs easily matches to the green (the parks, the shore, its nearness to Nallikari beach) and sporty (disc golf park, running tracks and winter hockey pond spots, climbing & trampolining in repurposed factory buildings)

Ambience of the neighbourhood and could be used as a background territory to map different kinds of research projects. Business Oulu also presents the North Finland Commission Audiovisual Incentive as an attractive possibility to generate creative industry infrastructure in the neighbourhood. These categories are of great value in order to present a transformative narrative that continues a spirit of productivity, from an Industrial to a Post-Industrial economy.

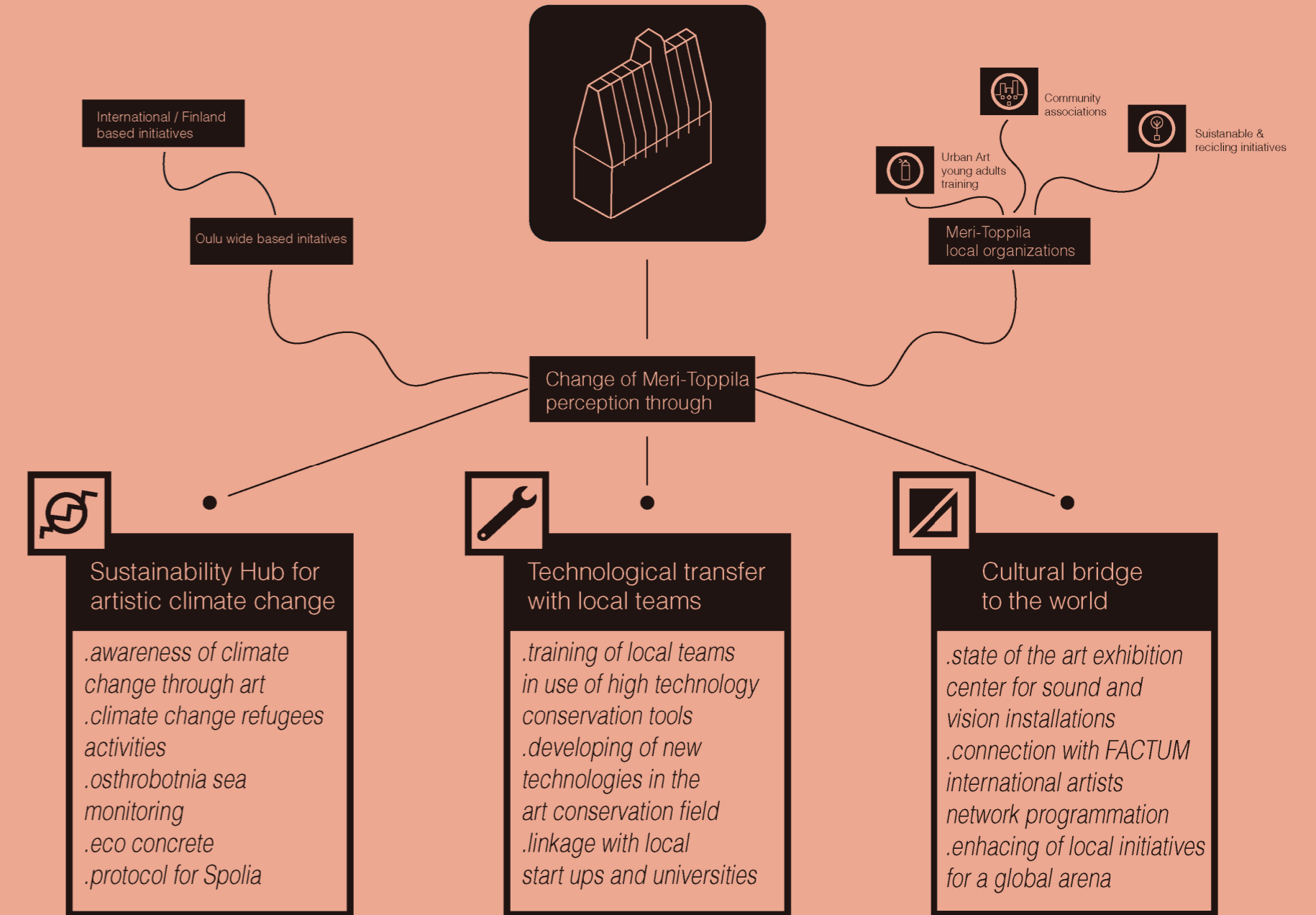
Environmental and Services, Interesting to the development of Meri-Toppila is the current work in progress City of Oulu's decision to build a new neighbourhood next to it, called Ranta-Toppila (Shore-Toppila in English). According to the plan's guidebook the goal is to balance different kinds of housing management and services to not repeat the current Meri-Toppila situation, where a lack of services and large number of rented apartments sets the standard for the area.

However, this plan doesn't lack criticism. In the town plan of Ranta-Toppila a consultant writes, referring to Meri-Toppila, "Like the adjacent area, with the wrong spoiled urban planning, likely here is to produce enough housing disruption too."

Ranta-Toppila is already materialising progress and the storytelling layout can be useful in example, in the guidance and compliment to a Meri-Toppila's UC narrative around present and future service design and its relationship with the housing environment.

Extracts of Ranta-Toppila book can be taken into consideration for Meri-Toppila's UC project as it seems to be in line with the City's strategic goals of urban area structure integration and developing in the right direction.

Fig 36- Intervention axis chart



Of course, to accomplish this end, policy and political will needs to follow, but a good story about the lost shore as Ranta-Toppila zoning has could be a good start for Meri-Toppila too.

#### 6.4 Actions on Site

Urban Narrative is all about perception and how a city unravels through stories of places, people, their interaction to history and a sense of belonging. This can be clearly seen in Uusitalo (2015) piece for biggest Oulu newspaper, Kaleva, about Meri-Toppila and the possibility of the area becoming a “slum” and how actually there is not an statistical base for that affirmation but only a widespread sense of it among the Oulu population. An urban myth created by the perceived notion of otherness that continues to appear in media and informal conversations.

An Urban Narrative process should consider these negative views as a necessary step to transform the image of the city without swiping the former experiences or erasing the past. Urban Calibration also encloses narrative as its impossible to operate a territory without telling a story in the process.

Coming back to the Kaleva article, the only way to address the otherness is to talk about it, sign it, describe it and subsequently, operate on it, as one can safely assume that no city can exist in the void. In accordance with the Aalto Silo project, one can identify three core axis of intervention that can be vehicles of a prospective urban narrative once the project gets materialised:

#### a) The sustainability hub for artistic climate change studies

As described in Lowe; Catling Skene (2021) The Aalto Silo in Meri-Toppila neighbourhood is a neglected suburb of Oulu, a place in urgent need of urban regeneration and undergoing the alarming consequences of climate change. Refugees (including people from Syria and Somalia) are arriving to the site as the arctic ice melts. Post-glacial rebound means the land “bounces back”, causing Oulu to rise by more than a centimetre per year. This affects not only the relationship between land and sea, but the composition of the sea itself. The melting ice is turning the Gulf of Bothnia into fresh water, evidenced by its new population of pike and perch.

This upcoming reality generates an opportunity for the Aalto Silo to become through art and cultural interventions a beacon of awareness of climate change. Meri-Toppila could become a resistance centre to a world apathy on the matter. Its location next to the Bothnia sea, its shape and function, and immediate implications of the problem on the Meri-Toppila population makes it a powerful, almost proverbial, agent of change.

In addition, the Aalto Silo project explorations with eco-concrete, as the one discussed in the implementation of the new research centre in the Silo plot as in Lowe’ Catling Skene (2021) can work both as a design laboratory as much as a piece of resistance against the industry in order to fuel a much needed discussion about the role of construction in a post-industrial world and its potential outcomes.

As the work of Radford and Oksala(2007)explains, Alvar Aalto tradition of materials experimentation in untraditional ways. The prime examples Muuratsalo experimentalhouse or Villa Mairea are essential to understand Aalto’s view on architecture and potential outcomes. As the work of Radford and Oksala (2007) explains, Alvar Aalto tradition of materials experimentation in untraditional ways. The prime examples Muuratsalo experimental house or Villa Mairea are essential to understand Aalto’s view on architecture and design. Reconnecting this aspect of Aalto’s world vision to an active position to actually save the planet creates an interesting synergy that can actually help to change the perception of the site in a positive way.

#### b) Technology transfer operations with local teams

Factum Foundation has experience in training local teams to use high conservation art technology and in the process, kickstarting a lot of side entrepreneurship opportunities for the people involved. Experiences like the ones held in Egypt through the Theban Necropolis Preservation Initiative (TNPI) where the tombs and other artefacts were scanned by a local team trained in recording technologies, providing them with skills which can be transferred to other projects within the Valley of the Kings and beyond, can be replicated in Meri-Toppila: generating a hub for creative and technological skills linked with international practices and linkage.

Work in deprived communities should not be limited to physical labour or low complexity endeavours.

Meri-Toppila and its vast industrial heritage landscape is a perfect setting to try these skills in a practical way. In addition, the IT sector in the city and the work from University of Oulu and OAMK also helps to create a suitable environment to expand these potential collaborations

While the programming itself of the Aalto Silo cannot affect the employment market directly, the snowball effect of attracting other firms to a cheap area of town could be achieved, as it usually begins with a flagship enterprise and continues with other players operating in a now, not so risky area.

#### c) Creation of a cultural bridge between Meri-Toppila and the world

The completion of the Aalto Silo would change the cultural landscape of Oulu in a transcendent way. Not only will the city obtain a global level venue for exhibitions and installations, but also regain a neighbourhood for activities located outside the downtown dominated scene.

In addition, the connection with Factum’s usual partners (Universities, Art foundations, Art dealer firms, Museums and International Cultural Associations) will generate an unknown number of synergies that alongside the 2026 Culture Capital status could mark the entrance of Oulu to the international art stage.

This combination of vernacular and international initiatives colliding in a delimited area of town resembles the status held of Meri-Toppila in the Dixon times. The Aalto Silo- through technology powered art and culture projects- can forge this new gateway to the world: creating in the process a suitable story of change from a medium of production to another, from industrial to post-industrial.

### 6.5 Urban Calibration Management

Built form can be considered a key determinant of firm location for creative industries and is equally important to other economic drivers. Meri-Toppila is in a good position to cater creative industry firms and initiatives. As found in Hutton (2006) firms in the creative service sector (architecture, design, and advertising) demonstrate a strong affinity for heritage buildings within inner city sites and choose their locations strongly on the basis of “bare geographies”.

Main task of an Ecosystem Design - especially if its aim is some sort of transformation process - is to orchestrate the interaction of multiple-actor in a coordinated operation through space and time. In the Aalto Silo project, there is a leading institution that can fill the director's place in this transformation process, The Factum Foundation, and a physical entity that can serve as a landing point for changes in the area to transform, The AaltoSilo. If done correctly, a series of potential opportunities can arise in a suitable environment for local businesses, community co-operatives and other kinds of organisations and this can trigger diverse outcomes to local and regional organisations: from highlighting their activities to give a enhanced

background in order to facilitate getting grants or funding from regional and external private or public sources.

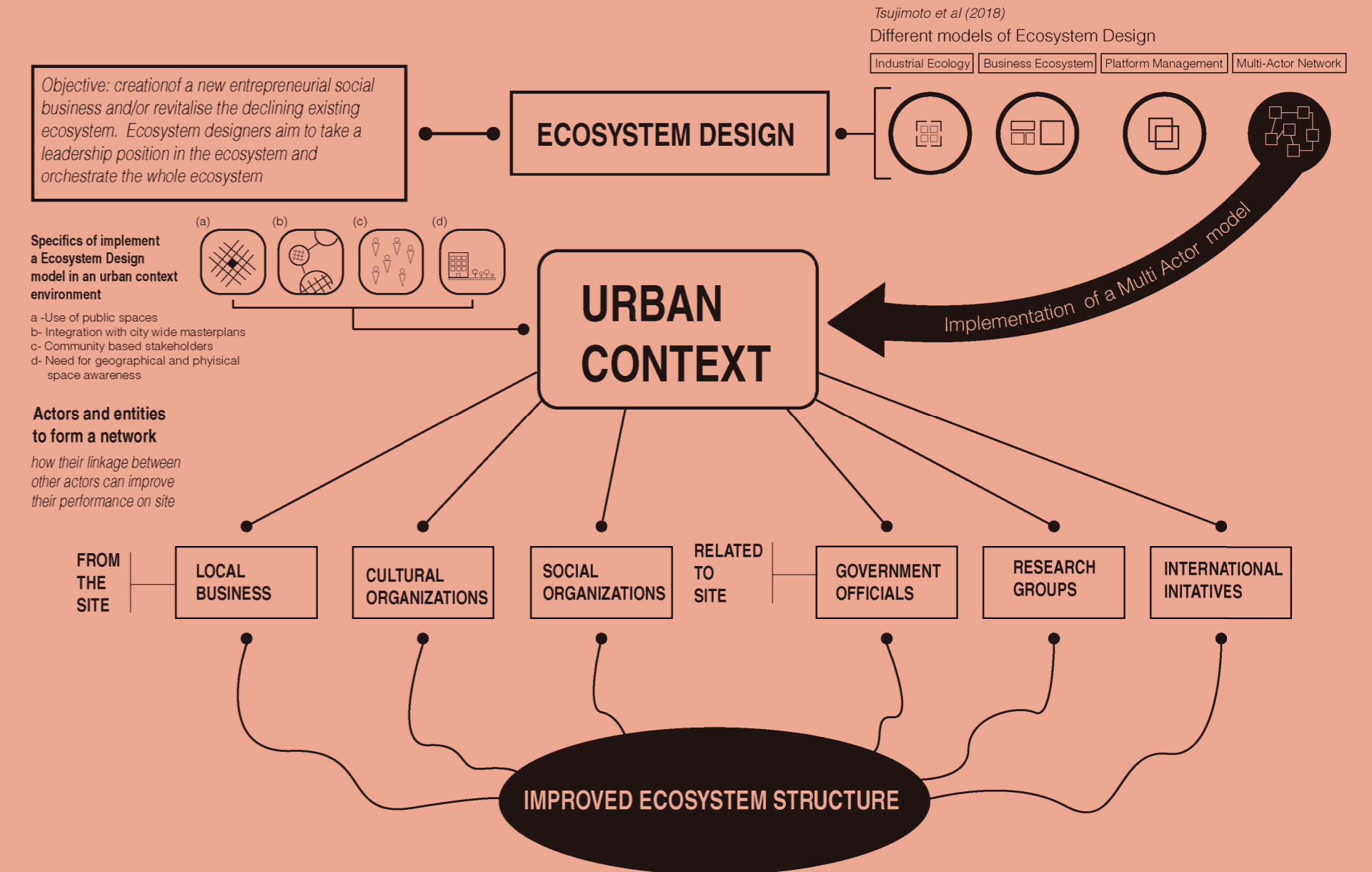
In addition, large scale projects tend to have more influence in the city planning decision makers and their ability to shift policy and strategy towards the operating district: This means that the objectives of the project can effectively impact on the urban layout in a direct way.

Regarding local businesses, they can benefit from the exposition of their enterprise closeness to an international flagship endeavour and utilise the communication resources of it as a collateral boost to their own media display. Same with cultural and community based associations: The momentum created by a large scale project can boost any site-related project into a positive scenario regarding available resources.

The role of Ecosystem Designers is to create a new entrepreneurial social business and/or revitalise the declining existing ecosystem. In this situation, the ecosystem designers aim to take a leadership position in the ecosystem and orchestrate the whole ecosystem (Tsujimoto et al, 2017).

In a city sector, this translates in identifying, analysing and configuring the relevant actors of the site and connecting them through Spatial Design, Urban Planning and Proactive Public Space Policies.

Fig 37- Ecosystem design in an urban context





Identifying, as in locating all the sector's relevant actors (Cultural Associations, Businesses, Governmental Dependencies, Neighbourhood Associations, Public Spaces that have Social Programs, etc) in Maps, Spreadsheets and Contact Lists. Analysing, as in recognizing patterns of conduct, linkage and actions of the aforementioned actors. Configuring, as in developing specific strategies to connect these different actors in innovative ways in order to allow them to get Funding, Public Benefits and a more active participation in the City Decision making process.

Ecosystem Design - in the terms of mapping the local actors and identifying their conduct patterns and actions in order to resolve specific problems efficiently - gives space to Urban Calibration. It is understood as the process of activating the neighbourhood through specific actions on site as the need for a specific way to fill the gaps of knowledge in a managerial position arises. Thereby, the neighbourhood oscillates between producing an outstanding volume of information to radio silence in a short period of time and the information left in between is lost in translation, or it's so fragmented that cannot be used.

While there are examples of project management models for construction (Chin and Hamid; 2015) or for (urban development Stoecker; 1997), there seems to be a lack of related models for urban narrative implementations as it dont rely on traditional managerial organisational structures.

The core idea of an urban narrative is to transcend the ephemeral materialisation of the economic forces that

operates in a delimited area and to be appropriated as a new discourse by the population as a whole: piercing through all the layers of city image and perception in a natural, organic, perception as the new normal.

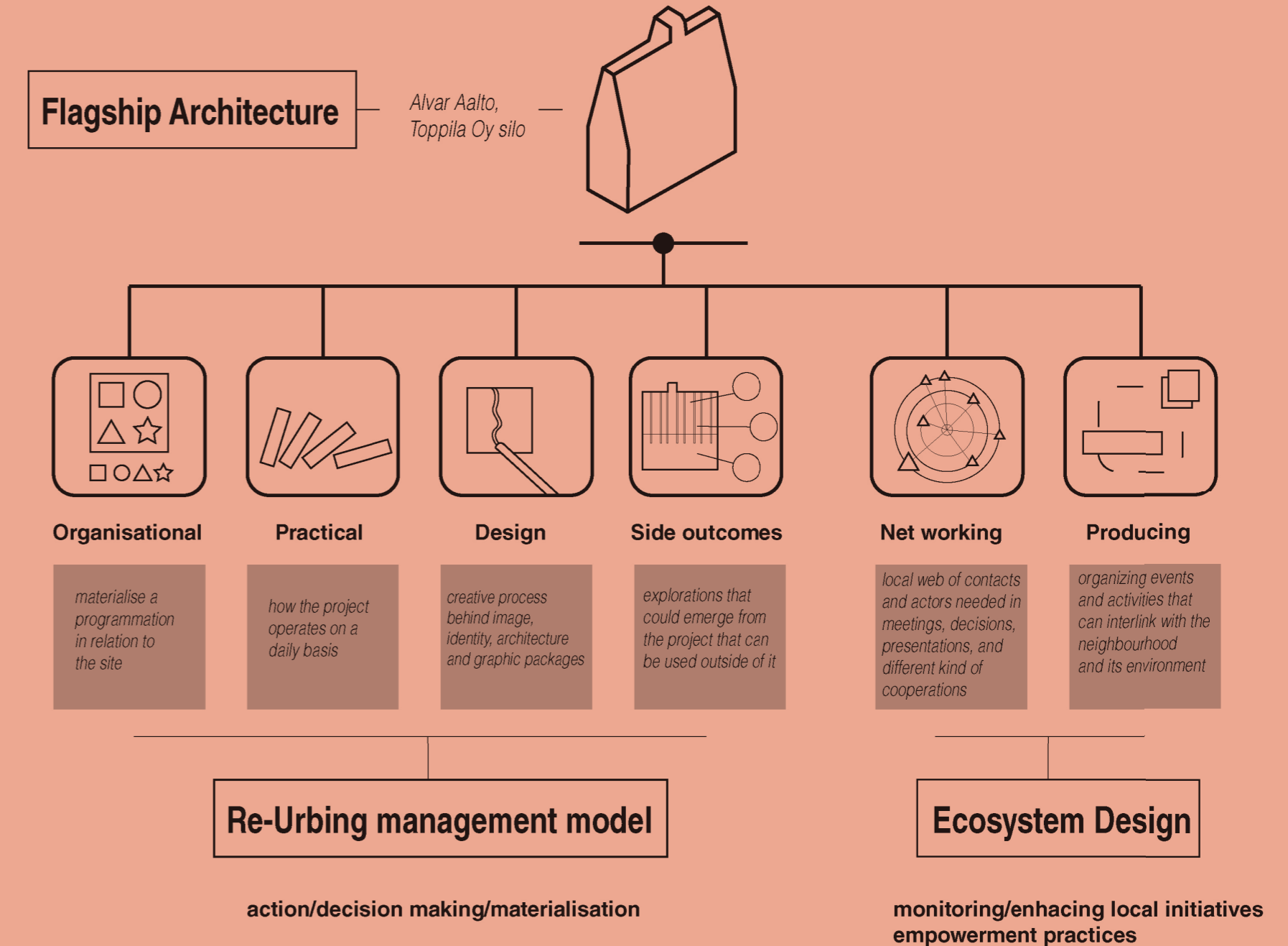
After some time, outside sources should relinquish this new image for making master plans, place marketing, piercing through all the layers of the city image and perception in a natural, organic, perception as the new normal. After some time, outside sources should relinquish this new image for making master plans, place marketing, and to a popular scale, to how the neighbours, cultural actors and other parts of the community conceive the urban area.

A new narrative implies a whole new language into how to describe, feel and interact with the site, there is a lot of uncertainty around it and also, deliberate blank spaces to be filled by outside actors.

An understanding of Adaptive Management structures - like the ones used to fill the information missing from a fossil skeleton -- is needed in order to establish a story strategy with more chances to stick into the broad population perception. Models taken from biology (Behrad,B 2020 ; Thom, R 1975) and resources management (Tallis,H; Polanski,s; 2009) can help to inspire implementation models that use qualitative input as primary sources of information.

In addition, qualitative models in biology and natural resource management are closely related to Catastrophe Theory.

Fig 38- Flagship Architecture an the Aalto Silo project



This theory attempts to study how the qualitative nature of solutions of equations depends on the parameters that appear in the same equations (Wilson, A 2011) and serve as an interesting linkage in order to expand a possible framework of model implementation.

In nature conservation management, Rewilding experiences (Pettorelli, N, Barlow, J, Stephens, P; 2018) emerges as an interesting linkage to associate with Urban Narrative change strategies as both depend on custom made processes of qualitative information generation in order to give quantitative results (Jørgensen, D; 2015). Narrative change strategies as both depend on custom made processes of qualitative information generation in order to give quantitative results (Jørgensen, D; 2015).

At the end, the final goal of both of these strategies - Rewilding and a change of Urban Narrative - is how to change the story of a territory in order to impact the interrelation within actors in a sustainable way.

Even more, the relationship between the reactivation of an Urban Area and Project Management, utilising concepts from Ecosystem Design and Rewilding experiences in natural context can operate in similar Project Management models, specially when aimed to construct a Practical-Theoretical approach to Re-Urbanize a de-connected city area, an action that could be called Re-Urbing.

Further, for this dissertation study object, the calibration of a post industrial urban area through the

impact of flagship architecture project in order to change its negative perception, needs to explore the inner managerial structure of the Aalto Silo to fully explicit how it intends to transform Meri-Toppila. And more importantly, how this process can be materialised in an implementation model that can be used in other similar situations.

Continuing this line of thought, the Aalto Silo project can be divided in the following levels of application (Fig 32):

Organisational: How a large scale cultural building intended to materialise its programme in relation with the site (and the bureaucratic needs to achieve this effort).

Practical: How the project operates on a daily basis.

Design: The creative process behind image, identity, architecture and graphic packages and how they link with Meri-Toppila history, present and future.

Net Working: Which actors are needed to be included in meetings, decisions, presentations, etc. In addition, how to solve the questions regarding "How the project is shown to the outside", founding and overall communication strategy of the project.

Producing: How the project works as a vehicle to materialise ideas that are related to it but not necessarily part of its morphogenesis, for example: Events that can interlink with the neighbourhood, participation of Meri-Toppila based organisations in those initiatives and in

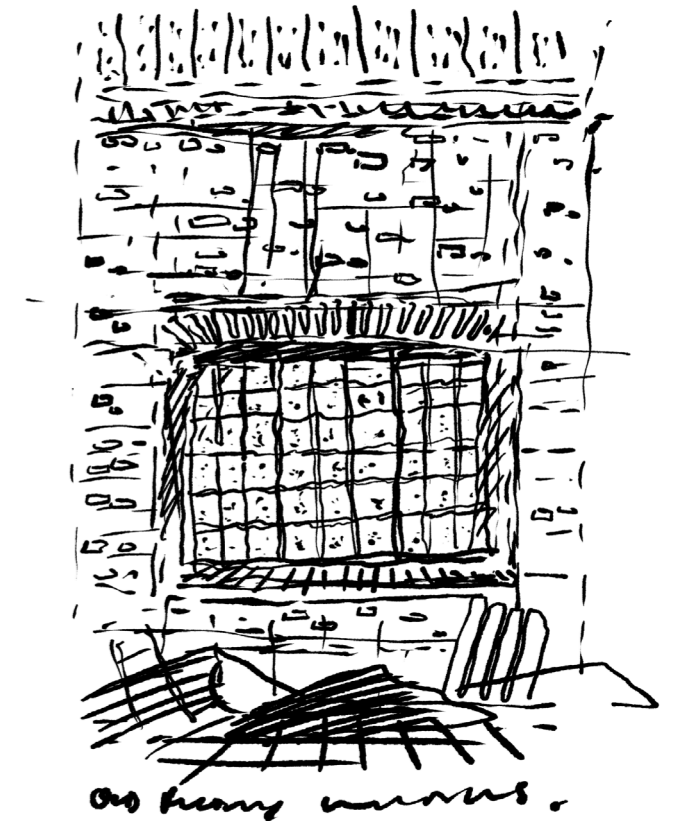
discussion forums (for example: The showcase of the area history in international events like the capsule made for the London Architecture Film Festival (2021) or the discussion panel at the Alvar Aalto Foundation symposium "The Future of Industry" (2021)

Side outcomes: How side explorations that could emerge from the main project can be implemented. The experimentation phase of the design and the potential benefits of its use in the near future.

This is the case with the idea of creating demolition concrete pieces protocol (Lowe; Catling Skene. 2021). But, as the project progresses it could also include workshops with the community for brainstorming policy guidelines and other kinds of local empowerment actions.

These categories are plastic in nature and flexible enough to adapt to changes on site but have recognisable borders of implementation, scope and impact.

Also, although in parts of the development process they can be interchangeable- and specially as is still a work in progress case that could change objectives depending on internal and external factors- they are the visible structure in a change of narrative for the urban area as they dialogue between the building and the context iteratively.



### 6.6 Design plans for the building, plot and neighbourhood

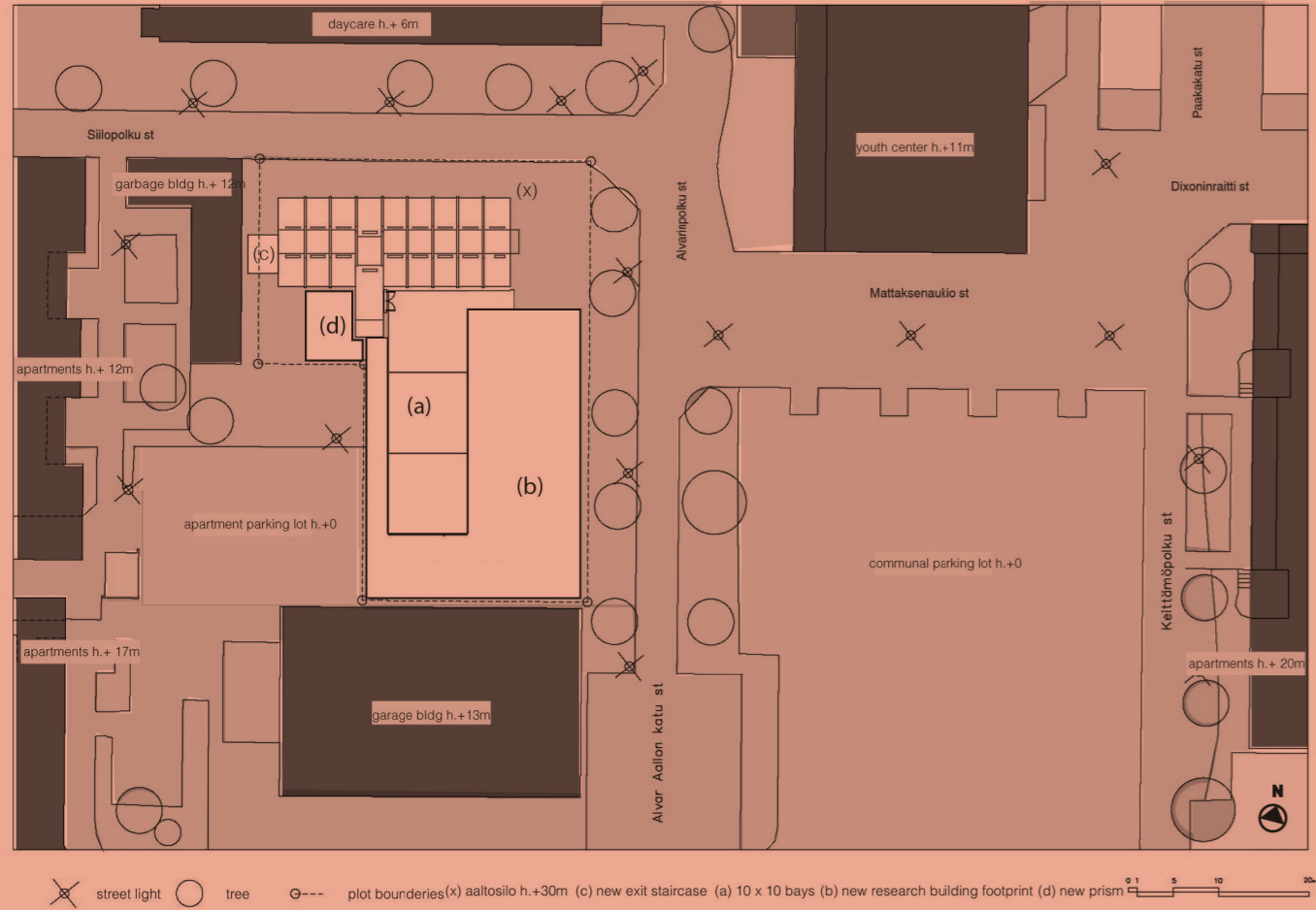
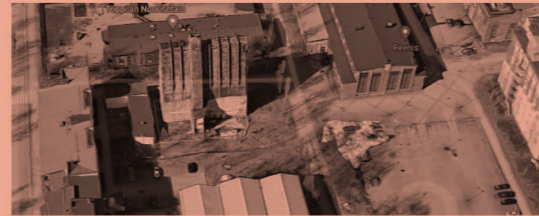


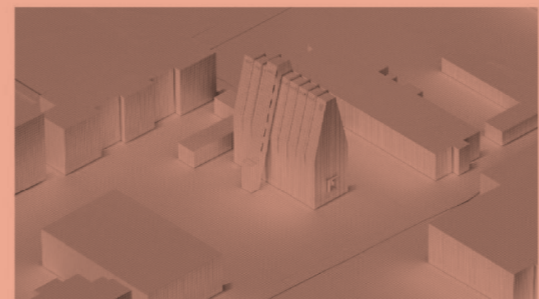
Fig 39- Groundplan from the Aalto Silo renovation and new research building



satellite plan



aerial picture



general volumetry

### 6.7 Design Summary

Following images are part of the on progress documentation of the Aalto Silo renovation and the new art research building

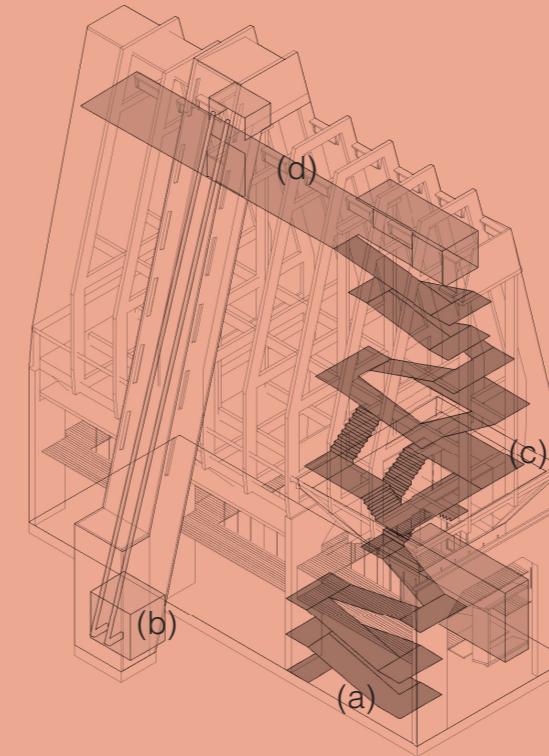


Fig 40- Axonometric of the Silo renovation

- (a) new main entrance and ramps
- (b) inclined elevator
- (c) ramps and exhibition spaces
- (d) rooftop social space

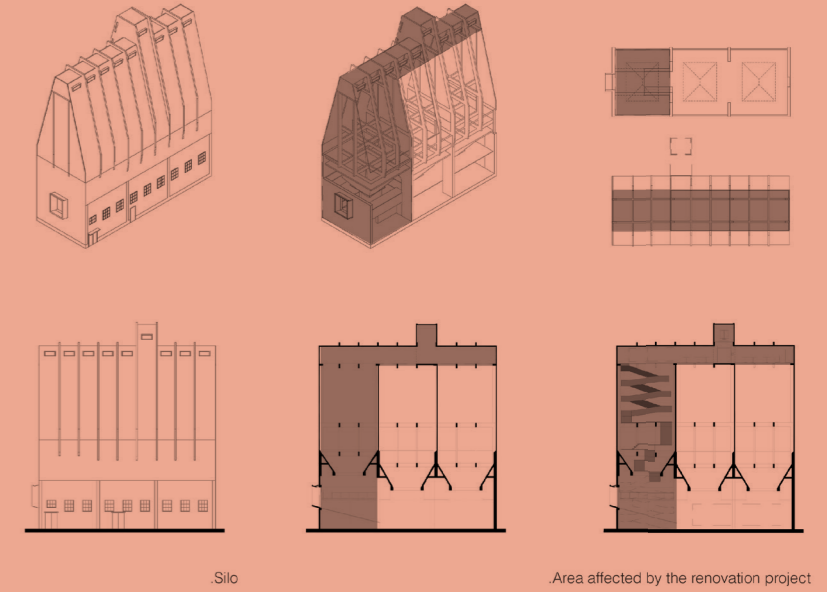


Fig 41- Intervention areas of the Silo renovation

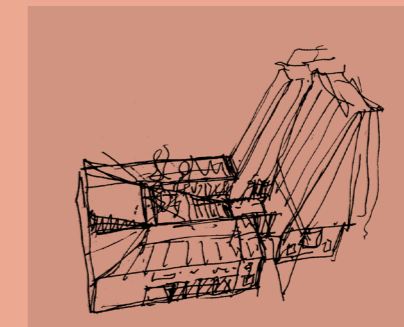


Fig 43- Charlotte Skene Catling sketch of the new building design

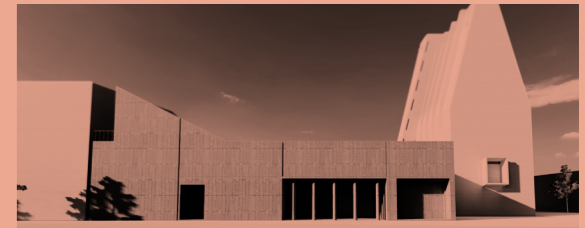


Fig 42 View of the new building ren-

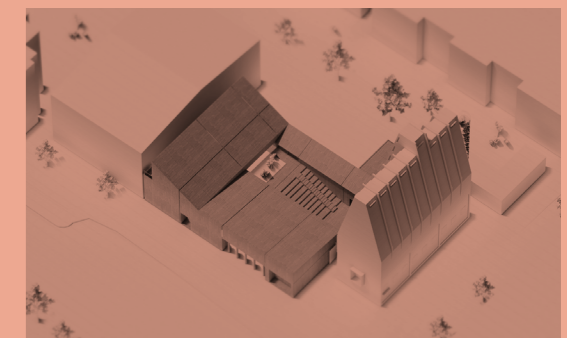


Fig 45 New building render



△ Fig 46. Roof inspection and minor works



△ Fig 48. View from the upper floor of the building



△ Fig 50. Workers taking out metal pieces from the interior



△ Fig 52. Fixing of the original hoppers bridge



△ Fig 53. Geolocation marks for 3D drone mapping



△ Fig 55. Anti Pigeon nets



△ Fig 56. Demolition team specialist visit



△ Fig 47. Provisional panel protection for broken windows and doors



△ Fig 49. More than 5 containers of trash were taken out of the silo



△ Fig 51. Cleaning of the plot



△ Fig 54. Levelling and soil testing



△ Fig 57. Daily meetings with contractors



Fig 58- Adam Lowe and Charlotte Skene Catling inside the silo



Fig 59- New residential buildings and old renovated factory ones



First take and done/  
play and rec/

that's how we did it/

our own style/

before starting Kultaleima/

we found the guys from Paskaranta/

before our songs spread in the web/

15 years have passed in a heartbeat

“Ykösellä purkkiin -settii/  
play ja reccii/

niin me se tehtiin/

meiningit kehitettiin/

jo ennen ku Kultaleima perustettiin/

Paskarannasta tyypit löyettiin/

ennenku biisit levis nettiin/

menny 15 vuotta ohi niinku hetki”

Henry K - Takas feat. Leilove

## RE-URBING

### 7.1 Approximation for a definition

An Urban Narrative connects the material aspect of the city with its primal symbolism in a way that can be traced in a similar communication even if the format changes: from words to mannerisms or from space to images. As found in Childs, C (2008) Every design is a rebuilding of a place. Even a new cabin in the remotest of lands recasts the landscape as inhabited by people who build in a certain way. Often we ignore or suppress earlier place stories, and discount the possibility that our designs may be redesigned. In this line of thought, in order to acknowledge good design, we need to know the history that was before in order to dialogue with it. The narrative in urban design fits this niche and allows the project to gain more degree of control in order to affect the site according to the project's needs.

An Urban Narrative can be described like the ocean tide, carrying different items from beyond to the shore, to be picked or left, disruptive in its content but with a clear pattern and pulse of when its coming or retreating: cities are not living beings but an environment that breathes through its inhabitants, if their perception changes so the one of the environment as a whole.

The narrative of cities cannot be quantified, but yes synthesised in order to use its information for transformative projects.

Narrative as design can help solving problems before they even arise as one, like described in Guhathakurta (2002) Urban environments have properties that are emerging out of micro-scale processes of individual behaviour. However, given that macro behaviour in an urban environment is often derived from the interactions of many individual processes, simple aggregation of these micro-scale processes does not necessarily capture the larger patterns of macro behaviour.

The products of interactive development bear little resemblance to the original micro-scale patterns, and therefore require a synthetic approach to the study of the whole system. Even if storytelling by itself cannot affect the landscape of a city, used as a complement with policy-making and urban transformation projects, its impact can be longstanding and surpass the area's original impact.

Also, storytelling can work as a material of design as much as concrete, wood or glass: equal as the choice of a reflective or opaque facade in a building, specially in a large scale project, the narrative that follows the building can set the stage for a similar spatial experiences happening in its adjacency.

For example, Knott (2020) shows an example of spatial storytelling activism in Hong Kong where a young author writing about a city street does not recite archival descriptions of the area's past, but focuses on a dessert stall owner reminiscing about their operations, changes to their dessert menu, and their interactions with patrons over the decades. The author believes these stories connects the 'hardware' of the city, which he defines as the physical features

features of urban space, with the 'software', the intangible meanings and experiences attached to the landscape, allowing readers to know the city in a more 'human' and 'sentimental way', acknowledging that although readers only acquire a fragmentary understanding of the city's past through these stories Hee finds that his readers attribute more value to information conveyed through stories as opposed to information conveyed through documents. He also believes stories leave a lasting impression on his readers, allowing them to develop an emotional interest in the city's landscape.

In order to fully implement these kinds of symbolic, emotional, or even "imaginary" experiences into any urban space related project a need for keeping track of how this narrative interacts with the project emerges. Re-Urbing -understood as the managerial action of designed urban narrative implementation- can fit this role as it primarily works as the a reconnection device for a certain city sector story with the rest of the city: the tuning of the urban calibration in a way that can be materialised in a tangible, practical and realistic way. In the history of a city, stories and myths often occupy the same discursive space, but an actual project implementation model needs to separate reality and symbolism in order to align them in service of the area as whole:

taken care of how a change of image could impact positively in the lives of its inhabitants, workers, occasional visitors and their neighbours from other parts of town.

However, there is an inherent conflict in this kind of management. Throngmorton (2003), explains: If we treat planning as a process of constructing persuasive stories

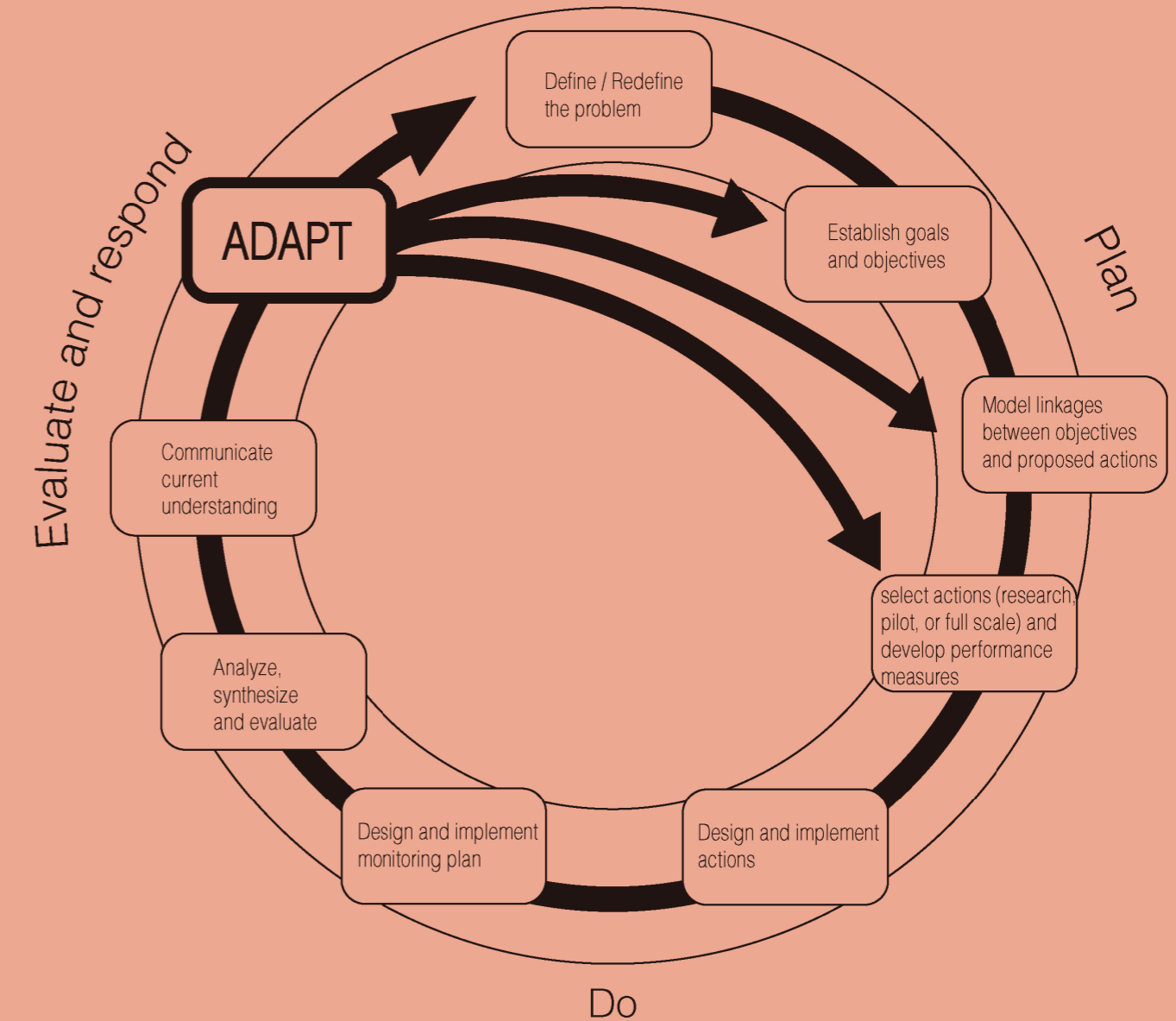
planning as a process of constructing persuasive stories about the future of cities, where meaning depends on context, then much can be learned from the practice of literary criticism. Reader-response theory tells us that the meaning of the planners' texts lies not just in the authors' intent or the written documents themselves but also, as suggested above, in what the various readers bring to the texts.

This notion has important implications for planning: planners cannot assume that any audience will receive the same message that elected officials or planners intend to convey. Neither can planners assume that their texts will evoke a single desired response if read correctly'. The meaning of the text is contestable and negotiated between the author and its many readers.

A Re-Urbing model works towards the erosion of this inherent conflict. The urban context project responds to a non specific, always changing and not direct stakeholder by filling the unknown gaps of information with design decisions. This generates a creative project management role that needs to be able to diagrammate a context transformation as much as analyse the variables encountered in its made environment. As in urban narrative, one will never have the whole picture on its decision making timetable and working around the emptiness, both filling it and using it as a dialogue space with external actors.

The urban narrative becomes a way to translate information into more traditional aspects of the project's management needs, like the building construction schedule or a communication campaign.

Fig 60- Adaptive management chart



7.2 Re-Urbing implementation Model proposal

Re-Urbing is described in this dissertation as an implementation model. The idea is that using these guidelines can help to achieve a high degree of successful performance in an ever changing urban environment, specifically related to how the perception of the place can change through the work in progress of an impactful project.

Any design project of medium-large scale will be affected by team building, budget and deadlines that will delimitate its scope and projection in time and space. This project before and while completing their main tasks on site will produce intermediate documentation for press releases, interviews, work in progress diagrams for contractors and design team, presentations to stakeholders, etc.

The intermediate documentation - although it can affect the main outcomes of the project - is thought of as snapshots of the moment and can help the change of the urban narrative through the duration of the project.

In this kind of operation one can find two main fields of action:

Firstly, where the project has full control of the information that transfers into specific outcomes, related to the traditional aspects of architecture, urban design and design in general. Secondly, where the project has little control on the information related to the environment and urban context, where the main challenge is how it can transform it into useful data.

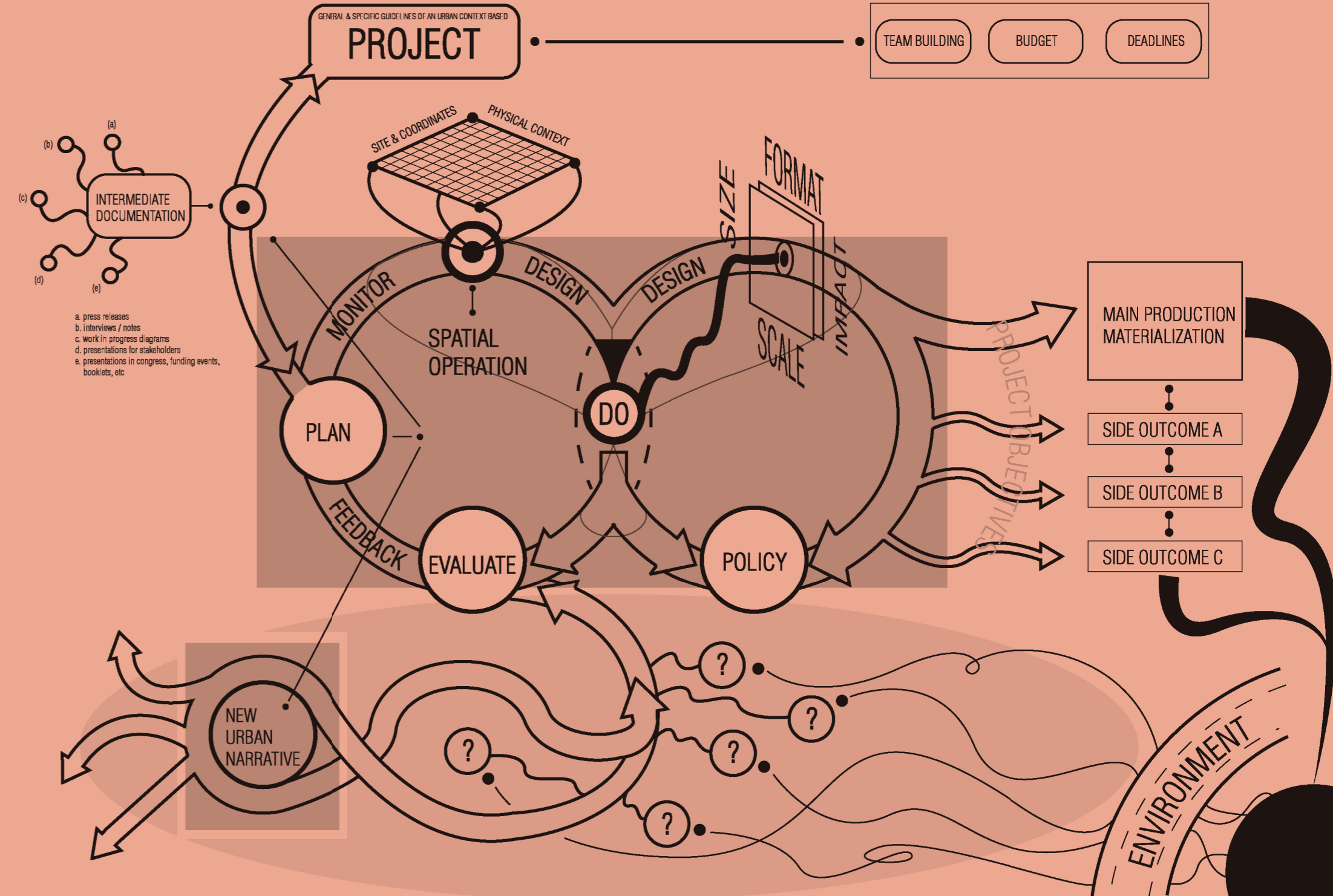
In the first field of action, where the implementation of the model is displayed, the process of materialisation of an urban based project can be explained by an iterative pairing of actions that connects planning, evaluation, policy and the actual doing of the project's needs. By getting feedback through the evaluation of the project's actions and the environment one can plan the project's needs and furthermore monitor its spatial operations on a determined site and physical context. In addition, through design - in whatever format, size, scale and type of impact needed - the project objectives can be achieved and in return, affect the environment, thus changing the urban narrative and its perception of the site.

In the second field of Action, the environment produces incognitas and surprise scenarios that there is an "exclave" of the project in this field of action:

the implementation of a new urban narrative, that will take its main characteristics from the project's plan and its intermediate documentation and can catalyse through different direct and indirect communication strategies a start of change of perception of the site through the ideas embodied on the project objectives.

This flow of information will run through the new urban narrative actions to be evaluated and re incorporated into the plan phase of the controlled field. Next, in this connection, incognitas from the environment will act as design-decision trigger points where if can't be answered with already made information should be filled with sketches, diagrams or related design process making tools in order to translate it into useful information for the project implementation.

Fig 61- Re-urbing model





### 7.3 Re-Urbing map

The Aalto Silo project catalyst properties will affect Meri-Toppila urban image: it will change the way the city relates to the area and how inhabitants perceive the space in a new way. Following exploratory map shows possible paths of actions both in an operative and speculative way. The conjunction of these action's toolkit is linked to the Silo renovation implementation and its potential to boost public and private policies and on-site operations. These operations can be described in 3 categories, linked to their type of relationship with the Aalto Silo project:

- (A) Actions part of the Aalto Silo project. The renovation of the silo, building of the new research center and the possibility to operate in the park plot in front of the silo. Also, there is plans and initial discussions with the city of Oulu in trying to change the parking lot into a new cultural green space.
- (B) Indirect- Cultural and Infrastructure
- b1 The space between the climbing building, Dixon klubi and the commercial center
  - b2 The empty plot between the kindergarten and the residential buildings
  - b3 The green areas entrance to the Disc-Golf park
- (C) Indirect - Management and Policy
- c1 Boulevards entering the neighborhood
  - c2 Warehouse and logistic area
  - c3 New residential sector being built

Fig 62- Re-Urbing core area in Meri-Toppila

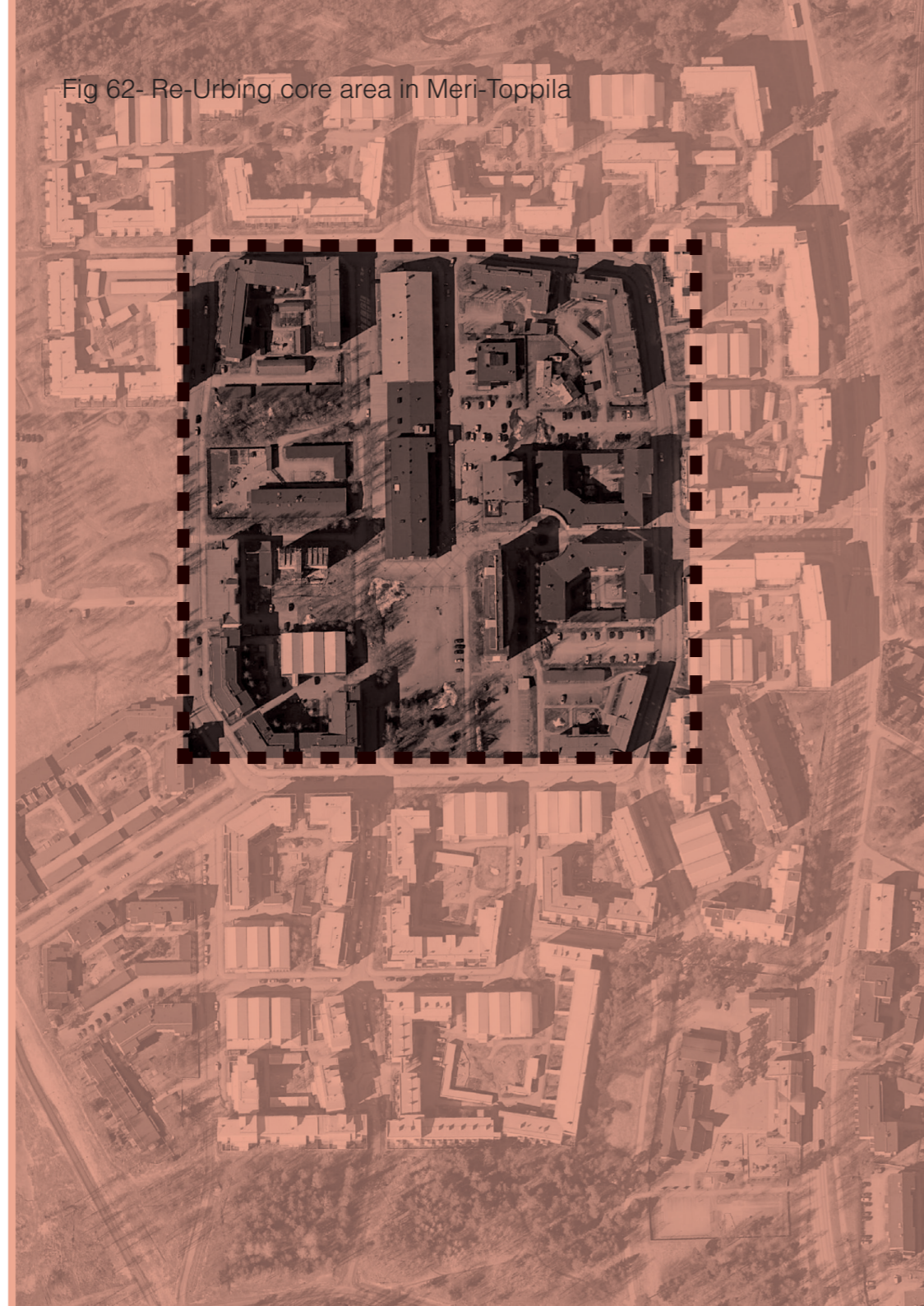
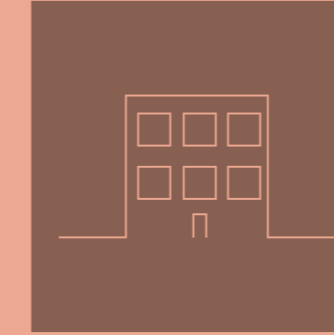
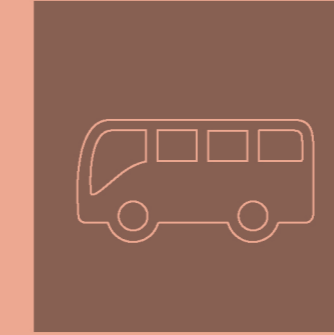


Fig 63- symbols in the re-urbing map



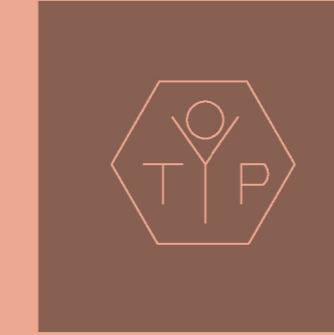
#### Infrastructure

New buildings, renovation of industrial facilities and Pop-up furniture are the physical face of a new narrative.



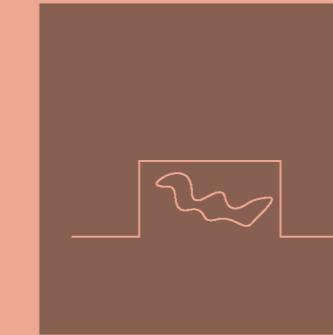
#### Transport lines

Meri-Toppila has a deficiency in its connection to downtown and other parts of Oulu: river and new bus stops should be explored.



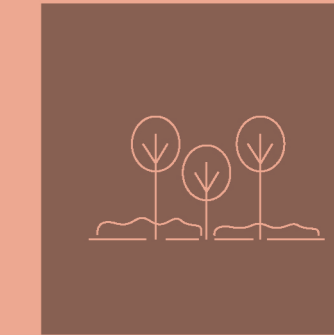
#### Branding

Industrial past, struggling present, creative industry future and an Alvar Aalto aura: Meri-Toppila brand is already there.



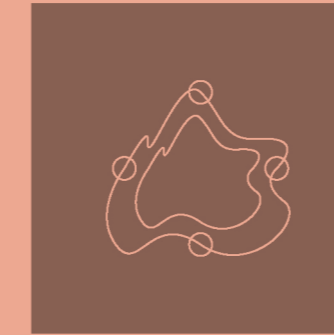
#### Curated street art

Long walls, and multiple urban pockets in between buildings generates possibilities to integrate urban art into a cohesive narrative.



#### Landscape reuse

Green spaces in the area are neglected. Their full potential could be articulated with district wide actions.



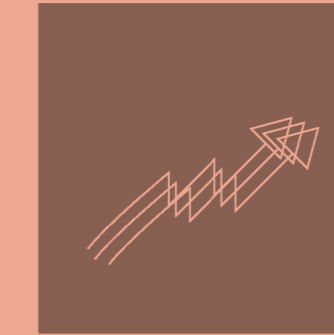
#### Community space

Small scale cultural centers, neighborhood associations, social service offices: spaces for discussion and intervention.



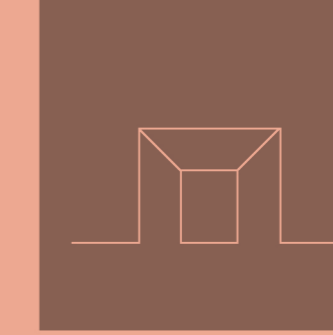
#### Policy

Specific government actions needed in determined areas of Meri-Toppila.



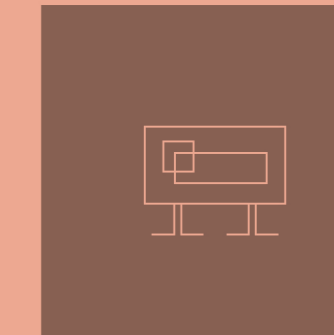
#### High impact actions for the residents

Areas that will affect most the resident's image of their own district.



#### Public event space

Generation of on-going events in the area that could attract inhabitants of other parts of the city.



#### Industrial heritage

Spots in Meri-Toppila are historically relevant: mapping they could benefit the image of the district.

Fig 64- Re-urbing map

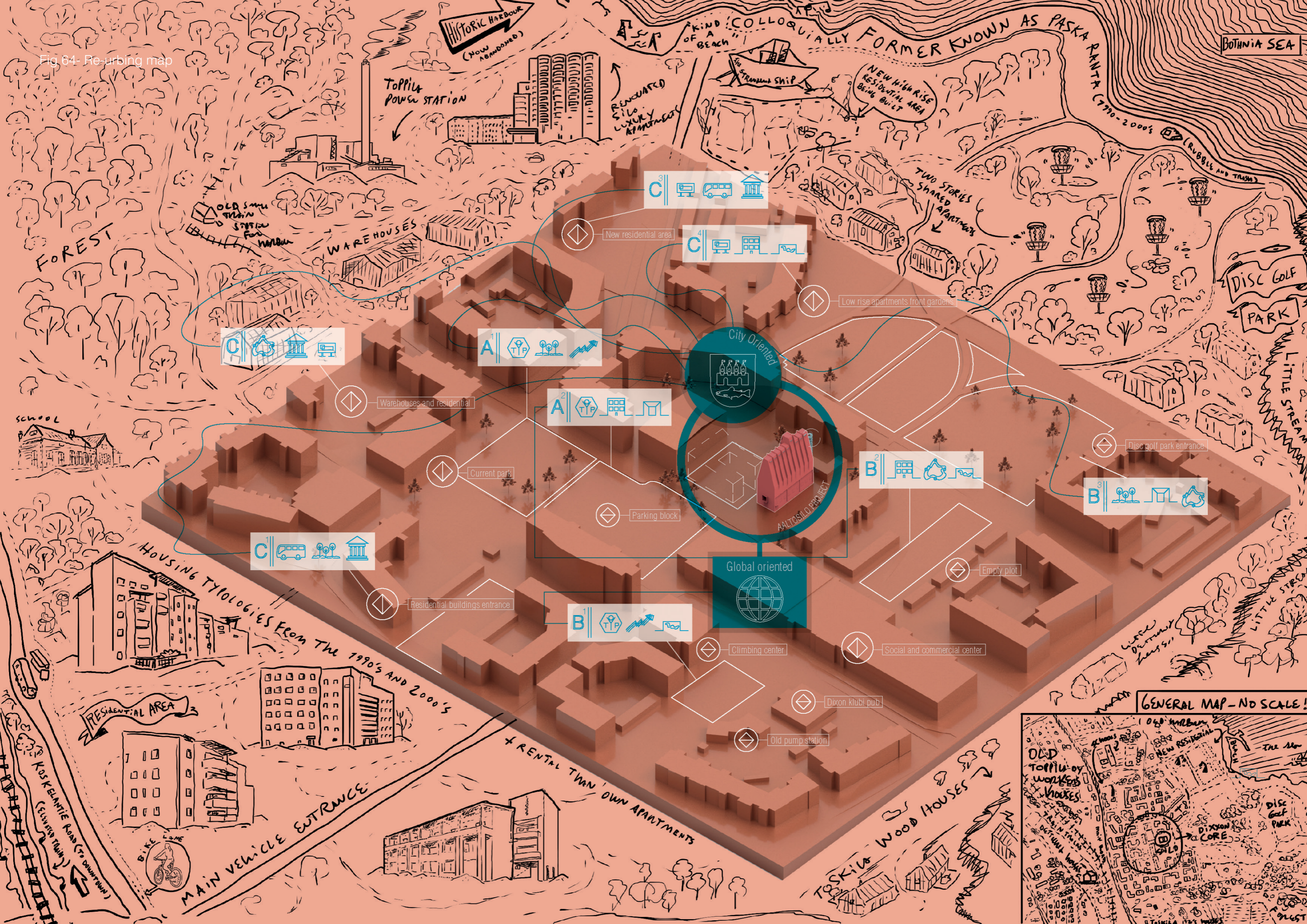




Fig 65- Former Dixon factory buildings view from the Silo

ON A WALK

With you I have found a new hour in a day

Between the midday and afternoon

around two

when the parks surrounding the city

are getting quiet

only a casual long distance runner

or a wanderer like us

and the grit under the ice

beneath my shoes

and the factory of course

and its calming hum.

Outside I don't need to

cradle you to sleep, the factory does it for me.

This new hour in a day,

that we have found

is my favorite time.

Around two

at the fringe of the city.

! "KÄVELYLLÄ

Kanssasi olen löytänyt uuden ajan päivästä

keskipäivän ja iltapäivän välillä

kahden aikaan  
kun kaupunkia ympäröivät puistoalueet

hiljenevät muista

vain satunnainen pitkän matkan pyöräilijä

tai meidän kaltaisemme vaeltaja

ja jään alleen jättämät sorakivet

kengänpohjan alla

ja tietenkin tehdas

ja sen rauhoittava hyminä.

Ulkona ei minun tarvitse

tuudittaa sinua uneen, kun tehdas tekee sen puolestani.

Tämä uusi aika päivästä,

jonka olemme löytäneet,

on minun lempi aikani.

Kello kahden aikaan

kaupungin laitamilla.

-Nina Juustila-Cevirel: Vällyihin valuva (2021)



## DISCUSSIONS

*Arriving to Oulu for the first time, visiting the Alvar Aalto silo was the only preconceived plan I had for the city. I remember being welcomed by a wall of medium rise housing buildings as soon as I crossed the train underpass and then, the downward hill leading you to Meri-Toppila's red brick maze. First I thought that this kind of urban spaces would be common on a former industrial city as Oulu, but I was wrong.*

Urban structures are one of the most time-enduring artifacts created by mankind: they last more than people, buildings and nations. In any city with some kind of history one can still see the connection lines and main roads traced hundreds (or even thousands) years ago. These physical lay outs of economic and political systems weight heavily in our conception of time and space and define how the city is perceived, thought and remembered.

*I moved to Oulu thinking on living next to the sea, as the official maritime history seemed to be quintessential to the town's identity. I had seen Peter von Bagh movie "Muisteija" and I was expecting vibrant waterfronts around the river, delta and marinas. Unfortunately, one can be entire months in Oulu without seeing the Bothnia Sea and when it does, usually its hidden, blocked, virtually denied. Maybe the decline of Oulu exporting industrial system had to do with it, as the factories closed people just forgot.*

While writing this thesis, I came across the complexity of Meri-Toppila as an enduring example on of how a post-industrial neighborhood could use its inherent attributes as a narrative boost in order to regain former hierarchy and connection to the rest of town. Acknowledging material and

intangible attributes in the urban space creates a solid background from where to build a longstanding renewed discourse that's anchored in place a real place .

*In Meri-Toppila, the sea was in its name and in the sunset wind, but, as the rest of town, seemed to be just a recollection tied to harbor times and the seaman's generational shadows. Once a pride global production center, now it was home for bad omens and suspicious rumors. The rest of Oulu people always had a quote on hand, of a friend of a friend, that had a non-happy experience on the neighborhood. And- besides some sporadic visit to the climbing center or a once in a lifetime game in the disc-golf park- nobody from my circle had a relationship with the 4,000+ people district. The more I knew owed about Oulu, more It seemed that Meri-Toppila was pierced in the city's collective memory as an exclave of something else.*

Regardless the exploration of topics in this dissertation as Adaptive Management, Ecosystem Design and Urban Narrative, some briefly discussed characteristics of the site and the Aalto Silo project would benefit of further research and reflection. These are as follows:

The role of gentrification models, their use of urban image as a commercial commodity and related theoretical frameworks. Improved discussions in how this phenomenon can be used to implement public lead processes of urban improvement and mitigate its negative effects can be beneficial for post-industrial neighborhoods as Meri-Toppila.

Design of custom- made community participation tools and networks for urban narrative projects. The core idea of urban narrative relies in mouth to mouth storytelling.

A configuration of specific lay outs, processes and workshop mechanics could provide a solid ground to transform the image of a district, through the eyes of its inhabitants.

Urban branding as an empowerment tool for social and cultural organizations. In a commodified society -where every citizen is an image producer and beholds some sort of digital persona- the needs to take control of the narrative are more akin to a right than an option. Building a Meri-Toppila urban narrative also needs to be able to communicate in a graphic and spatial way. Continuing approaches towards a set of formats and media that can encapsulate its potential is necessary a must .

Architecture design aspects of the Aalto Silo project. In the tradition of Aalto's experimental houses, the Aalto Silo project is thought as material representation of architecture exploration and several of its features can be continued to relate Meri-Toppila urban space, organizations, institutions and other buildings. In addition, as the project progresses more detailed information can be analyzed in depth and interlinked to other disciplinary fields.

*Between the ex-factory buildings of Meri-Toppila a constellation of empty urban pockets connects the pavilions footprint of the former Dixon company. These streets were not thought as streets, but logistic roads between production facilities, still, they produce some of the city's better environments to gather public space related events and art. The potential of Meri-Toppila as a creative industry hotspot is latent.*

Hopefully, a contribution of this dissertation would be to provide a practical and theoretical base for spatial and design operations, particularly in Meri-Toppila but also in

other post-industrial neighborhoods. The core idea of the thesis is to serve as an open source reference from which continue to add information around the subject across disciplines and structures.

Also, through this dissertation an exploration of design thinking in Project Management roles is presented as a way to resolve, display and think empty slots of information in decision making scenarios. The materialization nature of the design process generates an interesting opportunity to discuss how creative thinking can enhance any kind of management situations.





Fig 66- Empty plot of land near the Silo



“I went to all these schools in this town that brags about its reputation as a school city even though it is a punishment camp. I loved its river.

Like four ditches, it flowed through town, passing the little islands and in its delta the blue-black water that was cool even when the weather was hot merged with the sea’s low sodium, green element. The river and the church tower - that I feared - followed me into the eastern woods of the city and to the vast fields with the gray barns of the south.

But I just couldn’t ride my bike far enough from myself to hide from the church tower watching eye.”

“Kaikkia näitä kouluja kävin tässä koulukaupungin mainellaan ylpeilevässä rangaistussiirtolassa. Sen jokea minä rakastin. Neljänä haarana se virtasi läpi kaupungin, halki pienten saarien ja suistossa sen sinisenmusta ja helteilläkin vilpoinen vesi yhtyi meren vähäsuolaiseen vihertävään elementtiin.

Joki ja kirkontorni - sitä kammoksuin - seurasivat minua männikkökankaille kaupungin itäisiin metsiin, etelässä aukeaville harmaiden latojen Čaavalle. Mutta niin kauas itsestäni en voinut pyöräillä, ettei kirkontornin valvova silmä olisi nähnyt.”

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To,

Charlotte for the teachings

Adam for the trust

The Aalto Silo team for the hard work

Aulikki for the diligence

kaikki oululaiset ystävät kun esitelitte minulle kaupungin

My support crew here and there

and my family across the Atlantic.



“The ground set by the environment makes Oulu one of the luckiest of all our cities. It is - in the most demanding sense of the name - the white city of the north, maintaining this special mark in its growth. In addition to the buildings, the vibe of the white city remains in the whole scenery and how Oulu blends into it.

It is a result of harmonious cooperation of contractors and nature. This whiteness is reflected by the vast sea, heavy river and the sky, and it is highlighted both in the nightless midnight of the North and on the snowblanket of the late winter.

The beauty of Oulu has become known by many northern poets, and it has captured with strong bonds all of those, who once have empathized its white clearness.”



“Ympäristön luomien puitteiden kauneuden puolesta Oulu on kaupungeistamme kaikkein onnekkaimpia. Se on - nimen vaativimmassa mielessä - Pohjolan valkea kaupunki, ja tämän erikoisleimansa se säilyttää myös kasvussaan.

Paitsi rakennuksissa on valkean kaupungin tuntu koko maisemassa ja Oulun sulautumisessa siihen. Se on luonnon ja rakentajien sopusointuisen yhteistyön tulos. Tätä valkeutta heijastavat avara meri, vuolas virta ja taivas, ja se korostuu niin Pohjolan yöttömässä keskiyössä kuin kevättalven hangillakin.

Oulun kauneus on tullut monien pohjois pohjalaisten runoilijoiden laulamana laajalti tunnetuksi, ja se on vanginnut katkeamattomin sitein kaikki ne, jotka kerran ovat eläytyneet sen valkeaan kuulauteen.”

Atte #Kalajoki: Oulu - koskien kaupunki

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