Modernist urbanism under automated mobility scenarios

Transforming modernist areas for spatial quality in Amsterdam city

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P5
Presentation

Tutors

1st - Victor Muñoz Sanz
2nd - Maurice Harteveld

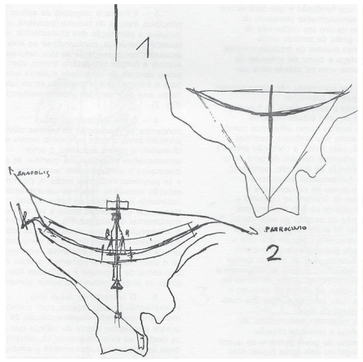
Problem Background | *Modernist urban model*

Critical aspects > Vision & reality

Difference in scales

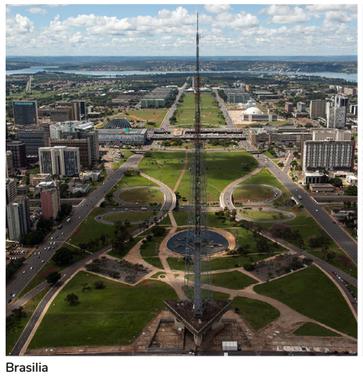
City scale → *Housing Estates* → *Street scale*

Brasilia



Lucio costa's Sketch for Brasilia urban plan
Source: www.agenciabrasilia.df.gov.br

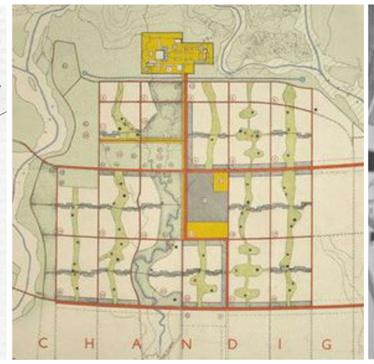
Brasilia overview
Source: https://en.wikipedia.org/wiki/Bras%C3%ADlia



Brasilia
Source: https://en.wikipedia.org/wiki/Bras%C3%ADlia

Low-income Sol Nascente neighborhood in Ceilândia,
Source: https://www.thepolisblog.org/2013/02/brasilia.html

Chandigarh



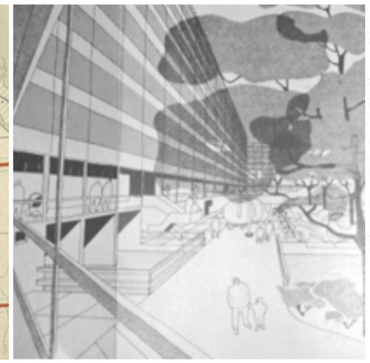
Chandigarh Plan
Source: https://bit.ly/2D2aY4K

Chandigarh overview
Source: Google maps

Chandigarh
Source: www.wikipedia.org/wiki/Chandigarh

Chandigarh proletarian fortress
Source: https://bit.ly/2LCKwBl

Biljmermeer



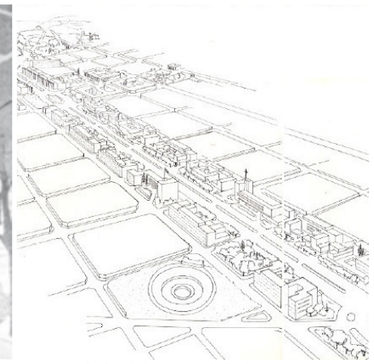
Sketch 'collectieve voorzieningen', 1967
Source: http://bit.do/Biljmer-colective

Biljmermeer overview
Source: Google maps

Biljmermeer
Source: www.bijlmermuseum.com/het-bijlmer-ontwerp/

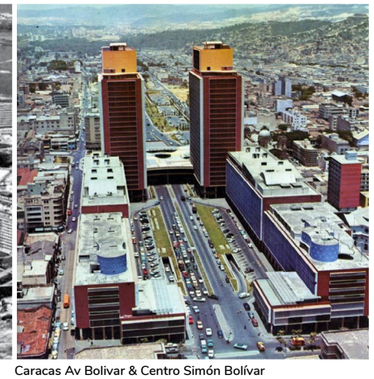
Biljmermeer public spaces
Source: https://failedarchitecture.com/dredging-dutch-city-part-2-

Av. Bolívar



Caracas Av Bolívar & Centro Simón Bolívar
Source: https://bit.ly/2YGfxrx

Caracas Av Bolívar overview
Source: Google maps



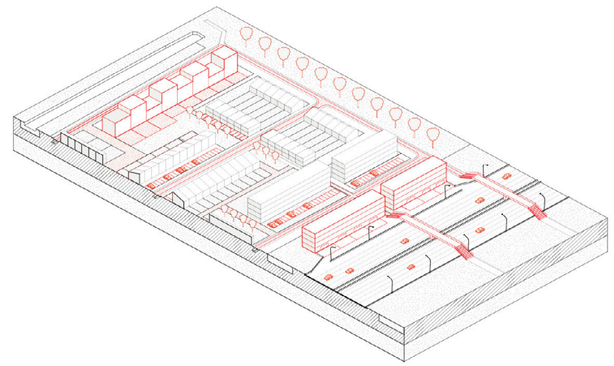
Caracas Av Bolivar & Centro Simón Bolívar
Source: https://bit.ly/1JaYNjc

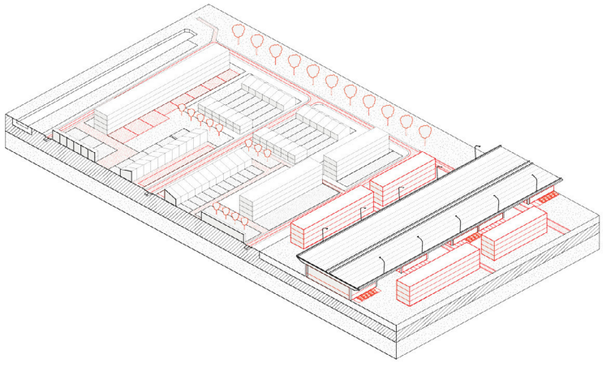
Avenida Bolivar empty and derelict public spaces
Source: https://en.wikipedia.org/wiki/Centro_Sim%C3%B3n_Bol%C3%ADvar_Towers

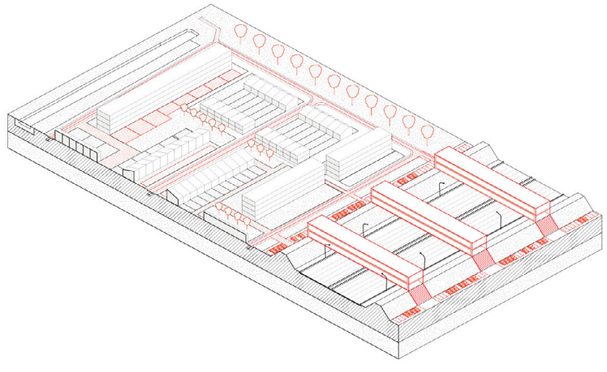
Difference between what is envisioned and what is built

Problem Background | *Automated mobility - New mobility+space relations*

Visions







New relations between car infrastructure & urban tissue

Resilient Infrastructure and Environment: Spatial operation perspective

TU Delft -2017

New street vision

Robocar Evolution

TU Delft -2018

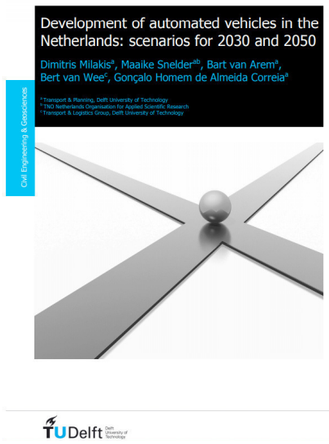
Problem Analysis

The case of Amsterdam

Impact of the model in the city / AUP & Zuid Oost
Automated mobility arrival

Amsterdam / General Expansion Plan AUP 1936
Source: Own elaboration

European incentives & knowledge creation



Declaration of Amsterdam / Cooperation in the field of connected and automated driving
European Commission

PBL - Project report 2015
Netherlands Environmental Agency

DESIGNLINES | AUTOMOTIVE DESIGNLINE

The Netherlands Tops List for Autonomous Vehicle Readiness

By Nitin Dahad, 01.24.18 0

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European nations score high marks for autonomous vehicle readiness in a new study by KPMG.

OK, so there was a lot of talk about autonomous vehicles this year at CES, with a good round up **here** from Junko Yoshida. While we have the technology, where is it most likely to be utilized?

Europe seems to be a good place to start. The Netherlands leads the newly published **automated vehicles readiness index** (AVRI), with Sweden, the U.K. and Germany also being among the top 10 countries globally which are ready for the introduction of self-driving vehicles.

The AVRI examines where countries are today in terms of progress and capacity for adapting AV technology. It evaluates each country according to four pillars that are integral to a country's capacity to adopt and integrate autonomous vehicles. The four pillars are: policy & legislation; technology & innovation, infrastructure and consumer acceptance.

The pillars are comprised of a number of variables that reflect the wide range of factors that impact a country's AV readiness, from the availability of electric vehicle charging stations, to AV technology R&D, to the population's willingness to adopt technology, to the regulatory environment.

According to the AVRI, the 10 countries most prepared for the future of autonomous transportation of those

AVRI - Netherlands tops list for autonomous vehicle Readiness Index 2018
4 pillars: policy and legislation, technology and innovation, infrastructure and consumer acceptance
Source: https://ubm.io/2GiCvwk

How to deal with this legacy integrate new technology?

April 1972. The second, widely televised demolition of a Pruitt–Igoe building
Source: www.wikipedia.org/wiki/Pruitt%E2%80%93Igoe

Research question

How can modernist urban areas be transformed to enhance spatial quality under future automated mobility scenarios?

'Reflect on the past modern approach to technology & and the new 'seductive' vision of autonomous mobility' to inform the construction of future scenarios of automated mobility that foster quality of public spaces'.

Structure

1- Methods

2-Literature review for:

Atlas of Modernist urbanism

Making Automated mobility scenarios

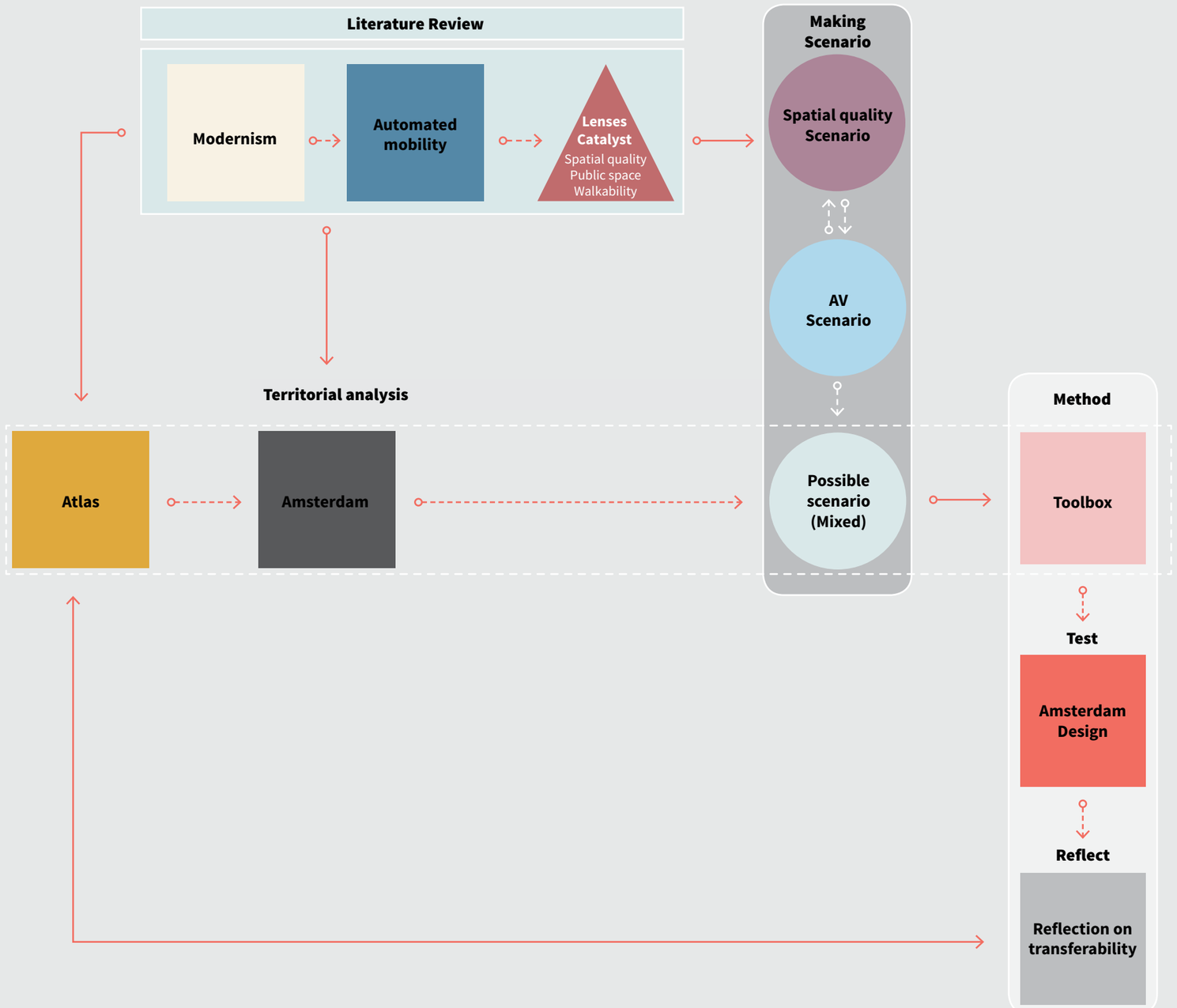
3-The Toolbox

4-Implementation in the territory

5-Reflection on applicability and future implementations

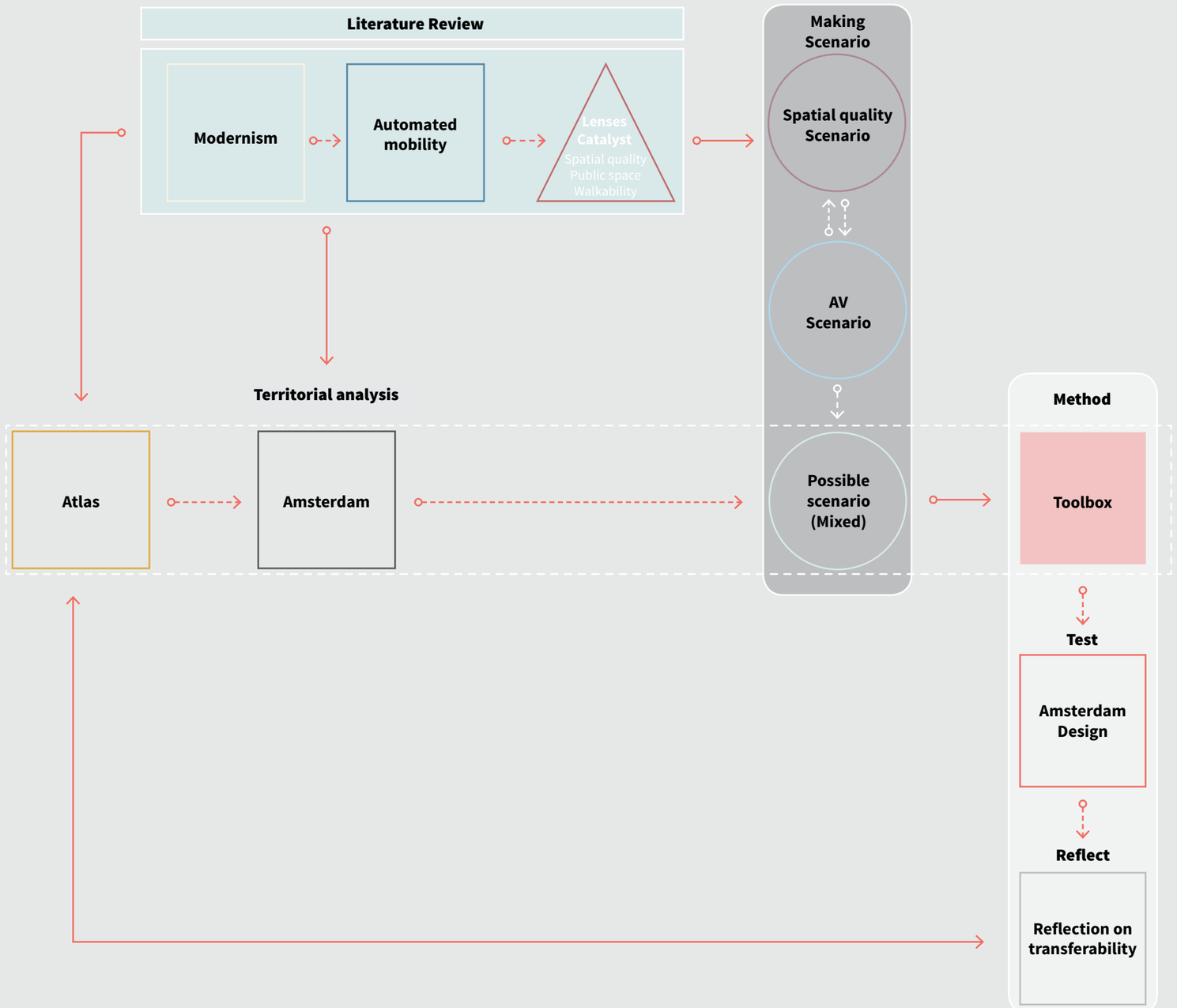
Methodology | *Building a method*

Literature review > Atlas - Scenarios - Toolbox

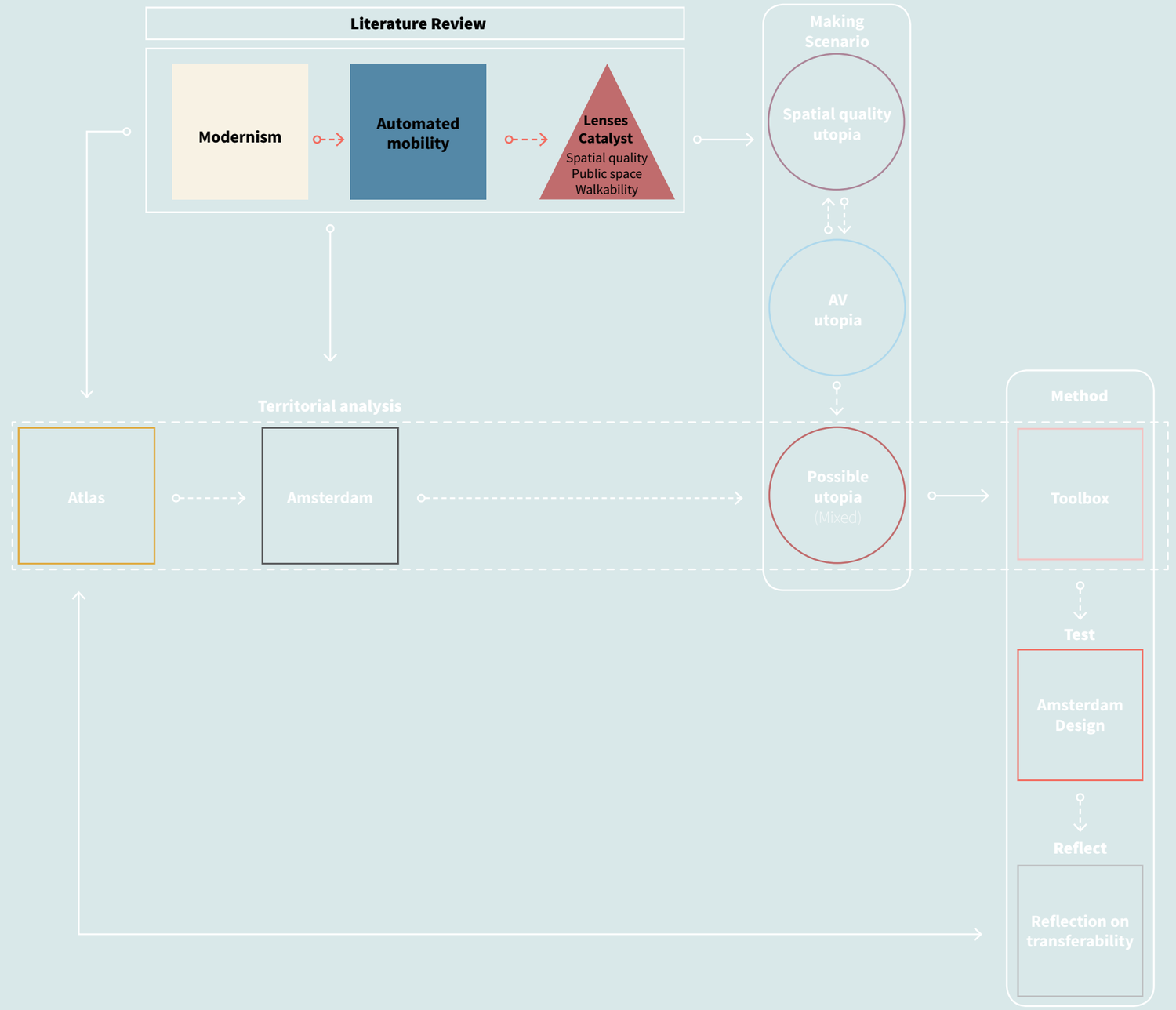


Methodology | *Building a method*

*Literature review > Atlas - Scenarios - **Toolbox***

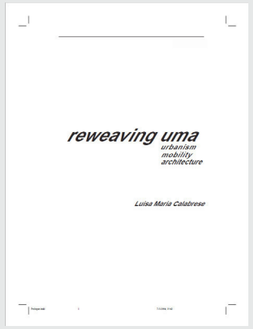


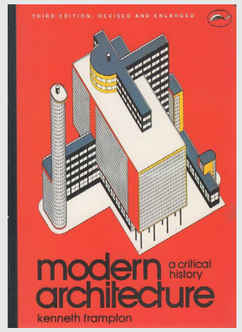
Literature review

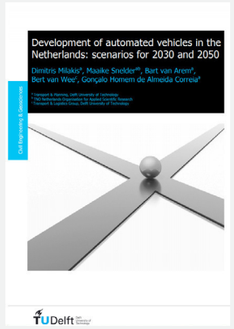


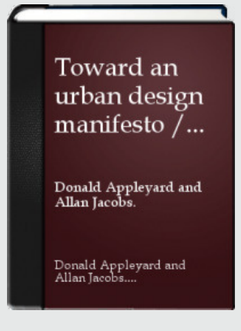
Theoretical Framework | *Spatial Quality & Public Space*

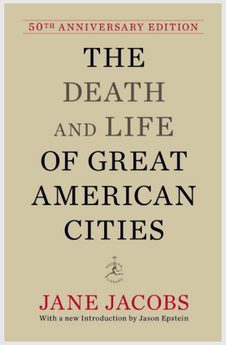
Theory > Different perspectives on 'quality of public space'

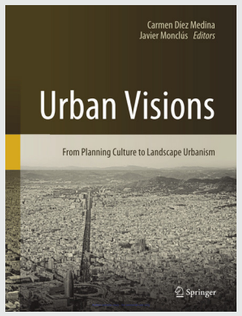


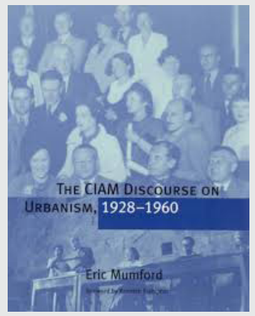


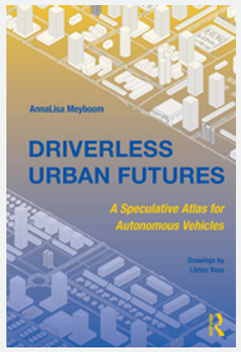


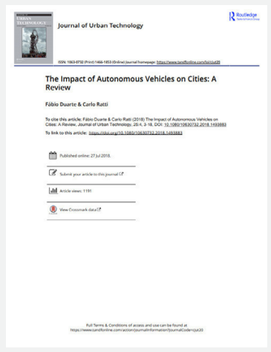


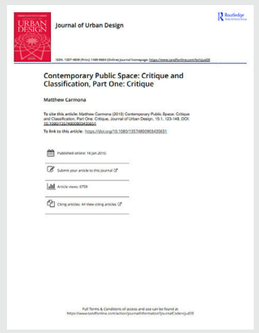


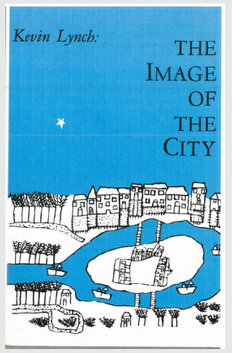


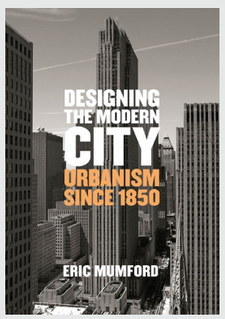


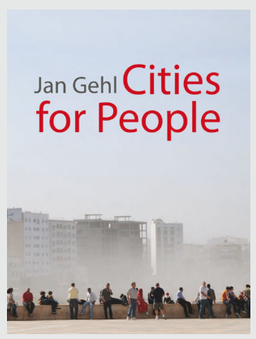


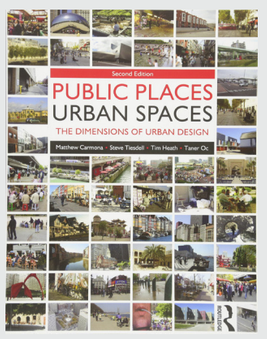










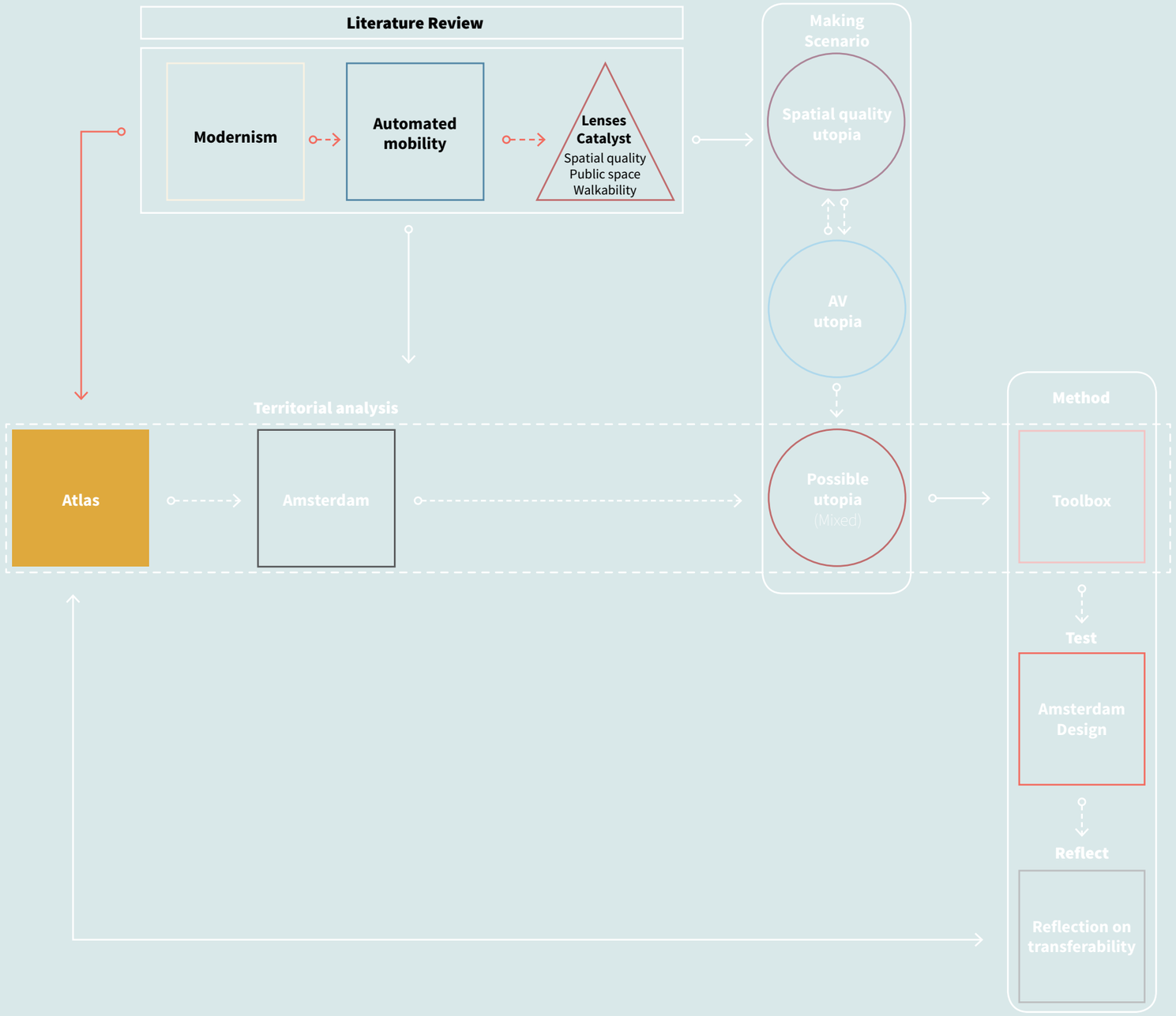


Atlas Universal
Modernism

Automated mobility scenario
Possible Utopia

Database
Theory quality of public space

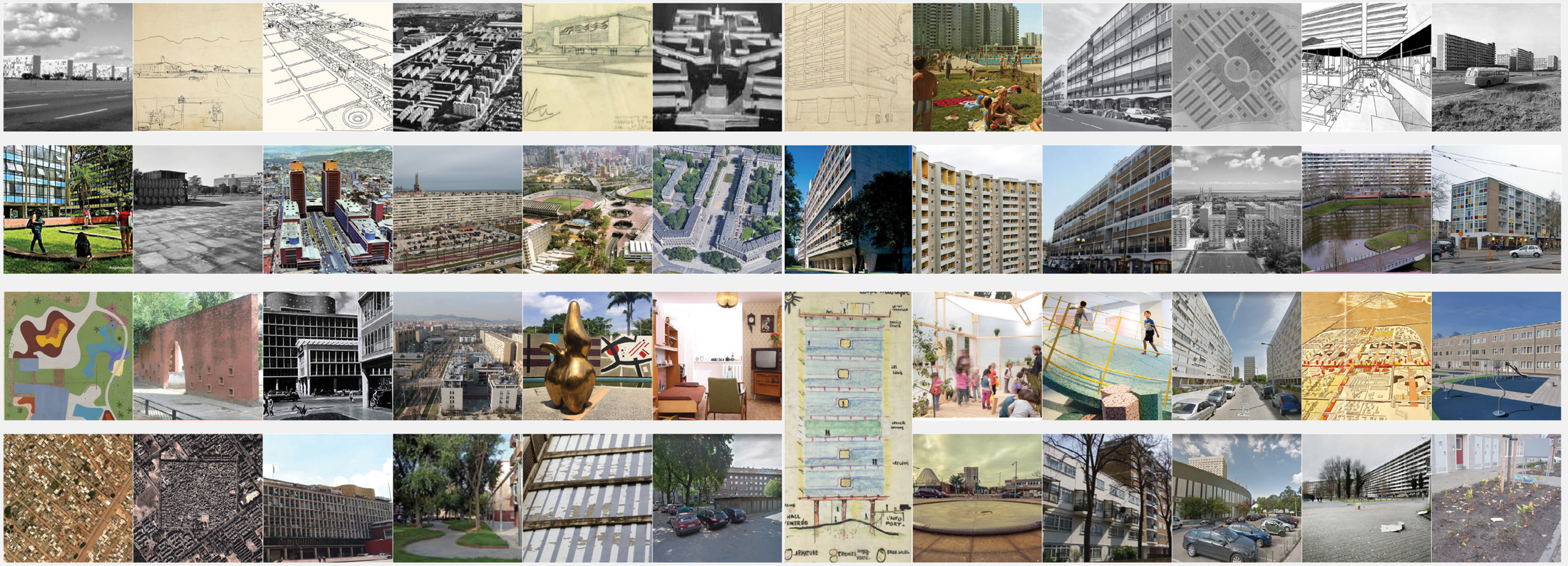
Atlas Modernism Universal model



Modernism as an universal model

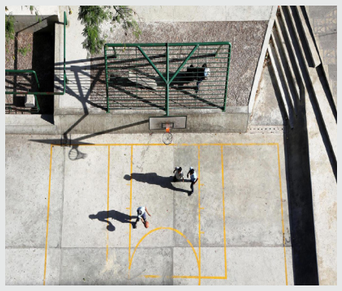
Matrix of projects

BRASILIA 1956	CHANDIGARH 1950-65	AVENIDA BOLIVAR 1936-53	BESÓS South West & La Mina 1959-65	UCV University Campus 1953	NOWA HUTA 1949-1960	UNITÉ D´ABITATION MARSEILLES 1947-52	GROPIUS STADT 1962-75	CHURCHILL GARDENS 1946-62	PORTELA 1970	BILJMERMEER 1966-73	NIEUW WEST 1956
Scale & Landscape 'Quadra Modelo' & 'The garden as an artistic expression'	**Scale / composition** 'Tropical Mordernism'	**Integration** 'The street as a space of dialogue'	**Adaptive re-use** 'Mixed strategy'	**Heritage value** 'Overcome modernity'	**Heritage value = Economic value**	**Heritage value** '5 Points of architecture'	**Heritage value** 'Sustainable development'	**Succesfull model** 'Playgrounds'	**Succesfull model** 'Occasional encounters Vs collectivity'	**Urban Renewal - Demolition**	**Adaptive re-use + architectonic value**



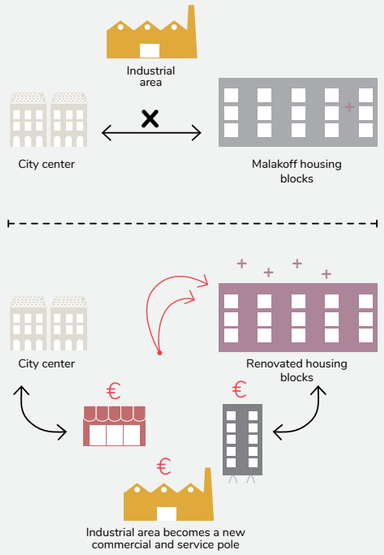
Av. BOLÍVAR
‘The street as a space of dialogue’



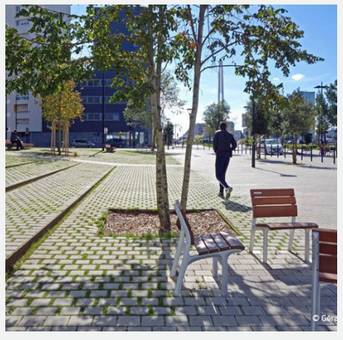



Avenida Bolívar - Public space intervention
Source: https://bit.ly/2VeLgSu

MALAKOFF
‘High density Attraction poles Rehabilitation’

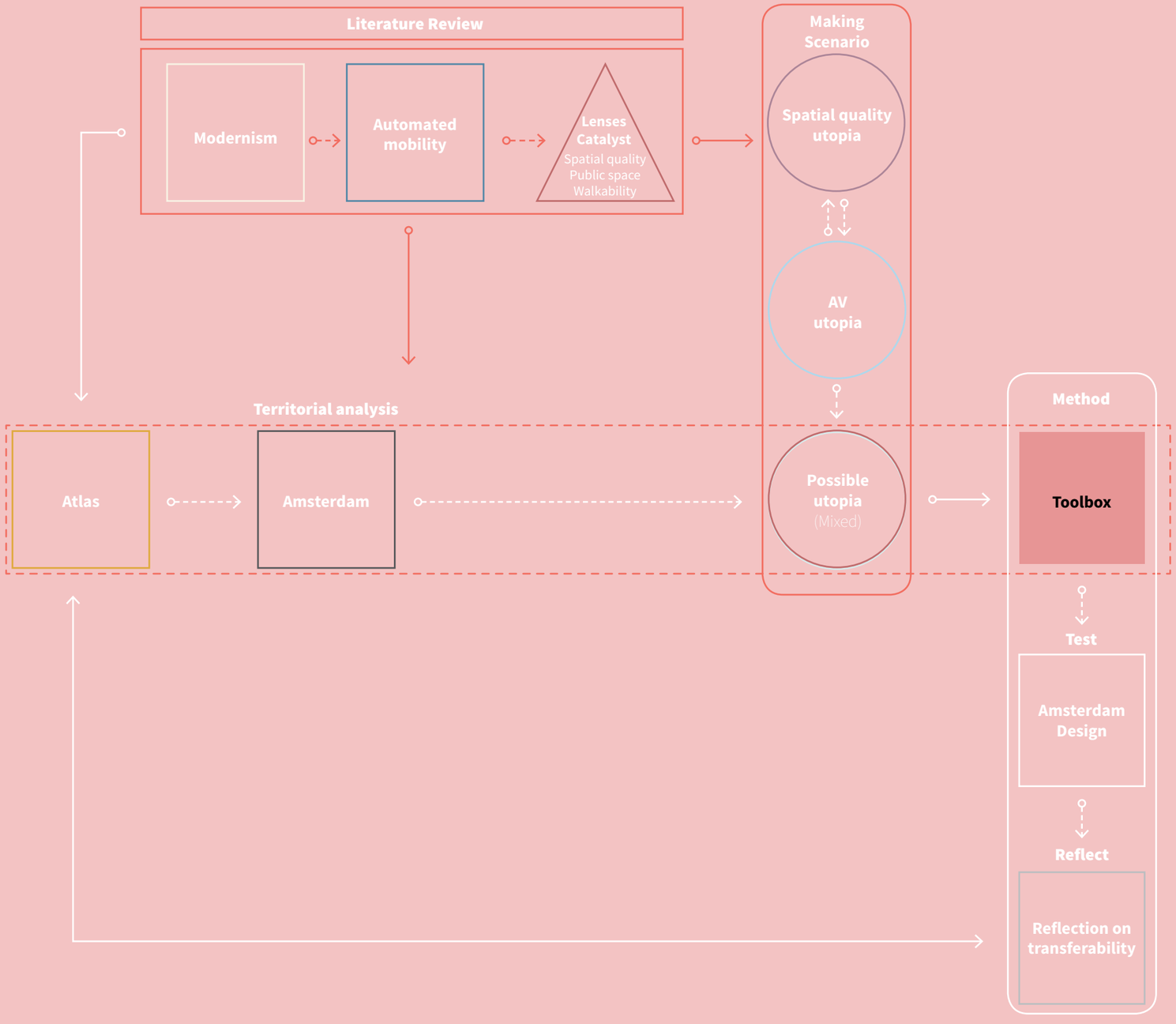




Public space transformation by Atelier Ruelle
Source: http://www.atelier-ruelle.fr/nantes?id_article=

Toolbox


Literature Review
Modernism
Automated mobility
Lenses Catalyst
Spatial quality
Public space
Walkability
Making Scenario
Spatial quality utopia
AV utopia
Possible utopia
(Mixed)
Territorial analysis
Atlas
Amsterdam
Method
Toolbox
Test
Amsterdam Design
Reflect
Reflection on transferability

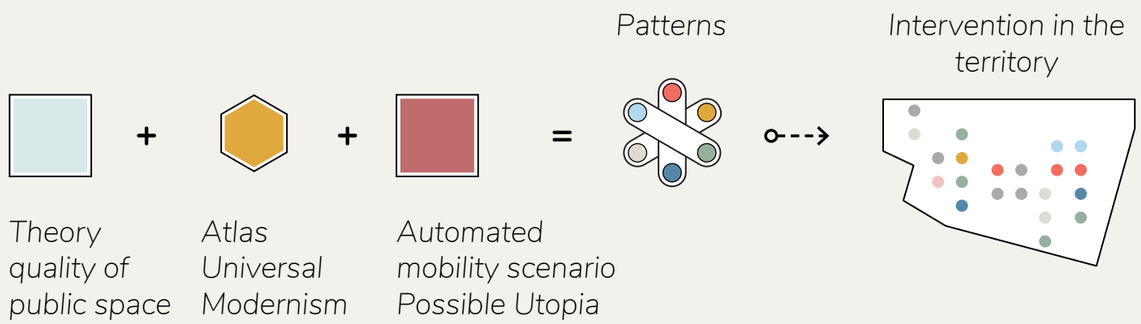
What is the Toolbox?

‘The toolbox is a tool that seeks to connect the literature on quality of public spaces, the references explored on the Atlas of modernism, and the Automated mobility scenario, in a series of patterns that can be applied in the territory’

Elements of the toolbox

1. A database of problems and solutions;
2. The hashtags, connecting problems and solutions;
3. Av scenario;
4. The patterns,

connecting problems – solutions and the automated mobility scenario through design.



1-Database

What are the Database & the Hashtags?

‘The database contains problems and solutions studied in the literature framework. The Hastags are key words that connect problems and solutions trough categories’

Elements of the toolbox

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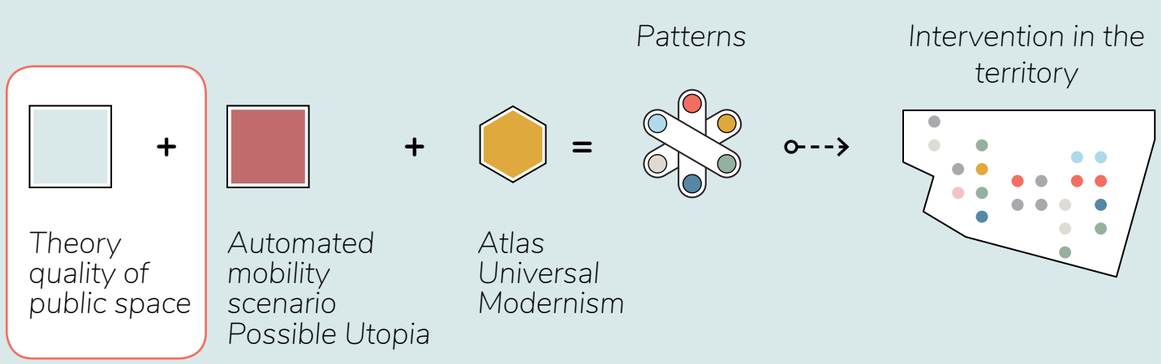


TOOLBOX | *1-Database*

Spatial Quality & Public Space / Problems & solutions

PROBLEMS OF PUBLIC SPACES

Management perspective

Carmona's 'under-managed' and 'over-managed' public spaces

Problems with modern urban design

Toward an urban design manifesto. Allan Jacobs & Donald Appleyard

Table 1 - An overview of Carmona's under-managed public spaces

An overview Carmona's under-managed public spaces. Adapted from Contemporary Public Space: critique and classification. Part one: Critique. Carmona 2010.

Under-management of public space	Defined by the notion that public space, and therefore the public realm is experiencing a physical decline.
>Neglected space	**In relation to Wilson and Kelling (1982) influential work 'Broken Windows Theory', where the failure to deal with smaller sings of decay within an urban area could bring a rapid spiral of decline. Francis Tibbalds studies recognizes good urban design and management as effective means to reverse the problems of derelict public realm.** **-Lost spaces** Refers to authors like Loukaitou-Sideris (1996), 'Cracks in the City' that focus on the 'in-between spaces, residual, under-utilized and deteriorating spaces'. Trancik (1986) 'Lost Space' as spaces that are in 'need of re-design, anti-spaces, making no positive contribution to the surrounds or users', e.g. the base of high-rise towers, unused sunken plazas, abandoned waterfronts, train yards, deteriorated parks and marginal public housing projects'. Trancik establishes a direct relation between 'lost spaces' and the car, urban renewal, the privatization of public space, functional separation of uses and with the modern movement. **-Twenty-four-hour space** Respond to the evening economy and the 24-hour city policies linked to regeneration processes that typically turned urban centers into 'youthful playscapes', these spaces may not be neglected, but have been abandoned to market forces', 'perpetuating forms of exclusion'.
>Invaded Space	'Sacrificing public space to the use of needs of the car, effectively allowing movement needs to usurp social ones'. 'The invasion of private cars have led to a dramatic reduction to the space available to pedestrians, a reduction on the quality of the space that remains, and a significant restriction to the freedom of movement to pedestrians'. **-Traffic and parking over pedestrian space in streets and squares** Leading to consequent, dirt, noise and visual pollution that helps to impoverish city life (Gehl & Gemzoe, 2001). **-Loss of social function** The number of car users greatly exceeds the number of pedestrians using the street, and the space given to road space exceeds that dedicated to footpaths. (Gehl and Gemozoe 2001) ideas state that invaded space is generally impoverished and loses most of the social and recreational activities, living only the most utilitarian functions. **-In-between spaces deteriorate** Based on 'archipelago of enclaves' (Hajer and Reijndorp, 2001), where distant spaces are compressed by instant connection by car roads, while the in-between spaces are ostracized and deteriorate and perceived as absent of attractors. **-Exclusively car reliant environments** External public space does not exist in any traditional form, and is replaced by a series of disconnected roads and car parks.
>Exclusionary space	Physical and psychological barriers (fear of the other) dominate public space design and management strategies. Some of the most influential figures in urban design such as Jane Jacobs (1984), Jan Gehl (1996), and William Whyte (1980-1988) have suggest the connection between use of public space and its quality factors. Arguing a connection between decline of quality, less use, and less incentive to provide new public spaces or maintain existing ones. **-Disabling spaces** Simple physical barriers could represent major obstacles for the use of public space, particularly for people with disabilities, children in push chairs and elderly. The author emphasizes on the necessity of making the environment accessible and easier to use for everyone; including psychological barriers related to crime, or unsafety related to fast traffic movement. **-Parochial Space** Based on Loukaiyou-Sideris, (1996) ideas on fragmentation of the public realm, and its relation to conflicts between different social groups which influences fear, suspicion and tensions, resulting on spatial segregation of activities in terms of class ethnicity, race, age and type of occupation. Creating what Lofland, (1998) describes as 'parochial space' that are appropriated only for certain groups of people.
>Segregated space	Associated to the desire of affluent groups in many societies to separate from the rest of society, as a reflection of fear of crime or need of exclusiveness. Leading to the global phenomena of 'gated communities'. Carmona points out that crime and uncivil behavior can quickly undermine the quality of public spaces, and feed a cycle of segregation of uses and users of public space, consequently contributing to their decline.
>Domestic, Third and Virtual Space	According to Sennett (1977), the idea of decline in public life could be related to an 'increasing emphasis on the private relations of individuals, their families and intimate friends, driven by the rise of secularism and capitalism. A dynamic that had contribute to a retreat to domestic space, while public life in the streets is replaced by the 'suburban Livingroom'. In relation to this, technology is identified as a 'key threat to the very notion of public life'. As, a variety of activities that typically took place in public spaces now can take place at home. **-Third spaces** The idea was originally proposed by Oldenburg (1989), and proposes broadening of the definition of public space, that include the notion of 'third spaces' - private spaces such as coffee shops or book stores, among others places - that 'support and enable social interactions, regardless of their ownership'. **-Virtual Space** Studies in relation to virtual spaces range from the extreme 'techno-determinists' predicting the end of urban life, to other currents suggesting the increasing importance of computer networks for 'urban life as street systems'. However, other authors such as Graham & Marvin (1999) suggest a reinforcement on the role of public space, as space to get in contact with others; and Castells (1996) and Sassen (1994), suggest that 'face to face communication would remain as the preferred mode of interaction between business, as well as for private activities'.
	All texts and authors are as cited in (Carmona, 2010)

Table 2 - An overview of Carmona's over managed public spaces

An overview Carmona's over-managed public spaces. Adapted from Contemporary Public Space: critique and classification. Part one: Critique. Carmona 2010.

>Privatized space	'Allowing public space to be privatized, with knock on impacts on political debate and social exclusion' **-Increase in public space security** In association to the neo-liberal era of the 1980's and 1990's and to terrorism. **-Corporate privatization** Based on Low & Smith (2006), privatization of public space by corporate or commercial interests. Evolving into what Boyer (1993) names a 'City of illusion', and Loukaitou-Sideris and Banerjee (1998), argues on post-modern design where 'space is cut off, separated, enclosed so that it can be easily enclosed and protected'. Resulting in the exclusion of the poor and the avoidance of realities related to landscapes of fear, neglect and deterioration.
>Consumption space	'Failing to address the relentless commodification of public space and the dangers of financial exclusion of less prosperous segments of society' Hajer and Reijndorp (2001) 'note the unprecedent increase in the deliberate consumption of places and events as a consequence of the dramatic expansion an domination of the middle classes in developed countries' **-Financial exclusion** Charging entry fees and visual cues, help to exclude people without the ability to pay. The space is 'apolitical' and the only social purpose is consumption. Mattson (1999) establishes a relation between 'lack of public spaces and the insidious impact of that on lack of democracy'.
>Invented space	'Condoning the spread of a placeless formulae-driven entertainment space'. **-Loss of authenticity and growth of 'placelessness'** Relph (1976), Canter (1977), Punter (1991), Montgomery (1998), discussed the components of place, typically focusing on three elements: Physical form, Human activities, Meaning or image. However, other authors such as Carr et al. (1992), focus on the qualities of successful places, measure trough their response to five needs: 1-Comfort, encompassing safety from harm as well as physical comfort; 2-Relaxation, allowing a sense of physiological ease; 3-Passive engagement, with the surroundings and other people, 4-Active engagement, 5-Discovery, reflecting the desire for variety and new experiences. Nonetheless, according to Carmona, 'the desire for and spread of globalization processes, mass culture and loss of attachment to place, has led to repetition of certain formulaic responses across the world'.
>Scary space	'Where crime, and more often fear of crime has been allowed to dominate the perceptions of place, and where crime prevention strategies -public and private- impact on the freedom with which space is used and enjoyed'. **-Instrumentalizing the poor** Fear leads to segregation, and the dynamic s created by it create a market of fear (gated communities, guns, surveillance equipment) **-Exclusionary Policing** According to Minton (2006), describes social exclusion in terms of 'hot spots' of affluence, and 'cold spots' of exclusion. 'Hot spots' -such as urban regeneration areas or BIDS- are characterized by having clean and safe policies that displace social problems. 'Cold spots' are characterized by the socially excluded who are unwelcome in the 'Hot spots', creating socially polarized urban public spaces'.
All texts and authors are as cited in (Carmona, 2010)	

Toward an urban design manifesto

PROBLEMS	Characteristics
Allan Jacobs and Donald Appleyard > Problems with modern urban design *Toward an urban design manifesto*	
Poor living environments	-Usually dangerous, polluted, noisy anonymous wastelands;
Gigantism and loss of control	-The elements of the city grow in size and massive transportation systems are segregated for single travel modes; -Loss of control over the homes and neighborhoods.
Large scale privatization and loss of public life	-Cities in the hands of large-scale developers, individual and private sector (stimulated by the *spread of the automobile*); - As public transit systems have declined, the number of places in American cities where people of different *social groups* can meet each other has dwindled'.
Centrifugal fragmentation	-Advanced industrial sites have took work is out of the home and the neighborhood, -The automobile and growing scale of commerce took shopping out of the local community; -Fear had led to homogeneity and segregation.
Destruction of valued places	-Exploitation of places lead to the destruction of heritage and natural amenities become overused.
Placelessness	-Cities become meaningless places with loss of community and participation
Rootless professionalism	-Many professionals are part of an universal professional culture more than part of the local cultures.

SOLUTIONS

Experience and quality of urban design elements

Gehl's 'Elements for experiencing public space'

Quality criteria of public spaces

Gehl's tool for evaluation of public spaces

Form and perception

Lynch's image of the city

Table 3 - Experiencing public spaces according to 'Close encounters with buildings'

Elements for experiencing public space. Adapted from Close encounters with buildings. *(Gehl, Kaefer, & Reigstad, 2006)* - Edited by author.

CLOSE ENCOUNTER WITH BUILDINGS (GEHL, 2006) > EXPERIENCING PUBLIC SPACE

Experiencing People	>Sight and hearing are our remote senses. Closer up we can also activate sense of smell, touch and taste. >Short distances are needed to provide intense and emotionally powerful experiences
Experiencing streets	Perception of public space depends on viewpoint, distance, and speed. **>5km/h architecture (Slow architecture)** The human sensory apparatus is designed to perceive and process sensory impressions while moving at about 5km/h -Spaces are small, -Pedestrians can get quite close to facades -Signals and sings can be small and refined -Architecture is rich in detail *In contrast with* **>60km/h architecture along roads used by vehicles** Drivers and passengers cannot perceive details when moving at speed -smooth buildings -short in detail Modern cities are heavily influenced by the confusion over these two scales, and pedestrians are often forced to walk in 60km/h urban landscapes and new architecture is design boring and sterile, 60km/h buildings in 50km/h traditional streets. **'The urban experience > The ground floor - Where building and city meet** **If the ground floors are interesting and varied, the urban environment is inviting and enriching. If the ground floors are closed or lacking of detail the urban experience is correspondingly flat and impersonal'** **Urban scenes at eye level** **>Scale and rhythm** Pedestrians experience the urban scene at maximum 5km/h with time to enjoy the surroundings. Small units provide wide range of experiences; Large number of doors provide points of exchange between outside and inside **>Transparency** The opportunity to be on the inside looking out – and on the outside looking in – significantly broadens the range of experiences in the buildings themselves and in the urban space. **>Appeal to many senses** We can draw on all our senses when we are close to buildings and we have sufficient time to look, listen smell, and touch the good things on offer. **>Texture** Good materials and fine details are an attraction for people strolling through the city. Opportunities to reach out and touch the buildings(…). Attractive ground level facades offer texture, good materials and carefully crafted details. **>Diversity of functions** The functions inside the buildings have a major impact on the activity and attractiveness of the spaces outside. Narrow units and many doors in the façade reflect on a wide functional variation inside and therefore on many points of exchange between inside and outside and many different events and experiences. **>Vertical façade rhythms** Walking along a ground floor façade with primarily vertical rhythms makes the walk much more interesting and eye-catching.
	All texts and authors are as cited in (Gehl, Kaefer, & Reigstad, 2006)

Table 4 -12 Quality Criteria of public spaces. (Gehl, 2018)

12 Quality Criteria of public spaces. (Gehl, 2018). Retrieved December 2018 www.gehlinstitute.org - Edited by author.

12 Quality criteria of public spaces (Gehl, 2018) > Qualities of public space

Protection	**Protection against traffic and accidents** • Traffic safety • Protection for pedestrians	**Protection against crime and violence, feeling secure** • Lively public realm • Allow for passive surveillance • Overlapping functions day and night • Well-lit lighting in human scale	**Protection against unpleasant sensory experience** • Wind / draft • Rain / snow • Cold / heat • Pollution • Dust / noise / glare
Comfort	**Opportunities to walk** • Room for walking • Interesting facades • No obstacles • Good surfaces • Accessibility for everyone	**Opportunities to stand and stay** • Attractive and functional edges • Defined spots for staying • Objects to lean against or stand next to • Facades with good details that invite staying	**Opportunities to sit** • Defined zones for sitting • Pleasant views and people watching • Good mix of public and coffee sitting • Resting opportunities
	Opportunities to see • Room for walking • Interesting facades • No obstacles • Good surfaces • Accessibility for everyone	**Opportunities to talk and listen** • Low noise levels • Public seating arrangements that are conducing to communicating 'talkscapes'	**Opportunities for play and exercise** • Allow for physical activity exercise, play and street entertainment • Temporary activities (Market, festivals, exhibitions, etc) • By day and night • In summer and winter
Enjoyment	**Dimensioned at human scale** • Dimensions of buildings and spaces in observance of the important human dimension in relation to senses, movements, size and behavior.	**Opportunities to enjoy the good aspects of weather** • Sun / Shade • Heat / Coolness • Shelter from wind – breeze	**Aesthetic qualities** • Good design and detailing • Good materials • Fine views and vistas • Rich sensory experiences: trees, plants, water
All texts and authors are as cited in (Gehl, 2018)			

Table 5 - Elements of the image of the city (Lynch, 1960)

Elements of the image of the city *(Lynch, 1960)* - Edited by author.

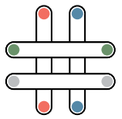
On perception	
The image of the environment	
Legibility	Clear structure and coherent patterns. Emphasizes positive values of a legible surrounding.
Image	A two way process between observer and the environment, where the environment suggest distinctions and relations, and the observer selects, organizes and gives meaning.
Structure and identity	Identity: distinction from other means, an separable entity; Structure: spatial or pattern relations object-observer; Meaning: practical or emotional.
Imageability	High probability of evoking a strong image
On form	
Main elements of public space are	
Paths	Routes along which people move throughout the city;
Edges	Boundaries and breaks in continuity;
Districts	Areas characterized by common characteristics;
Nodes	Strategic focus points for orientation like squares and junctions;
Landmarks	External points of orientation, usually a easily identifiable physical object in the urban landscape.
	(Lynch, 1960)

Quality and liveliness 'Death and life of great American Cities' Jane Jacobs (1961)

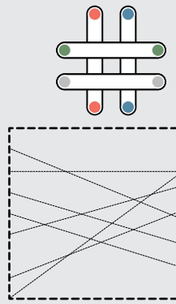
QUALITIES	Characteristics
JACOBS, 1961 > Quality / Quality and liveliness *'Death and life of great American Cities'*	
Functional mixture	Provide adequate services and proximity synergies;
Density	Could provide for concentration of people and institutions;
Social mix	Is valuable and an essential component of the contemporary urban environments in attractive cities;
Physical space	Should provide: -Short blocks, -Life on the ground floors -Attractive corners and side streets

TOOLBOX | 1-2 Database & Hashtags

Spatial Quality & Public Space / Hashtags



1-Database / 2-Hashtags



Problems of public space

Solutions Quality of public spaces

Qualities of public space

Authors | Text | Problems | Hash-tag | Family / Category

Autor	Reference text	Problem	Solution	Hashtag	Sub-category	MAP	Family
Allan Jacobs & Donald Appleyard	Problems with modern urban design	1 Poor living environments		Physical space	Wastelands & inbetween spaces	Wastelands – Residual space – In-between spaces	Spatial qualities
Allan Jacobs & Donald Appleyard	Problems with modern urban design	1 Poor living environments		Sustainability - Environment	Underutilized green areas - parks	Pollution (air, visual) & noise	Sustainability & Environment
Allan Jacobs & Donald Appleyard	Problems with modern urban design	1 Poor living environments		Physical space	Underutilized squares or other	Degradation of public space or architectural elemen	Spatial qualities
Allan Jacobs & Donald Appleyard	Problems with modern urban design	1 Poor living environments		Place Identity	Anonymity – Lack of identity	Anonymity – Lack of identity	Identity
Allan Jacobs & Donald Appleyard	Problems with modern urban design	1 Poor living environments		Integration of activities	Anonymity – Lack of identity	Uses (Monofunctional areas)	Attractiveness & Livability
Allan Jacobs & Donald Appleyard	Problems with modern urban design	1 Poor living environments		Density	Wastelands & inbetween spaces	Suitable Areas for densification	Spatial qualities
Allan Jacobs & Donald Appleyard	Problems with modern urban design	2_Gigantism and loss of control		Physical space	Wastelands & inbetween spaces	Wastelands – Residual space – In-between spaces	Spatial qualities
Allan Jacobs & Donald Appleyard	Problems with modern urban design	2_Gigantism and loss of control		Physical space	Elements of city are at massive scale	Massive scale buildings	Spatial qualities
Allan Jacobs & Donald Appleyard	Problems with modern urban design	2_Gigantism and loss of control		Mobility	Segregated transportation systems -Single travel modes	Public transportation systems (Lack – or deficient)	Mobility - walkability
Allan Jacobs & Donald Appleyard	Problems with modern urban design	2_Gigantism and loss of control		Mobility	Segregated transportation systems -Single travel modes	Rapid roads – Highway car infrastructure are prev	Mobility - walkability
Allan Jacobs & Donald Appleyard	Problems with modern urban design	2_Gigantism and loss of control		Integration of activities	Elements of city are at massive scale	Uses (Monofunctional areas)	Attractiveness & Livability
Allan Jacobs & Donald Appleyard	Problems with modern urban design	2_Gigantism and loss of control		Attractiveness - Experience	Elements of city are at massive scale	Ground floors	Attractiveness & Livability
Allan Jacobs & Donald Appleyard	Problems with modern urban design	2_Gigantism and loss of control		Integration of activities	where people of different social groups can meet each other has dwindled	Uses (Monofunctional areas)	Attractiveness & Livability
Allan Jacobs & Donald Appleyard	Problems with modern urban design	2_Gigantism and loss of control		Integration of activities	where people of different social groups can meet each other has dwindled	Uses (Public -cultural)	Attractiveness & Livability
Allan Jacobs & Donald Appleyard	Problems with modern urban design	3_Large scale privatization and loss of public life		Socio - Economic	Segregation-Fragmentation, no space where people of different social groups c	Social composition class, ethnicity (mixed Vs homo	Social - economic qualities
Allan Jacobs & Donald Appleyard	Problems with modern urban design	3_Large scale privatization and loss of public life		Physical space	Lack of public spaces	Public space (Underutilized – degraded)	Spatial qualities
Allan Jacobs & Donald Appleyard	Problems with modern urban design	3_Large scale privatization and loss of public life		Mobility	Public transit systems declined	Public transportation systems (Lack – or deficient	Mobility - walkability
Allan Jacobs & Donald Appleyard	Problems with modern urban design	3_Large scale privatization and loss of public life		Density	Public transit systems declined	Suitable Areas for densification	Spatial qualities
Allan Jacobs & Donald Appleyard	Problems with modern urban design	4_Centrifugal fragmentation		Integration of activities	Work is out of the home and the neighborhood, commerce is out of local comm	Uses (Monofunctional areas)	Attractiveness & Livability
Allan Jacobs & Donald Appleyard	Problems with modern urban design	4_Centrifugal fragmentation		Integration of activities	Work is out of the home and the neighborhood, commerce is out of local comm	Uses (Public -cultural)	Attractiveness & Livability
Allan Jacobs & Donald Appleyard	Problems with modern urban design	4_Centrifugal fragmentation		Integration of activities	Work is out of the home and the neighborhood, commerce is out of local comm	Uses (Prevalence of Big structures - shopping malls	Attractiveness & Livability
Allan Jacobs & Donald Appleyard	Problems with modern urban design	4_Centrifugal fragmentation		Mobility	The automobile leads to fragmentation in the city and separation of uses	Rapid roads – Highways car infrastructure are prev	Mobility - walkability
Allan Jacobs & Donald Appleyard	Problems with modern urban design	4_Centrifugal fragmentation		Mobility	The automobile leads to fragmentation in the city and separation of uses	Mobility landscapes – Parking (are prevalent)	Mobility - walkability
Allan Jacobs & Donald Appleyard	Problems with modern urban design	4_Centrifugal fragmentation		Socio - Economic	Fear had led to homogeneity and segregation	Social composition class, ethnicity (mixed Vs homo	Social - economic qualities
Allan Jacobs & Donald Appleyard	Problems with modern urban design	4_Centrifugal fragmentation		Density	Work is out of the home and the neighborhood, commerce is out of local comm	Suitable Areas for densification	Spatial qualities
Allan Jacobs & Donald Appleyard	Problems with modern urban design	5_Destruction of valued places		Heritage	Urban renewal and exploitation of places	Heritage buildings -Art	Identity
Allan Jacobs & Donald Appleyard	Problems with modern urban design	5_Destruction of valued places		Physical space	Exploitation of places, destruction of heritage and naturals amenities	Degradation of public space or architectural elemen	Spatial qualities
Allan Jacobs & Donald Appleyard	Problems with modern urban design	5_Destruction of valued places		Place Identity	Exploitation of places, destruction of heritage and naturals amenities	Anonymity – Lack of identity	Identity
Allan Jacobs & Donald Appleyard	Problems with modern urban design	6_Placelessness		Place Identity	Cities become mimingless places	Neighborhood boundaries	Identity
Allan Jacobs & Donald Appleyard	Problems with modern urban design	6_Placelessness		Community - Participation	Loss of community and participation	Community centers – Social activities	Social - economic qualities
Allan Jacobs & Donald Appleyard	Problems with modern urban design	6_Placelessness		Integration of activities	Loss of community and participation	Uses (Public -cultural)	Attractiveness & Livability
Allan Jacobs & Donald Appleyard	Problems with modern urban design	6_Placelessness		Integration of activities	Universal professional culture Vs local cultures	Uses (corporate space – offices)	Attractiveness & Livability
Allan Jacobs & Donald Appleyard	Problems with modern urban design	7_Rootless professionalism		Community - Participation	Universal professional culture Vs local cultures	Community centers – Social activities	Social - economic qualities
Matthew Carmona	Under-management of public spaces	8_Neglected space - Lost space		Physical space	Wastelands & inbetween spaces are deteriorated	Wastelands – Residual space – In-between spaces	Spatial qualities
Matthew Carmona	Under-management of public spaces	8_Neglected space - Lost space		Physical space	Wastelands & inbetween spaces are deteriorated	Public space (Underutilized – degraded)	Spatial qualities
Matthew Carmona	Under-management of public spaces	8_Neglected space - Lost space		Attractiveness - Experience	Wastelands & inbetween spaces are deteriorated	Ground floors	Attractiveness & Livability
Matthew Carmona	Under-management of public spaces	8_Neglected space - Lost space		Density	Wastelands & inbetween spaces are deteriorated	Suitable Areas for densification	Spatial qualities
Matthew Carmona	Under-management of public spaces	9_Neglected space - 24 hour space		Socio - Economic	Spaces are abandoned by market forces, perpetuates forms of exclusion	Social composition class, ethnicity (mixed Vs homo	Social - economic qualities
Matthew Carmona	Under-management of public spaces	9_Neglected space - 24 hour space		Integration of activities	Spaces are abandoned by market forces, perpetuates forms of exclusion	Uses (Prevalence of commercial – third spaces)	Attractiveness & Livability
Matthew Carmona	Under-management of public spaces	9_Neglected space - 24 hour space		Community - Participation	Spaces are abandoned by market forces, perpetuates forms of exclusion	Community centers – Social activities	Social - economic qualities
Matthew Carmona	Under-management of public spaces	10_Invaded space - Traffic and parking over pedestrian space in streets and squares		Mobility	Mobility landscapes over pedestrian space	Rapid roads – Highways car infrastructure are prev	Mobility - walkability
Matthew Carmona	Under-management of public spaces	10_Invaded space - Traffic and parking over pedestrian space in streets and squares		Sustainability - Environment	Traffic over pedestrian space, leads to dirt, noise and visual pollution that helps	Pollution (air, visual) & noise	Sustainability & Environment
Matthew Carmona	Under-management of public spaces	10_Invaded space - Traffic and parking over pedestrian space in streets and squares		Walkability	Mobility landscapes invade or take over pedestrian space	Mobility landscapes – Parking (invade public & pedi	Mobility - walkability
Matthew Carmona	Under-management of public spaces	10_Invaded space - Traffic and parking over pedestrian space in streets and squares		Integration of activities	Traffic over pedestrian space impoverish city life	Uses (Monofunctional areas)	Attractiveness & Livability
Matthew Carmona	Under-management of public spaces	10_Invaded space - Traffic and parking over pedestrian space in streets and squares		Density	Mobility landscapes over pedestrian space	Suitable Areas for densification	Spatial qualities
Matthew Carmona	Under-management of public spaces	11_Invaded space -Loss of social function		Walkability	More cars than people	Mobility landscapes – Parking (invade public & pedi	Mobility - walkability
Matthew Carmona	Under-management of public spaces	11_Invaded space -Loss of social function		Integration of activities	Loss of social functions to only utilitarian functions	Uses (Monofunctional areas)	Attractiveness & Livability
Matthew Carmona	Under-management of public spaces	11_Invaded space -Loss of social function		Community - Participation	Loss of social functions to only utilitarian functions	Community centers – Social activities	Social - economic qualities
Matthew Carmona	Under-management of public spaces	11_Invaded space -Loss of social function		Physical space	Cars and roads create an impoverished space	Public space near mobility landscapes (Underutilize	Spatial qualities
Matthew Carmona	Under-management of public spaces	11_Invaded space -Loss of social function		Mobility	Cars and roads create an impoverished space	Mobility landscapes – Parking (are prevalent)	Mobility - walkability
Matthew Carmona	Under-management of public spaces	12_Invaded space -in-between spaces deteriorate		Physical space	Wastelands & inbetween spaces deteriorate	Wastelands – Residual space – In-between spaces	Spatial qualities
Matthew Carmona	Under-management of public spaces	12_Invaded space -in-between spaces deteriorate		Mobility	Distant spaces connected by car roads create issues on inbetween spaces	Rapid roads – Highways car infrastructure are prev	Mobility - walkability
Matthew Carmona	Under-management of public spaces	12_Invaded space -in-between spaces deteriorate		Attractiveness - Experience	Absent of attractors	Uses (Attraction poles urban renewal areas	Attractiveness & Livability
Matthew Carmona	Under-management of public spaces	12_Invaded space -in-between spaces deteriorate		Integration of activities	Roads conecting far away attraction poles	Uses (Monofunctional areas)	Attractiveness & Livability
Matthew Carmona	Under-management of public spaces	12_Invaded space -in-between spaces deteriorate		Integration of activities	Roads conecting far away attraction poles	Uses (Public -cultural)	Attractiveness & Livability
Matthew Carmona	Under-management of public spaces	12_Invaded space -in-between spaces deteriorate		Density		Suitable Areas for densification	Spatial qualities
Matthew Carmona	Under-management of public spaces	13_Invaded space -Exclusively car reliant environments		Physical space	Mobility landscapes - Public does not exist - is replaced by disconected roads a	Public space near mobility landscapes (Underutilize	Spatial qualities
Matthew Carmona	Under-management of public spaces	13_Invaded space -Exclusively car reliant environments		Safety	Crime as a psycological barrier	Criminality -Stigmatization	Social - economic qualities
Matthew Carmona	Under-management of public spaces	13_Invaded space -Exclusively car reliant environments		Mobility	Mobility landscapes are predominant	Mobility landscapes – Parking (are prevalent)	Mobility - walkability
Matthew Carmona	Under-management of public spaces	13_Invaded space -Exclusively car reliant environments		Accessibility	Traffic movement as a safety barrier	Barriers (Traffic)	Attractiveness & Livability
Matthew Carmona	Under-management of public spaces	13_Invaded space -Exclusively car reliant environments		Density		Suitable Areas for densification	Spatial qualities
Matthew Carmona	Under-management of public spaces	14_Exclusionary space - Disabling spaces		Walkability	Barriers	Barriers (for pedestrians, kids elderly & disabled)	Mobility - walkability
Matthew Carmona	Under-management of public spaces	14_Exclusionary space - Disabling spaces		Safety	Safety issues for people with disabilities, children and elderly	Criminality -Stigmatization	Social - economic qualities
Matthew Carmona	Under-management of public spaces	14_Exclusionary space - Disabling spaces		Accessibility	Safety issues for people with disabilities, children and elderly	Barriers (Traffic)	Attractiveness & Livability
Matthew Carmona	Under-management of public spaces	15_Exclusionary space - Parrochial spaces		Walkability	Barriers & obstacles for the use of public space -	Barriers (for pedestrians, kids elderly & disabled)	Mobility - walkability
Matthew Carmona	Under-management of public spaces	15_Exclusionary space - Parrochial spaces		Integration of activities	Segregation-Fragmentation	Uses (Monofunctional areas)	Attractiveness & Livability
Matthew Carmona	Under-management of public spaces	15_Exclusionary space - Parrochial spaces		Socio - Economic	Conflict between social groups	Social composition class, ethnicity (mixed Vs homo	Social - economic qualities
Matthew Carmona	Under-management of public spaces	15_Exclusionary space - Parrochial spaces		Safety	Segregation-Fragmentation	Criminality -Stigmatization	Social - economic qualities
Matthew Carmona	Under-management of public spaces	16_Segregated space		Socio - Economic	Segregation, need of exclusiveness	Social composition class, ethnicity (mixed Vs homo	Social - economic qualities
Matthew Carmona	Under-management of public spaces	16_Segregated space		Safety	Fear of crime	Criminality -Stigmatization	Social - economic qualities
Matthew Carmona	Under-management of public spaces	16_Segregated space		Integration of activities	Raise of gated communities & decline of public spaces	Uses (Gated communities)	Attractiveness & Livability
Matthew Carmona	Under-management of public spaces	17_Domestic,Third and Virtual Space - Third spaces		Integration of activities	Accesibility for all social groups	Uses (Prevalence of commercial – third spaces)	Attractiveness & Livability
Matthew Carmona	Under-management of public spaces	17_Domestic,Third and Virtual Space - Third spaces		Socio - Economic	Third spaces, support and enable social interactions	Social composition class, ethnicity (mixed Vs homo	Social - economic qualities
Matthew Carmona	Under-management of public spaces	18_Domestic,Third and Virtual Space - Virtual space		Virtual space	Technodeterminism Vs Reinforcement of the role of public spaces	X	Attractiveness & Livability
Matthew Carmona	Over-management of public spaces	19_Privatized space - Increase in public space security		Integration of activities	Third spaces, privatized public spaces and consumtion	Uses (Prevalence of commercial – third spaces)	Attractiveness & Livability
Matthew Carmona	Over-management of public spaces	19_Privatized space - Increase in public space security		Safety	Fear of crime and terrorism	Criminality -Stigmatization	Social - economic qualities
Matthew Carmona	Over-management of public spaces	20_Privatized space - Corporate privatization		Accessibility	Barriers and landscapes of fear, enclosed and protected space	Barriers (Gated communities -fenced public space	Attractiveness & Livability
Matthew Carmona	Over-management of public spaces	20_Privatized space - Corporate privatization		Socio - Economic	Segregation of the poor	Social composition class, ethnicity (mixed Vs homo	Social - economic qualities
Matthew Carmona	Over-management of public spaces	20_Privatized space - Corporate privatization		Integration of activities		Uses (corporate space – offices)	Attractiveness & Livability
Matthew Carmona	Over-management of public spaces	21_Consumption space - Financial exclusion		Socio - Economic	Financial exclusion, Consumption places & domination of middle class	Social composition class, ethnicity (mixed Vs homo	Social - economic qualities
Matthew Carmona	Over-management of public spaces	21_Consumption space - Financial exclusion		Physical space	Landscapes of fear, neglect, deterioration	Degradation of public space or architectural elemen	Spatial qualities
Matthew Carmona	Over-management of public spaces	22_Consumption space - Domination of consumption spaces		Integration of activities	Financial exclusion, Consumption places & domination of middle class	Uses (Prevalence of commercial – third spaces)	Attractiveness & Livability
Matthew Carmona	Over-management of public spaces	22_Consumption space - Domination of consumption spaces		Integration of activities	Dominance of Consumption places	Uses (Prevalence of commercial – third spaces)	Attractiveness & Livability
Matthew Carmona	Over-management of public spaces	22_Consumption space - Domination of consumption spaces		Attractiveness - Experience	Dominance of Consumption places	Uses (Attraction poles urban renewal areas	Attractiveness & Livability
Matthew Carmona	Over-management of public spaces	22_Consumption space - Domination of consumption spaces		Community - Participation	Monotanity Mix of uses	Community centers – Social activities	Social - economic qualities
Matthew Carmona	Over-management of public spaces	22_Consumption space - Domination of consumption spaces		Integration of activities	Dominance of Consumption places	Uses (Public -cultural)	Attractiveness & Livability
Matthew Carmona	Over-management of public spaces	23 Invented space - Loss of authenticity & growth of placelessness		Physical space	Placelessness & Belonging	Anonymity – Lack of identity	Identity
Matthew Carmona	Over-management of public spaces	23 Invented space - Loss of authenticity & growth of placelessness		Heritage	Placelessness, repetition of urban formulaic responses	Heritage buildings -Art	Identity
Matthew Carmona	Over-management of public spaces	23 Invented space - Loss of authenticity & growth of placelessness		Attractiveness - Experience		Uses (Attraction poles urban renewal areas	Attractiveness & Livability
Matthew Carmona	Over-management of public spaces	24_Scary space - Instrumentalizing the poor		Socio - Economic	Loss of attachment to place	Social composition class, ethnicity (mixed Vs homo	Social - economic qualities
Matthew Carmona	Over-management of public spaces	24_Scary space - Instrumentalizing the poor		Place Identity	Loss of attachment to place	Anonymity – Lack of identity	Identity
Matthew Carmona	Over-management of public spaces	24_Scary space - Instrumentalizing the poor		Safety	Loss of attachment to place	Criminality -Stigmatization	Social - economic qualities
Matthew Carmona	Over-management of public spaces	25_Scary space - Exclusionary policing		Accessibility	Hot spots of affluence lead to Cold spots of exclusion	Barriers (Gated communities -fenced public space	Attractiveness & Livability
Matthew Carmona	Over-management of public spaces	25_Scary space - Exclusionary policing		Socio - Economic	Financial exclusion, Consumption places	Social composition class, ethnicity (mixed Vs homo	Social - economic qualities
Matthew Carmona	Over-management of public spaces	25_Scary space - Exclusionary policing		Attractiveness - Experience	Urban regeneration areas - Socially polarized urban spaces	Uses (Attraction poles urban renewal areas	Attractiveness & Livability
Allan Jacobs & Donald Appleyard	Goals for urban life		1 Livability	Safety	Space is devoided of danger		Social - economic qualities
Allan Jacobs & Donald Appleyard	Goals for urban life		1_Livability	Sustainability - Environment	Protection against climate, pollution, dirt and trash		Sustainability & Environment
Allan Jacobs & Donald Appleyard	Goals for urban life		1_Livability	Socio - Economic	Accesibility for all social groups to live in relative comfort		Social - economic qualities
Allan Jacobs & Donald Appleyard	Goals for urban life		**2_Identity & control**	Place Identity	Sense of individual and collective belonging		Identity
Allan Jacobs & Donald Appleyard	Goals for urban life		**2_Identity & control**	Heritage	Conservation encourages identity, control, and better sense of community		Identity
Allan Jacobs & Donald Appleyard	Goals for urban life		**2_Identity & control**	Socio - Economic	Financial inclusion		Social - economic qualities
Allan Jacobs & Donald Appleyard	Goals for urban life		3_Access to opportunity, imagination and joy	Attractiveness - Experience	Break from tratditional molds, meet new people, have fun		Attractiveness & Livability
Allan Jacobs & Donald Appleyard	Goals for urban life		3_Access to opportunity, imagination and joy	Integration of activities	Recreational, cultural & functional		Attractiveness & Livability
Allan Jacobs & Donald Appleyard	Goals for urban life		3_Access to opportunity, imagination and joy	Socio - Economic	Access to jobs, and alternative housing choices		Social - economic qualities
Allan Jacobs & Donald Appleyard	Goals for urban life		**4_Authenticity & meaning**	Physical space	Understad the city		Spatial qualities
Allan Jacobs & Donald Appleyard	Goals for urban life		**4_Authenticity & meaning**	Accessibility	Accesibility for all		Attractiveness & Livability
Allan Jacobs & Donald Appleyard	Goals for urban life		**4_Authenticity & meaning**	Place Identity	The urban environment should reveal its significant meanings		Identity
Allan Jacobs & Donald Appleyard	Goals for urban life		5_Community & public life	Community - Participation	Encourage Participation, community & public life		Social - economic qualities
Allan Jacobs & Donald Appleyard	Goals for urban life		5_Community & public life	Physical space	Encourage Participation, community & public life		Spatial qualities
Allan Jacobs & Donald Appleyard	Goals for urban life		**6_Urban self-reliance**	Sustainability - Environment	Self sustaining in the use of scarce resources		Sustainability & Environment
Allan Jacobs & Donald Appleyard	Goals for urban life		**6_Urban self-reliance**	Physical space	Regional identity, authenticity and meaning		Spatial qualities
Allan Jacobs & Donald Appleyard	Goals for urban life		7_An environment for all	Socio - Economic	Financial and spatial inclusion		Social - economic qualities
Allan Jacobs & Donald Appleyard	Goals for urban life		7_An environment for all	Accessibility	Financial and spatial inclusion		Attractiveness & Livability
Allan Jacobs & Donald Appleyard	Goals for urban life		7_An environment for all	Community - Participation	***An environment for all would require activities for social cohesion and participation		Social - economic qualities
Jan Gehl	Close encounter with buildings		**8_Experiencing people**	Attractiveness - Experience	Activate sense of smell, touch and taste		Attractiveness & Livability
Jan Gehl	Close encounter with buildings		**8_Experiencing people**	Walkability	Short distances, and strong experiences		Mobility - walkability
Jan Gehl	Close encounter with buildings		**8_Experiencing people**	Community - Participation	***Meeting people increase the chance to build community		Social - economic qualities
Jan Gehl	Close encounter with buildings		9 Experiencing streets - 50 km/h architecture	Walkability	Pedestrians can get close to facades		Mobility - walkability
Jan Gehl	Close encounter with buildings		9 Experiencing streets - 50 km/h architecture	Physical space	Space for walking - Spaces are small, archtecture rich in detail and signs		Spatial qualities
Jan Gehl	Close encounter with buildings		9 Experiencing streets - 50 km/h architecture	Integration of activities	Facades, small spaces,		Attractiveness & Livability
Jan Gehl	Close encounter with buildings		**10_Urban scenes at eye level - Scale & rythm**	Walkability	Pedestrians experience the urban scene at maximum 5km/h		Mobility - walkability
Jan Gehl	Close encounter with buildings		**10_Urban scenes at eye level - Scale & rythm**	Attractiveness - Experience	Small units provide wide range of experiences;		Attractiveness & Livability
Jan Gehl	Close encounter with buildings		**10_Urban scenes at eye level - Scale & rythm**	Physical space	Large number of doors provide points of exchange between outside and inside		Spatial qualities
Jan Gehl	Close encounter with buildings		**11_Urban scenes at eye level - Urban scenes at eye level - Transparency**	Physical space	Ground floor, materiality and urban elements		Spatial qualities
Jan Gehl	Close encounter with buildings		**11_Urban scenes at eye level - Urban scenes at eye level - Transparency**	Attractiveness - Experience	Looking inside & outside - Broadening range of experiences		Attractiveness & Livability
Jan Gehl	Close encounter with buildings		**12_Urban scenes at eye level - Texture**	Physical space	Ground floor, Textures, good materials, details		Spatial qualities
Jan Gehl	Close encounter with buildings		**13_Urban scenes at eye level - Diversity of functions**	Integration of activities	Wide functional variation		Attractiveness & Livability
Jan Gehl	Close encounter with buildings		**13_Urban scenes at eye level - Diversity of functions**	Attractiveness - Experience	In relation to the uses of the buildings, events & experiences		Attractiveness & Livability
Jan Gehl	Close encounter with buildings		**14_Urban scenes at eye level - Vertical façade rhythms**	Density	Narrow units, many doors		Mobility - walkability / Spatial qua
Jan Gehl	Close encounter with buildings		**14_Urban scenes at eye level - Vertical façade rhythms**	Attractiveness - Experience	Intresting and eye-catching		Attractiveness & Livability
Jan Gehl	Close encounter with buildings		**14_Urban scenes at eye level - Vertical façade rhythms**	Walkability	Walking along groundfloor		Mobility - walkability
Jan Gehl	Close encounter with buildings		**14_Urban scenes at eye level - Vertical façade rhythms**	Physical space	Facades, with vertical rhythms		Spatial qualities
Jan Gehl	Close encounter with buildings		**14_Urban scenes at eye level - Vertical façade rhythms**	Attractiveness - Experience	Vertical rhythm makes walk eye cathching and intresting		Attractiveness & Livability
Jan Gehl	12 Quality criteria of public spaces		15_Protection - Against traffic and accidents	Safety	Against traffic & crime		Social - economic qualities
Jan Gehl	11 Quality criteria of public spaces		15_Protection - Against traffic and accidents	Mobility	Traffic safety		Mobility - walkability
Jan Gehl	14 Quality criteria of public spaces		15_Protection - Against traffic and accidents	Walkability	Pedestrian safety against traffic		Mobility - walkability
Jan Gehl	12 Quality criteria of public spaces		16_Protection - Against crime and violence, feeling secure	Integration of activities	Lively public realm, functional variation, day and night functions		Attractiveness & Livability
Jan Gehl	12 Quality criteria of public spaces		16_Protection - Against crime and violence, feeling secure	Attractiveness - Experience	Liveliness & Lichtning		Attractiveness & Livability
Jan Gehl	13 Quality criteria of public spaces		16_Protection - Against crime and violence, feeling secure	Safety	Passive surveillance		Social - economic qualities
Jan Gehl	14 Quality criteria of public spaces		16_Protection - Against crime and violence, feeling secure	Physical space	Well-lit in human scale		Spatial qualities
Jan Gehl	12 Quality criteria of public spaces		17_Protection - Against unpleasant sensory experience	Sustainability - Environment	Protection against climate, pollution, dirt and trash, noise		Sustainability & Environment
Jan Gehl	12 Quality criteria of public spaces		17_Protection - Against unpleasant sensory experience	Physical space	Urban elements that provide protection against climate		Spatial qualities
Jan Gehl	12 Quality criteria of public spaces		**18_Comfort - Opportunities to walk**	Walkability	Accesibility for all		Mobility - walkability
Jan Gehl	13 Quality criteria of public spaces		**18_Comfort - Opportunities to walk**	Physical space	No obstacles, room for walking , good surfaces		Spatial qualities
Jan Gehl	12 Quality criteria of public spaces		**18_Comfort - Opportunities to walk**	Safety	Accesibility for all		Social - economic qualities
Jan Gehl	12 Quality criteria of public spaces		**18_Comfort - Opportunities to walk**	Attractiveness - Experience	Intresting facades		Attractiveness & Livability
Jan Gehl	12 Quality criteria of public spaces		**19_Comfort - Opportunities to stand and stay**	Attractiveness - Experience	Attractive and functional edges and facades		Attractiveness & Livability
Jan Gehl	12 Quality criteria of public spaces		**19_Comfort - Opportunities to stand and stay**	Physical space	Sportive, details, furniture		Attractiveness & Livability
Jan Gehl	12 Quality criteria of public spaces		**19_Comfort - Opportunities to stand and stay**	Attractiveness - Experience	Urban furniture, objects to lean, intresting facades, functional edges		Spatial qualities
Jan Gehl	12 Quality criteria of public spaces		**20_Comfort - Opportunities to sit**	Integration of activities	Good mix of public and coffee sitting		Attractiveness & Livability
Jan Gehl	12 Quality criteria of public spaces		**20_Comfort - Opportunities to sit**	Physical space	Urban elements , Sportive, details, sitting furniture		Spatial qualities
Jan Gehl	13 Quality criteria of public spaces		**21_Comfort - Opportunities to see**	Attractiveness - Experience	Pleasant views and people watching		Attractiveness & Livability
Jan Gehl	12 Quality criteria of public spaces		**21_Comfort - Opportunities to see**	Walkability	Room for walking, accessibility for all, no obstacles		Mobility - walkability
Jan Gehl	12 Quality criteria of public spaces		**21_Comfort - Opportunities to see**	Attractiveness - Experience	Interesting facades		Attractiveness & Livability
Jan Gehl	12 Quality criteria of public spaces		**22_Comfort - Talk and listen**	Sustainability - Environment	Low noise level		Sustainability & Environment
Jan Gehl	12 Quality criteria of public spaces		**22_Comfort - Talk and listen**	Physical space	Public seating arrangements that are conducing to communicating 'talkscapes'		Spatial qualities
Jan Gehl	12 Quality criteria of public spaces		**23_Comfort - Opportunities for play and exercise**	Integration of activities	Sports, play, culture, temporary activities		Attractiveness & Livability
Jan Gehl	13 Quality criteria of public spaces		**23_Comfort - Opportunities for play and exercise**	Community - Participation	***Sport activities could enhance the cohesion at small neighbohood scales		Social - economic qualities
Jan Gehl	12 Quality criteria of public spaces		24_Enjoyment - Dimensioned at human scale	Physical space	Dimensions of buildings according to human dimension in relation to senses, movements, size and behavior.		Spatial qualities
Jan Gehl	12 Quality criteria of public spaces		25_Enjoyment - Opportunities to enjoy good aspects of weather	Sustainability - Environment	Enjoy sun, shade, heat, coolness, shelter from wind & breeze		Sustainability & Environment
Jan Gehl	12 Quality criteria of public spaces		25_Enjoyment - Opportunities to enjoy good aspects of weather	Physical space	Urban elements, Details, furniture that allow for weather protection and enjoyment		Spatial qualities
Jan Gehl	12 Quality criteria of public spaces		26_Enjoyment - Aesthetic qualities	Attractiveness - Experience	Fine views and vistas;		Attractiveness & Livability
Jan Gehl	12 Quality criteria of public spaces		26_Enjoyment - Aesthetic qualities	Physical space	Good materials, design and detailing		Spatial qualities
Jan Gehl	12 Quality criteria of public spaces		26_Enjoyment - Aesthetic qualities	Sustainability - Environment	Rich sensory experiences: trees, plants, water.		Sustainability & Environment
Jan Gehl	12 Quality criteria of public spaces		26_Enjoyment - Aesthetic qualities	Place Identity	***Visual cues, signs and details are in syn: with history culture and meanig of the place		Identity
Jane Jacobs	Death and life of great American Cities		**27_Functional mixture**	Integration of activities	Adequate services and proximity synergies		Attractiveness & Livability
Jane Jacobs	Death and life of great American Cities		**27_Functional mixture**	Density	Proximity synergies		Mobility - walkability / Spatial qua
Jane Jacobs	Death and life of great American Cities		28_Urban density	Density	Concentration of people and institutions		Mobility - walkability / Spatial qua
Jane Jacobs	Death and life of great American Cities		28_Urban density	Integration of activities	Adequate services and proximity synergies		Attractiveness & Livability
Jane Jacobs	Death and life of great American Cities		**29_Social mix**	Socio - Economic	An essential component of attractive cities		Social - economic qualities
Jane Jacobs	Death and life of great American Cities		**29_Social mix**	Attractiveness - Experience	An essential component of attractive cities		Attractiveness & Livability
Jane Jacobs	Death and life of great American Cities		**29_Social mix**	Community - Participation	Social mixes will require activities for social cohesion and community building		Social - economic qualities
Jane Jacobs	Death and life of great American Cities		**29_Social mix**	Physical space	Short blocks, life on the ground floors, attractive corners		Spatial qualities
Jane Jacobs	Death and life of great American Cities		**29_Social mix**	Accessibility	Short blocks, life on the ground floors, attractive corners		Attractiveness & Livability
Jane Jacobs	Death and life of great American Cities		**29_Social mix**	Attractiveness - Experience	Short blocks, life on the ground floors, attractive corners		Attractiveness & Livability

TOOLBOX | 1-2 Database & Hashtags

1st phase - Problems -Solutions

Spatial
Spatial code + Site analysis

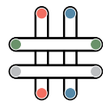
Patterns
Literature review

Spatial

Wastelands – Residual space - In-between spaces
Degradation of public space or architectural elements
Massive scale buildings
Degradation of public space or architectural elements
Public space (Underutilized – degraded)
Public space near mobility landscapes (Underutilized – degraded)
Pollution (air, visual) & noise
Anonymity - Lack of identity
Neighborhood boundaries
Uses (Prevalence of private uses)
Uses (Prevalence of commercial - third spaces)
Uses (Monofunctional areas)
Uses (Public -cultural)
Uses (Prevalence of Big structures - shopping malls / light industry)
Uses (Public -cultural)
Uses (corporate space – offices)
Uses (Gated communities)
Public transportation systems (Lack – or deficient)
Rapid roads – Highways car infrastructure are prevalent
Mobility landscapes – Parking (are prevalent)
Social composition (class, ethnicity (mixed Vs homogeneous or segregated)
Heritage buildings - Art
Community centers – Social activities
Mobility landscapes – Parking (invade public & pedestrian areas)
Barriers (for pedestrians, kids elderly & disabled)
Criminality -Stigmatization
Uses (Attraction poles urban renewal areas
Ground floors
Barriers (Gated communities -fenced public space)
Barriers (Traffic)
Barriers (Gated communities -fenced public space)
Suitable Areas for densification

Problems

Poor living environments
Gigantism and loss of control
Large scale privatization and loss of public life
Centrifugal fragmentation
Destruction of valued places
Placelessness
Rootless professionalism
Neglected space - Lost space
Neglected space - 24 hour space
Invaded space - Traffic and parking over pedestrian space in streets and squares
Invaded space -Loss of social function
Invaded space In-between spaces deteriorate
Invaded space Exclusively car reliant environments
Exclusionary space - Disabling spaces
Exclusionary space - Parochial spaces
Segregated space
Domestic,Third and Virtual Space - Third spaces
Privatized space - Increase in public space security
Privatized space - Corporate privatization
Consumption space - Financial exclusion
Consumption space Domination of consumption spaces
Invented space - Loss of authenticity & growth of placelessness
Scary space - Instrumentalizing the poor
Scary space - Exclusionary policing



Hashtag

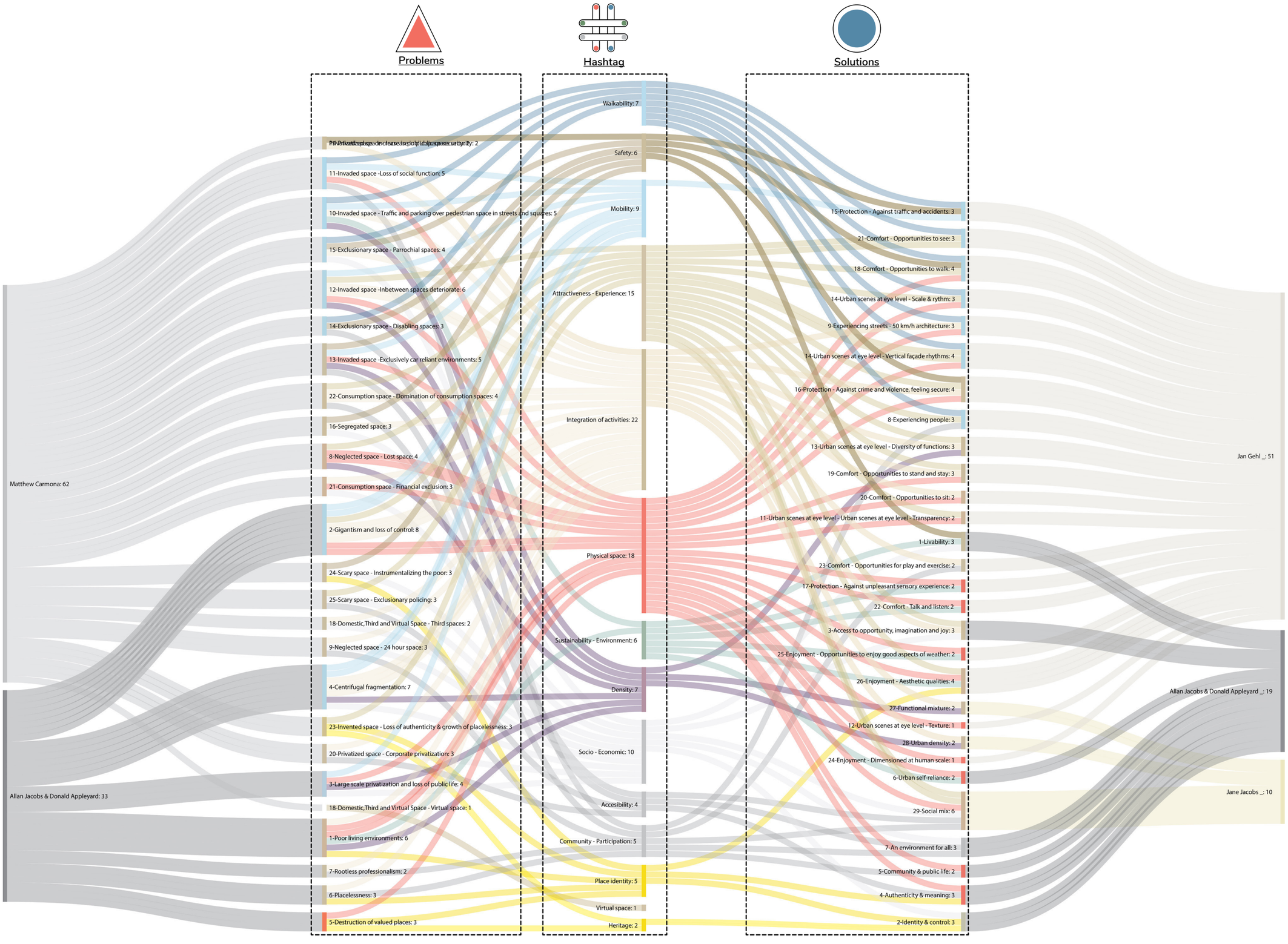
6 Categories	14 Hashtags #
Spatial qualities	Physical space
	Density
Sustainability & environment	Sustainability
Mobility & walkability	Mobility
	Walkability
Socio-economic	Socio - economic
	Accesibility
Identity	Heritage
	Place identity
	Integration of activities
Attractiveness & livability	Attractiveness - experience
	Safety
	Virtual space

Solutions

Livability
Identity & control
Access to opportunity, imagination and joy
Authenticity & meaning
Community & public life
Urban self-reliance
An environment for all
Experiencing people
Experiencing streets - 50 km/h architecture
Urban scenes at eye level - Scale & rythm
Urban scenes at eye level - Urban scenes at eye level - Transparency
Urban scenes at eye level - Texture
Urban scenes at eye level - Diversity of functions
Urban scenes at eye level - Vertical façade rhythms
Protection - Against traffic and accidents
Protection - Against crime and violence, feeling secure
Comfort - Opportunities to walk
Comfort - Opportunities to stand and stay
Comfort - Opportunities to sit
Comfort - Opportunities to see
Comfort - Talk and listen
Comfort - Opportunities for play and exercise
Enjoyment - Dimensioned at human scale
Enjoyment - Opportunities to enjoy good aspects of weather
Enjoyment - Aesthetic qualities
Functional mixture
Density
Social mix
Physical space

TOOLBOX | *1-2 Database & Hashtags*

Authors - problems - solutions connected trough hashtags



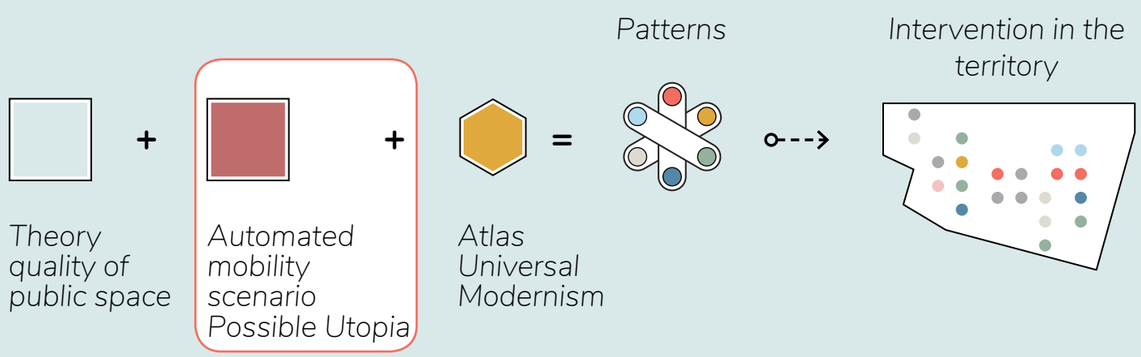
3-AV Scenario

‘The scenario is created to have an understanding on the impact of AM in the physical space. The scenario will inform all the design proposals’

Elements of the toolbox

1. A database of problems and solutions;
2. The hashtags, connecting problems and solutions;
3. Av scenario;
4. The patterns,

connecting problems – solutions and the automated mobility scenario through design.



TOOLBOX | 3 AV Scenarios

Spatial quality & Automated mobility

Effects on cities > Advantages & Disadvantages

Advantages Drivers Disadvantages Drivers

	Advantages	Driver	Disadvantages	Driver
Reach, Use and Integration				
Public transport	>Multimodal mobility services >Emphasis on Public transport as it offers better functional capacity	>Preserve priority of public transportation especially in higher density areas	**>AVs and car-sharing schemes make public transport obsolete;** **>AVs may not serve as last mile supporting service, as people would prefer not to transfer;** **>Traffic capacity improvements eliminate the role for public transport;**	>Prioritize total access of cars; >Lack of regulations; >Prioritize car infrastructure development;
Bicycle & pedestrians	>Part of the existing infrastructure becomes bicycle or pedestrian uses, due to increase in traffic capacity	>Low traffic intensity, and VKT >Offer diverse means of transportation	**>Another possibility is that more traffic is accommodated in the same road space, without any benefits for pedestrians and cyclists** **>Increased traffic volumes and speeds with AVs may degrade walking and cycling conditions (Litman, 2014).**	>Market driven approach; >Prioritize total access of cars; >Strong induced travel demand;
Sharing schemes	>Encourage car-sharing schemes and mobility as a service;	>Policies and taxes	**>Prevailing private cars**	>Lack of regulations;
Space and infrastructure				
Environment	>Accelerate vehicle electrification and electro-mobility; >Reduction on CO2 emissions and fuel consumption; (COM(2018) 238)	>Low traffic intensity, and VKT >Offer diverse means of transportation >Policies and taxes	>Increase or maintained CO2 emissions	>Strong induced travel demand;
Infrastructure & Roads	>Reduce the need for conventional infrastructural investments >Utilizing existing infrastructure >Re-propose the obsolete existing infrastructure	>Low traffic intensity, and VKT >Offer diverse means of transportation >Policies and taxes	>If especial dedicated lanes for AVs are necessary, additional infrastructural investments may take place >Smart infrastructure, especially for vehicle-infrastructure communications >Smart infrastructures may soon become obsolete if they are not constantly maintained and upgraded	>Prioritize vehicle as transportation mean; >Prioritize car infrastructure development; >Strong induced travel demand; >Not prioritizing Multimodal mobility services;
Parking	>Significant reduction of the amount of spaces dedicated to parking in urban areas >Automated vehicles drive themselves to peripheral parking lots after dropping off passengers. >Car-sharing lead to a reduction in car ownership or car-free lifestyles.	>Preserve priority of public transportation as a priority, especially in higher density areas; >Offer diverse means of transportation >Policies and taxes >Development of automated parking in less expensive areas of the city.		
Traffic	>Less cars on the road; >Increase traffic capacity and reduce need for road expansions	>Offer diverse means of transportation	>Increase in vehicle-kilometer travels (VKT) due to low cost and induced demand	>Market driven approach; >Not prioritizing Multimodal mobility services. >Decrease in value of time
Quality of life				
Safety	>Improvement on road safety, considering that human error is estimated to account for 94% of accidents;	>High technological development; >Controlling accessibility and intensity of car traffic		
Accessibility	>Widened the range of access to mobility (e.g. people with disabilities or unable to drive, elderly, etc.);	>AV's have total access to city		
Cost	>Lower driver cost for fright traffic and taxis; >Fuel cost reduction as a result of more cost- efficient driving.	>High penetration and adaptation of AV's	> Fuel cost may increase in case of VKT increase	
Time	>Travel time decrease its value, and can be used for leisure or work;	>More time for leisure and work	Increase in travel demand and VKT	>Decrease in value of time

Reach - use integration

Space & Infrastructure

Quality of life

Drivers of advantages & disadvantages of AV's

Table 6

Accepted advantages and disadvantages of automated vehicles development according to literature – Sources: (Milakis, Snelder, Van Arem, Van Wee, & Correia, 2015), (COM(2018) 238). Edited by author.

	ADVANTAGES	DISADVANTAGES
REACH, USE AND INTEGRATION		
PUBLIC TRANSPORT	>Dual role between bus services and AVs -Low density areas AVs may replace bus services -High density areas AVs may act as bus-feeder (Begg, 2014). >AVs could offer a more flexible and inexpensive alternative to high-speed trains, if especial express lines are developed for this purpose (Silberg et *al*. 2012). Paradox >Long distance public transport services seem to have better potential to operate their own automated public transport service, due to less stops and traffic conflicts (Polzin, 2014). >AVs would not represent a substitute for public transport as they could hardly compete with the average capacity of a subway or even a bus (Duarte & Ratti, 2018)	>AVs and car-sharing schemes could make public transport obsolete (in particular rail transport), especially in mid to low density areas (O'Toole, 2014). >AVs may not serve as last mile supporting service, as people would prefer not to transfer to another mode to reach their final destination, especially in less congested road environment (O'Toole, 2014). >AVs may influence primarily investment decisions for long distance public transport services, since traffic capacity improvements may eliminate the role for public transport in meeting future capacity needs (Polzin, 2014).
BICYCLE & PEDESTRIANS	>Part of the existing human-driver infrastructure could be converted into bicycle or pedestrian uses, due to increase in traffic capacity (Silberg et *al*., 2012).	>Another possibility is that more traffic is accommodated in the same road space, without any benefits for pedestrians and cyclists (Begg, 2014). >Increased traffic volumes and speeds with AVs may degrade walking and cycling conditions (Litman, 2014).
SHARING SCHEMES	>Encourage car-sharing schemes and mobility as a service;	
SPACE AND INFRASTRUCTURE		
ENVIRONMENT	>Accelerate vehicle electrification and electro-mobility; >Reduction on CO2 emissions and fuel consumption; (COM(2018) 238)	
INFRASTRUCTURE & ROADS	>Reduce the need for conventional infrastructural investments (extra wide lanes, wide shoulders, guardrails, rumble strips, stop signs) (Van Melik & Lawton, 2011), and traffic lights. >Utilizing existing infrastructure >Re-propose the obsolete existing infrastructure	>If especial dedicated lanes for AVs are necessary, additional infrastructural investments may take place >Smart infrastructure, especially for vehicle-infrastructure communications (Silberg et *al*. 2012). >Smart infrastructures may soon become obsolete if they are not constantly maintained and upgraded (O'Toole, 2014)
PARKING	>Significant reduction of the amount of spaces dedicated to parking in urban areas (Anderson et al., 2014) >Automated vehicles drive themselves to peripheral parking lots after dropping off passengers. >Car-sharing schemes could potentially lead to a reduction in car ownership or car-free lifestyles (Silberg et al., 2012), reducing the car spaces in residential areas. >Development of automated parking in less expensive areas of the city. >Automated parking is expected to partly replace on street parking	
TRAFFIC	>Less cars on the road; >Increase traffic capacity and reduce need for road expansions	>Increase in vehicle-kilometer travels (VKT) due to low cost and induced demand
QUALITY OF LIFE		
SAFETY	>Improvement on road safety, considering that human error is estimated to account for 94% of accidents;	
ACCESSIBILITY	>Widened the range of access to mobility (e.g. people with disabilities or unable to drive, elderly, etc.);	
COST	>Lower driver cost for fright traffic and taxis (Litman, 2014) >Fuel cost reduction as a result of more cost- efficient driving (Brown, Gonder and Repac, 2013)	> Fuel cost may increase in case of VKT increase
TIME	>Travel time increase its value, and can be used for leisure or work;	
	All authors as cited in (COM(2018) 238) and (Van Melik & Lawton, 2011)	

Advantages

Qualities of public space
Jane Jacobs
Kevin Lynch

Drivers of advantages & disadvantages of AV's + qualities of public space

		Advantage drivers					
	Advantages drivers	>Preserve priority of public transportation especially in higher density areas >Offer diverse means of transportation > Environment	>Low traffic intensity, and VKT	>High technological development; >Controlling accessibility and intensity of car traffic	>AV's have total access to city >High penetration and adaptation of AV's	>Development of automated parking in less expensive areas of the city.	Decrease in value of time
	AV'S advantage	**Integration to Public transport, Bikes and pedestrians**	**>Integration to Public transport, Bikes and pedestrians** **>Environment** **>Infrastructure & roads**	**>Safety**	**>High accessibility by car** **>Cost**	**>Parking** **>Integration to Public transport, Bikes and pedestrians**	**Time for leisure or work**
	Impact on space	>More space Reduced emissions Density	>More space Use of non-operative infrastructure Reduced emissions	>Different meanings and means for typical infrastructure	>Urban sprawl >Streets & parking preserve same use & scale >Need of dedicated infrastructure or enlargement of existing >No additional space.	>More space **>Integration to Public transport, Bikes and pedestrians** >Different meanings and means for typical infrastructure	>Increased value and use of public spaces
Public space - life qualities							
Quality & Liveliness Jane Jacobs	**Goals Qualities public space Kevin Lynch**						
Functional mixture provide adequate services and proximity synergies	Livability Identity and control Access to opportunity, imagination and joy; Authenticity and meaning;	☺	☺	☺	☹	☺	☺
	Integration of activities, living, working, shopping in reasonable proximity to each other;	✓	✓	✓	✓✕	-	✓
	Community and public life;	✓	✓	✓	-	-	✓
	An environment for all;	✓	✓	✓	-	-	✓
	Urban self-reliance;	✓	✓	✓	-	-	✓
The physical space should provide: short blocks, life on the ground floors and attractive corners and side streets.	Buildings that define public space (not sit in space);	☺	☺	-	-	☺	☺
	Many separate distinct buildings with complex arrangements and relationships, as opposed to huge large buildings.	✓	-	-	✕	✓	-
	Livable streets and neighborhoods;		✓	-	✕	✓	✓
	Gehl						
	Opportunities for play and exercise	✓	✓	✓	✕	✓	✓
	Opportunities to talk and listen	✓	✓	✓	✕	✓	✓
	Opportunities to walk	✓	✓	✓	✕	✓	✓
Density could provide for concentration of people and institutions;	Minimum density of residential development, intensity of land use;	☺	-	-	☹	☺	-

Disadvantages

Qualities of public space
Jane Jacobs
Kevin Lynch

		Disadvantage drivers					
	Disadvantages drivers	>Prioritize total access of cars; >Not prioritizing Multimodal mobility services; >Prioritize car infrastructure development;	>Market driven approach;	>Lack of regulations;	**>Strong induced travel demand;** >Increased traffic,	**Decrease in value of time**
	AV'S disadvantage	**Pressures on:** **>Public transport** **>Bicycle & pedestrians** **>Infrastructure & roads** **>Traffic**	**Pressures on:** **>Public transport** **>Bicycle & pedestrians**	**>Prevailing private cars over sharing schemes** **Pressures on:** **>Public transport** **>Bicycle & pedestrians** **>Impact in all fields**	**Pressures on:** **>Public transport** **>Bicycle & pedestrians** **>Environment** **Increased or maintain CO2 emissions**	**>Time** **>Traffic** **>Increase in travel demand and VKT** **Pressures on:**
	Impact on space	>No additional space Pressures on: >Infrastructure & roads >quality of space >Urban sprawl >Bicycle & pedestrians	Pressures on: >Infrastructure & roads >quality of space >Urban sprawl	>Impact in all fields	>Urban sprawl >Streets & parking preserve same use & scale >No additional space Pressures on: >Infrastructure & roads >Environment increased emissions >Urban sprawl	Pressures on: >Infrastructure & roads >Environment increased emissions >Urban sprawl
Public space - life qualities						
Quality & Liveliness Jane Jacobs	**Goals Qualities public space Jacobs & Appleyard**					
Functional mixture provide adequate services and proximity synergies;	Livability Identity and control Access to opportunity, imagination and joy; Authenticity and meaning;	☹	☹	☹	☹	☹
	Integration of activities, living, working, shopping in reasonable proximity to each other;	-	-	✕	✕	-
	Community and public life;	-	✕	✕	✕	-
	An environment for all;	-	✕	✕	✕	-
	Urban self-reliance;	-	-	✕	-	-
The physical space should provide: short blocks, life on the ground floors and attractive corners and side streets.	Buildings that define public space (not sit in space);	☹	☹	☹	☹	☹
	Many separate distinct buildings with complex arrangements and relationships, as opposed to huge large buildings.	-	-	✕	✕	✕
	Livable streets and neighborhoods;	-	✕	✕	✕	-
	Gehl					
	Opportunities for play and exercise	-	-	✕	-	✕
	Opportunities to talk and listen	-	-	✕	-	-
	Opportunities to walk	-	-	✕	-	✕
Density could provide for concentration of people and institutions;	Minimum density of residential development, intensity of land use;	☹	☹	☹	☹	☹

TOOLBOX | 3 AV Scenarios

Scenario making strategy

Sistematic analysis of literature to build a scenario

AV's Possible impact on space

Advantages **Drivers** Advantages **Drivers**

	Advantages	Driver	Disadvantages	Driver
Reach, Use and Integration				
Public transport	>Multimodal mobility services >Emphasis on Public transport as it offers better functional capacity	>Preserve priority of public transportation especially in higher density areas	**>AVs and car-sharing schemes make public transport obsolete;** **>AVs may not serve as last mile supporting service, as people would prefer not to transfer;** **>Traffic capacity improvements eliminate the role for public transport;**	>Prioritize total access of cars; >Lack of regulations; >Prioritize car infrastructure development;
Bicycle & pedestrians	>Part of the existing infrastructure becomes bicycle or pedestrian uses, due to increase in traffic capacity	>Low traffic intensity, and VKT >Offer diverse means of transportation	**>Another possibility is that more traffic is accommodated in the same road space, without any benefits for pedestrians and cyclists** **>Increased traffic volumes and speeds with AVs may degrade walking and cycling conditions (Litman, 2014).**	>Market driven approach; >Prioritize total access of cars; >Strong induced travel demand;
Sharing schemes	>Encourage car-sharing schemes and mobility as a service;	>Policies and taxes	**>Prevailing private cars**	>Lack of regulations;
Space and infrastructure				
Environment	>Accelerate vehicle electrification and electro-mobility; >Reduction on CO2 emissions and fuel consumption; (COM(2018) 238)	>Low traffic intensity, and VKT >Offer diverse means of transportation >Policies and taxes	>Increase or maintained CO2 emissions	>Strong induced travel demand;
Infrastructure & Roads	>Reduce the need for conventional infrastructural investments >Utilizing existing infrastructure >Re-propose the obsolete existing infrastructure	>Low traffic intensity, and VKT >Offer diverse means of transportation >Policies and taxes	>If especial dedicated lanes for AVs are necessary, additional infrastructural investments may take place >Smart infrastructure, especially for vehicle-infrastructure communications >Smart infrastructures may soon become obsolete if they are not constantly maintained and upgraded	>Prioritize vehicle as transportation mean; >Prioritize car infrastructure development; >Strong induced travel demand; >Not prioritizing Multimodal mobility services;
Parking	>Significant reduction of the amount of spaces dedicated to parking in urban areas >Automated vehicles drive themselves to peripheral parking lots after dropping off passengers. >Car-sharing lead to a reduction in car ownership or car-free lifestyles.	>Preserve priority of public transportation as a priority, especially in higher density areas; >Offer diverse means of transportation >Policies and taxes >Development of automated parking in less expensive areas of the city.		
Traffic	>Less cars on the road; >Increase traffic capacity and reduce need for road expansions	>Offer diverse means of transportation	>Increase in vehicle-kilometer travels (VKT) due to low cost and induced demand	>Market driven approach; >Not prioritizing Multimodal mobility services. >Decrease in value of time
Quality of life				
Safety	>Improvement on road safety, considering that human error is estimated to account for 94% of accidents;	>High technological development; >Controlling accessibility and intensity of car traffic		
Accessibility	>Widened the range of access to mobility (e.g. people with disabilities or unable to drive, elderly, etc.);	>AV's have total access to city		
Cost	>Lower driver cost for fright traffic and taxis; >Fuel cost reduction as a result of more cost- efficient driving.	>High penetration and adaptation of AV's	>Fuel cost may increase in case of VKT increase	
Time	>Travel time decrease its value, and can be used for leisure or work;	>More time for leisure and work	Increase in travel demand and VKT	>Decrease in value of time

Qualities of public space

Jane Jacobs
Kevin Lynch

AV's - Drivers of advantages

		Advantage drivers					
Advantages drivers		>Preserve priority of public transportation especially in higher density areas >Offer diverse means of transportation > Environment	>Low traffic intensity, and VKT	>High technological development; >Controlling accessibility and intensity of car traffic	>AV's have total access to city >High penetration and adaptation of AV's	>Development of automated parking in less expensive areas of the city.	Decrease in value of time
AV'S advantage		**Integration to Public transport, Bikes and pedestrians**	**>Integration to Public transport, Bikes and pedestrians** **>Environment** **>Infrastructure & roads**	**>Safety**	**>High accessibility by car** **>Cost**	**>Parking** **>Integration to Public transport, Bikes and pedestrians**	**Time for leisure or work**
Impact on space		>More space Reduced emissions Density	>More space Use of non-operative infrastructure Reduced emissions	>Different meanings and means for typical infrastructure	>Urban sprawl >Streets & parking preserve same use & scale >Need of dedicated infrastructure or enlargement of existing >No additional space	>More space **>Integration to Public transport, Bikes and pedestrians** >Different meanings and means for typical infrastructure	>Increased value and use of public spaces
Public space - life qualities	**Goals Qualities public space Kevin Lynch**						
Quality & Liveliness Jane Jacobs							
Functional mixture provide adequate services and proximity synergies;	Livability Identity and control Access to opportunity, imagination and joy; Authenticity and meaning;	☺	☺	☺	☻	☺	☺
	Integration of activities, living, working, shopping in reasonable proximity to each other;	✓	✓	✓	✓✕	-	✓
	Community and public life;	✓	✓	✓	-	-	✓
	An environment for all;	✓	✓	✓	-	-	✓
	Urban self-reliance;	✓	✓	✓	-	-	✓
The physical space should provide: short blocks, life on the ground floors and attractive corners and side streets.	Buildings that define public space (not sit in space);	☺	☺	-	-	☺	☺
	Many separate distinct buildings with complex arrangements and relationships, as opposed to huge large buildings.	✓	-	-	✕	✓	-
	Livable streets and neighborhoods;		✓	-	✕	✓	✓
	Gehl						
	Opportunities for play and exercise	✓	✓	✓	✕	✓	✓
	Opportunities to talk and listen	✓	✓	✓	✕	✓	✓
	Opportunities to walk	✓	✓	✓	✕	✓	✓
Density could provide for concentration of people and institutions;	Minimum density of residential development, intensity of land use;	☺	-	-	☻	☺	-

AV's - Drivers of disadvantages

		Disadvantage drivers				
Disadvantages drivers	>Prioritize total access of cars; >Not prioritizing Multimodal mobility services; >Prioritize car infrastructure development;	>Market driven approach;	>Lack of regulations;	**>Strong induced travel demand;** >Increased traffic;	**Decrease in value of time**
AV'S disadvantage	**Pressures on:** **>Public transport** **>Bicycle & pedestrians** **>Infrastructure & roads** **>Traffic**	**Pressures on:** **>Public transport** **>Bicycle & pedestrians**	**>Prevailing private cars over sharing schemes** **Pressures on:** **>Public transport** **>Bicycle & pedestrians** **>Impact in all fields**	**Pressures on:** **>Public transport** **>Bicycle & pedestrians** **>Environment** **Incressed or maintain CO2 emissions**	**>Time** **>Traffic** **>Increase in travel demand and VKT** **Pressures on:**
Impact on space	>No additional space Pressures on: >Infrastructure & roads >quality of space >Urban sprawl >Bicycle & pedestrians	Pressures on: >Infrastructure & roads >quality of space >Urban sprawl	>Impact in all fields	>Urban sprawl >Streets & parking preserve same use & scale >No additional space Pressures on: >Infrastructure & roads >Environment increased emissions >Urban sprawl	Pressures on: >Infrastructure & roads >Environment increased emissions >Urban sprawl
Public space - life qualities	**Goals Qualities public space Jacobs & Appleyard**				
Quality & Liveliness Jane Jacobs					
Functional mixture provide adequate services and proximity synergies;	Livability Identity and control Access to opportunity, imagination and joy; Authenticity and meaning;	☻	☻	☻	☻	☻
	Integration of activities, living, working, shopping in reasonable proximity to each other;	-	-	✕	✕	-
	Community and public life;	-	✕	✕	✕	-
	An environment for all;	-	✕	✕	✕	-
	Urban self-reliance;	-	-	✕	-	-
The physical space should provide: short blocks, life on the ground floors and attractive corners and side streets.	Buildings that define public space (not sit in space);	☻	☻	☻	☻	☻
	Many separate distinct buildings with complex arrangements and relationships, as opposed to huge large buildings.	-	-	✕	✕	✕
	Livable streets and neighborhoods;	-	✕	✕	✕	-
	Gehl					
	Opportunities for play and exercise	-	-	✕	-	✕
	Opportunities to talk and listen	-	-	✕	-	-
	Opportunities to walk	-	-	✕	-	✕
Density could provide for concentration of people and institutions;	Minimum density of residential development, intensity of land use;	☻	☻	☻	☻	☻

Spatial quality Scenario

AV Scenario

Possible Scenario

TOOLBOX | *3 AV Scenarios*

2 Opposed scenarios of Automated mobility

Scenario 1 / Space quality utopia

Scenario 2 / AV utopia

TOOLBOX | 3 AV Scenarios

Proposed scenario of Automated mobility

Chosen scenario - Possible Utopia

Policy based drivers

Possible impact on mobility

Possible impact on physical space

Premises for a 'Possible Utopia' scenario

>Last mile services & mobility hubs
>Prioritizing public transport
>Car sharing schemes over private ownership
>Encourage active travels - walking & biking

>Less Traffic
>Less use of road space

>Re-propose part of existing car infrastructure
-Roads
-Parking
>Mobility hubs
>Flexible parking structures

Problems
Typical problems of public space

Solutions
Qualities of public space

Highway / Freeway

+ Maximum fast connectivity
+Incorporation of mobility hubs

Arterial roads

Collector / distributor

+ Public transportation & last mile services
+ More space in sidewalks & parking lots
+ Attractive to pedestrians

Local

+ Mixed functions - Maximum appropriation of space
+ Oriented to neighborhood activities

Scenario 3 / AV Possible Utopia

(Mixed realities)

'The premises for a Possible Utopia scenario are used as drivers to create connections between problems and solutions'

New program & living

In green areas and voids

Activate & Link

Green and voids

Mixed mobility networks

Public transportation, AV's & active travels are mixed

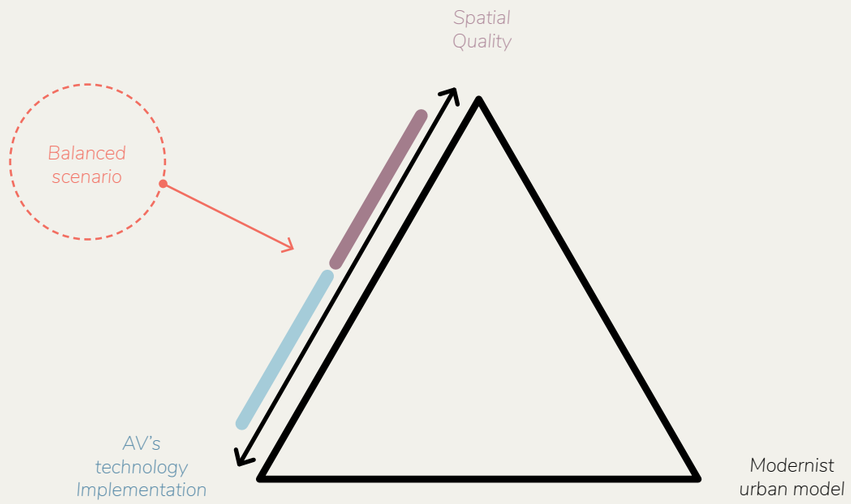
More space for sidewalks

What is the role of scenarios in the project?

+ ***Connect the project with the spatial possibilities offered by automated mobility;***

+ ***Foster a positive impact of AM in the public space in built sreas***

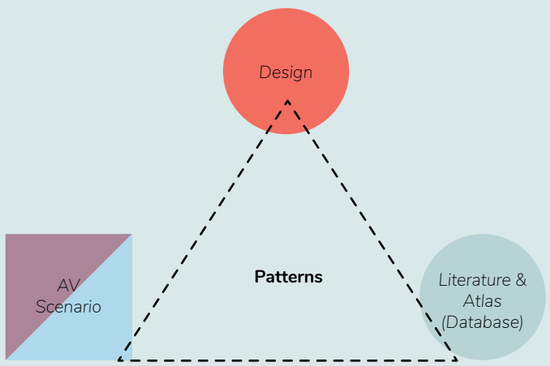
+ ***Inform the creation of all the patterns***



4-Patterns

What are the patterns?

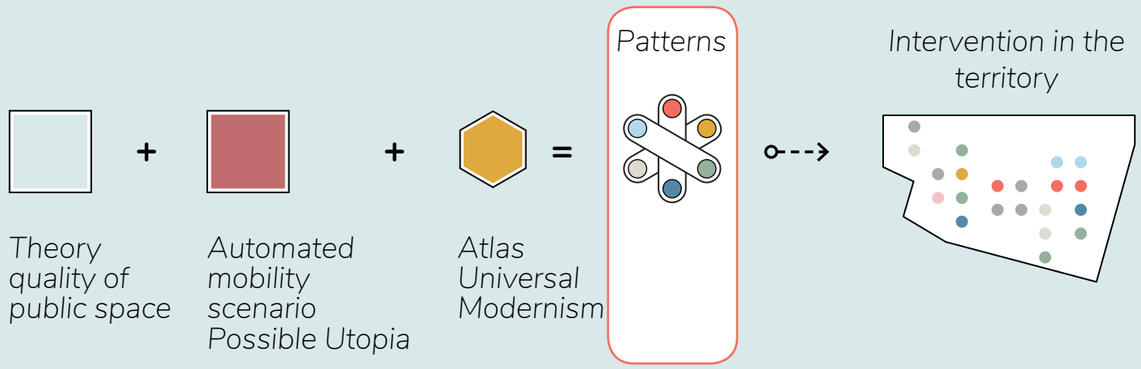
‘The Patterns System offers the possibility of creating a more consistent relationship between problems and solutions, applying a specific spatial character to them, making them easily recognizable and applicable in the territory’



Elements of the toolbox

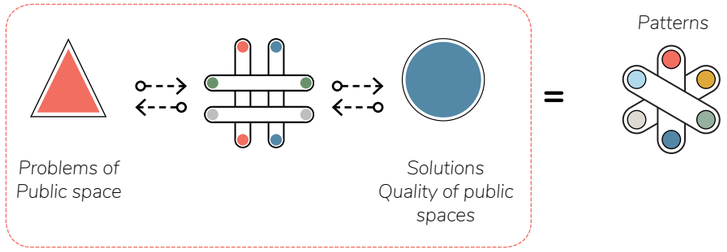
1. A database of problems and solutions;
2. The hashtags, connecting problems and solutions;
3. Av scenario;
4. The patterns,

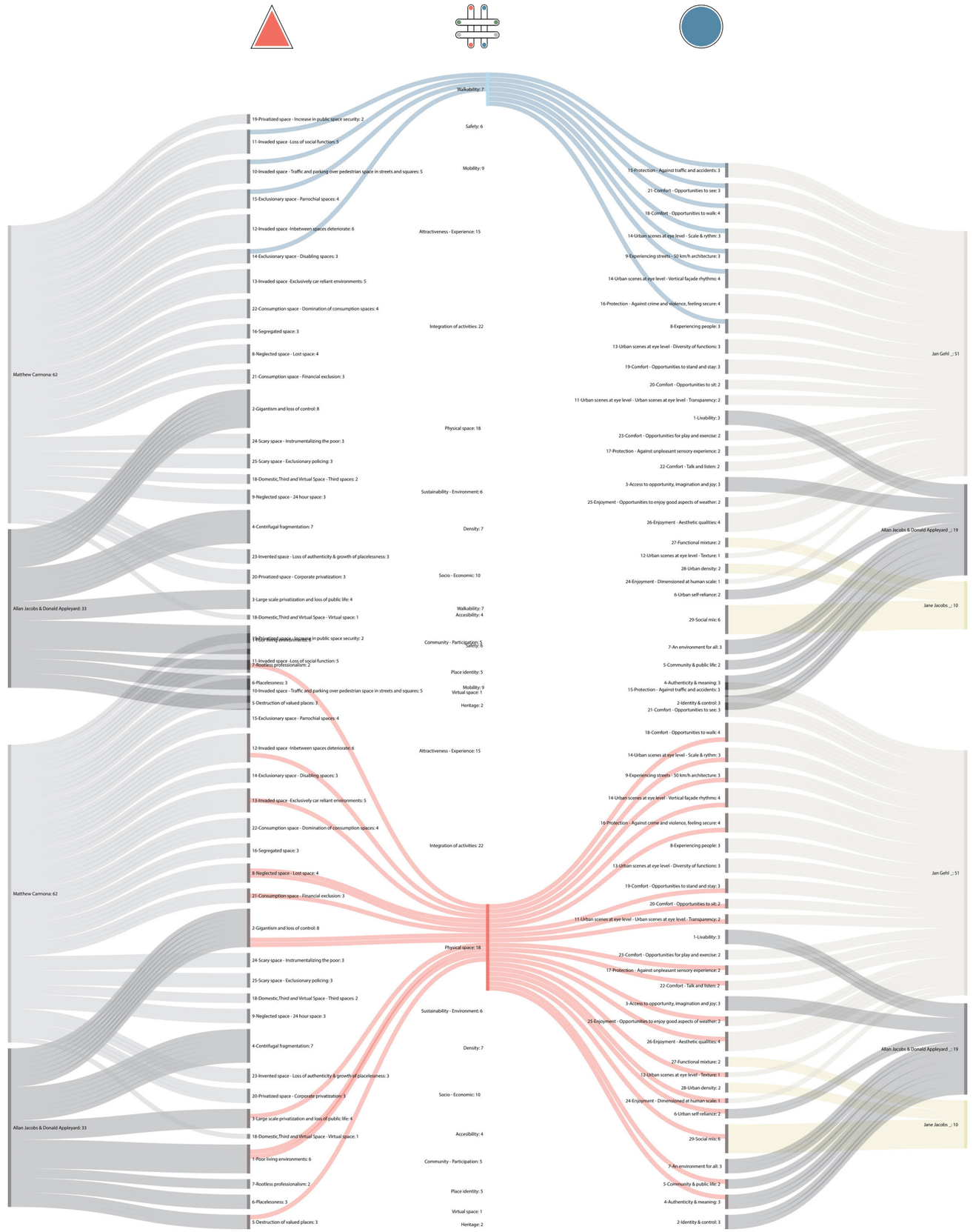
connecting problems – solutions and the automated mobility scenario through design.



TOOLBOX | *4 Patterns*

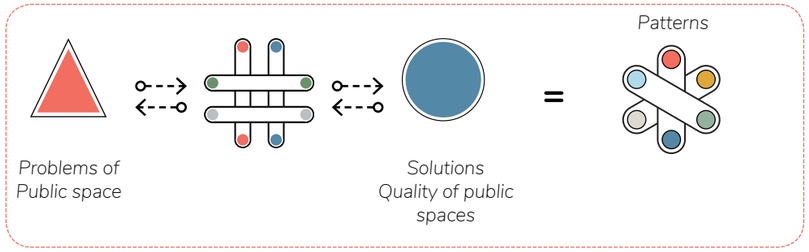
Creating the patterns

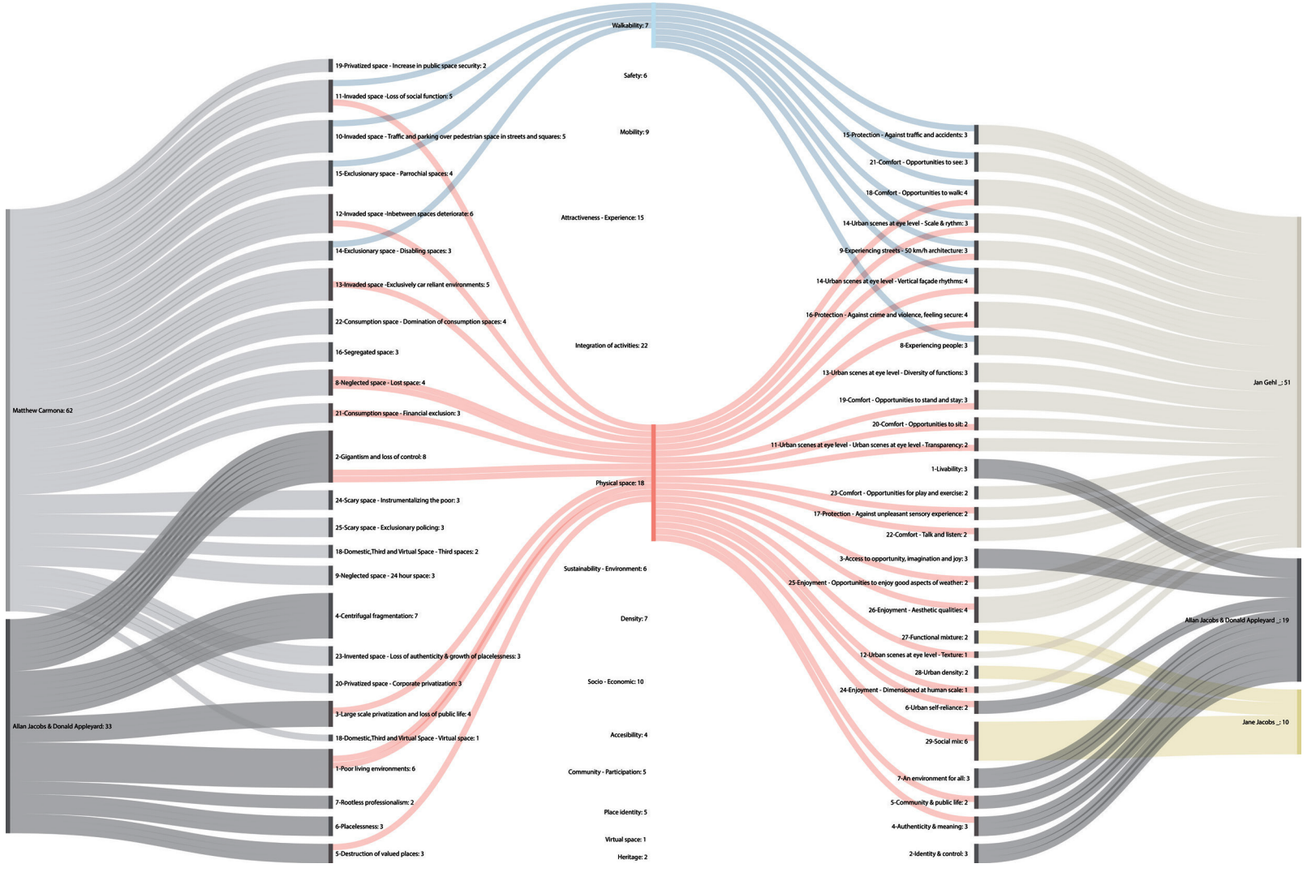




TOOLBOX | *4 Patterns*

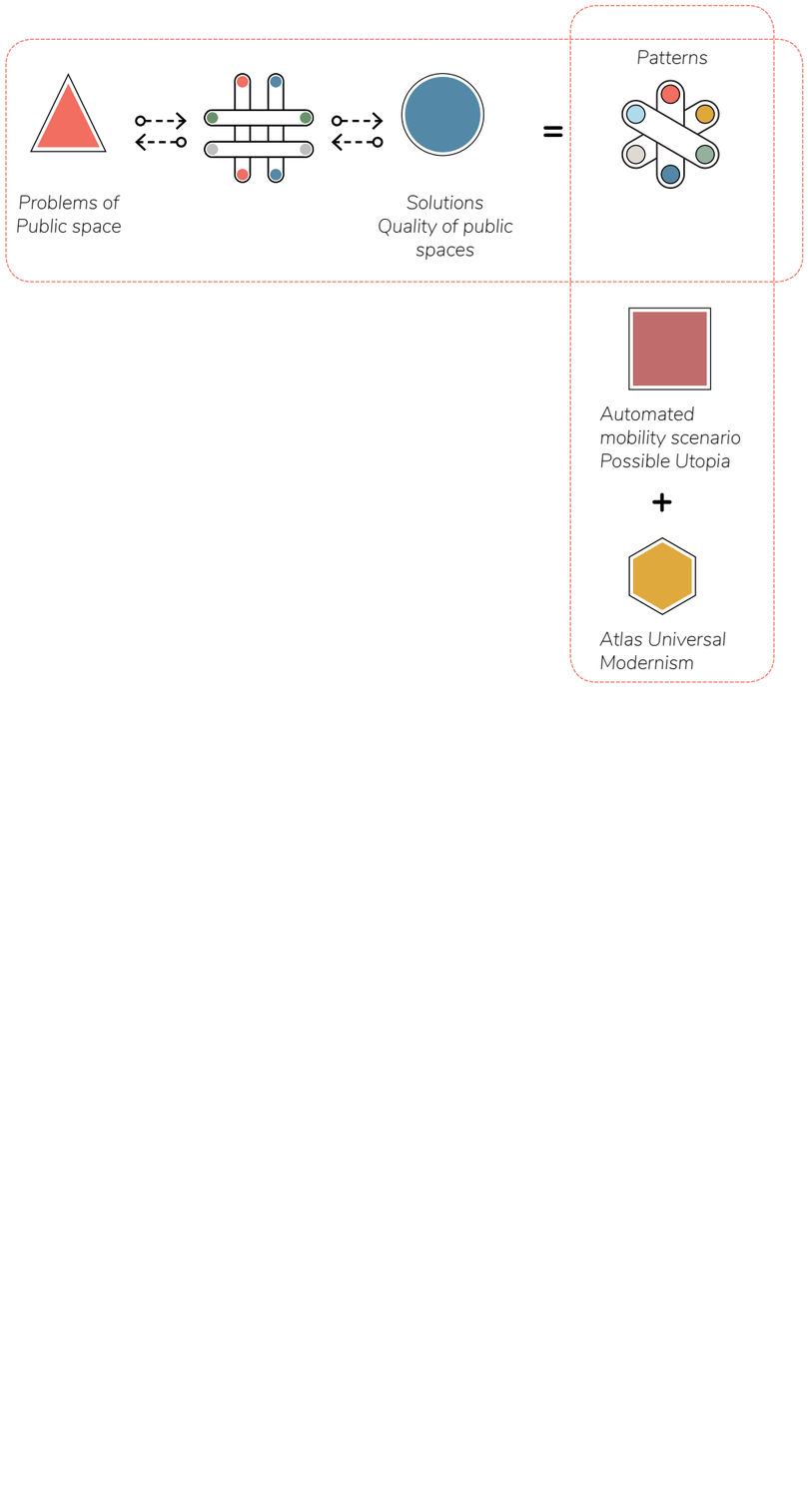
Creating the patterns

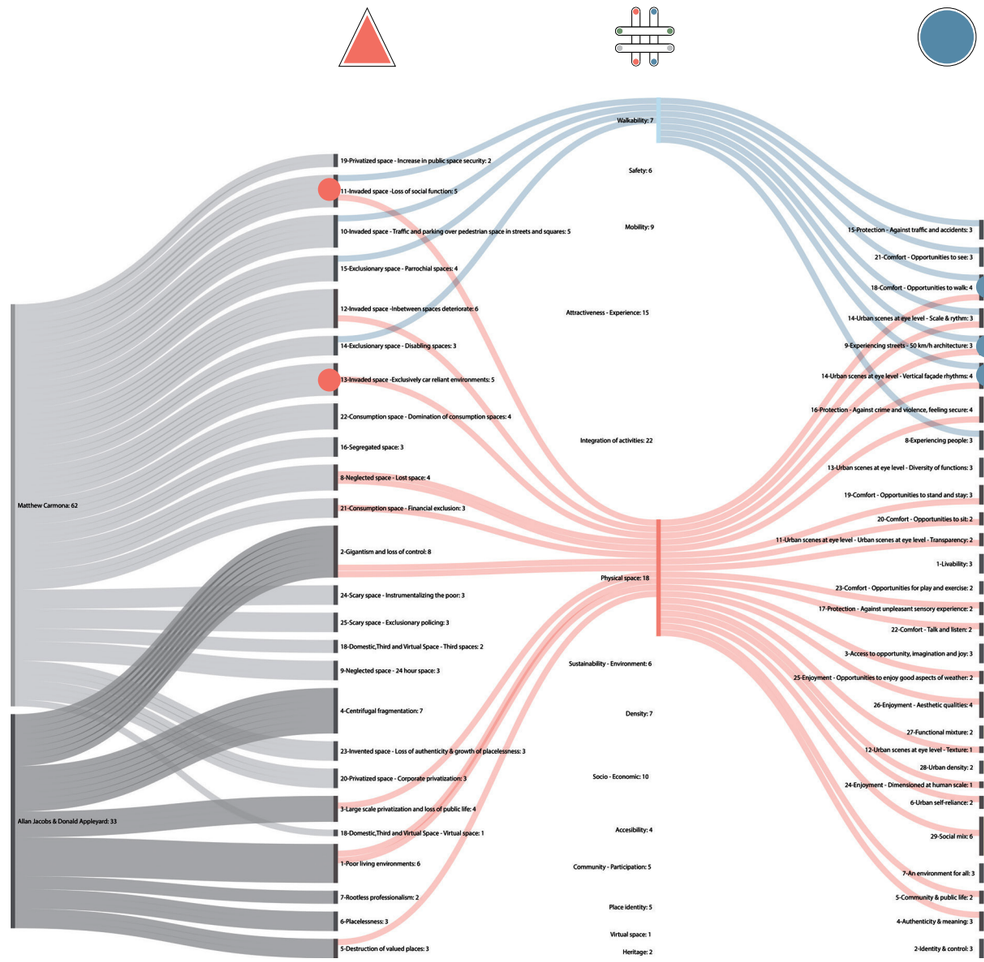




TOOLBOX | *4 Patterns*

Creating the patterns





TOOLBOX | *4 Patterns*

28 patterns

1-Mobility Hubs & Last mile services.

2-AV Public transportation

3- Parking infrastructure.

4-Nodes as meeting points.

5-Paths between nodes & neighbor-hood routes.

6-Temporary pedestrian street.

7-Enjoyment street.

8-More density & diversity of uses.

9-Tactical temporary interventions.

10-Activate neighborhood streets.

11-Bottom up initiatives.

12-Life on the ground floor.

13-Functionally mixed oriented infill.

14-Completing the block perimeter.

15-Mobility land-scapes become public spaces .

16-Wide sidewalks

17- Scenes at eye level- Texture & transparency.

18-Playgrounds for all.

19-Many doors & open facades.

20-Public spaces as nodes of attrac-tion.

21-Community gardens.

22-Add value to heritage with public space and art.

23-AV Infrastructure triggers more porosity in neighbourhood borders.

24-Protection from rain, sun and wind.

25-Green infrastructure and landscape design, for environmental quality.

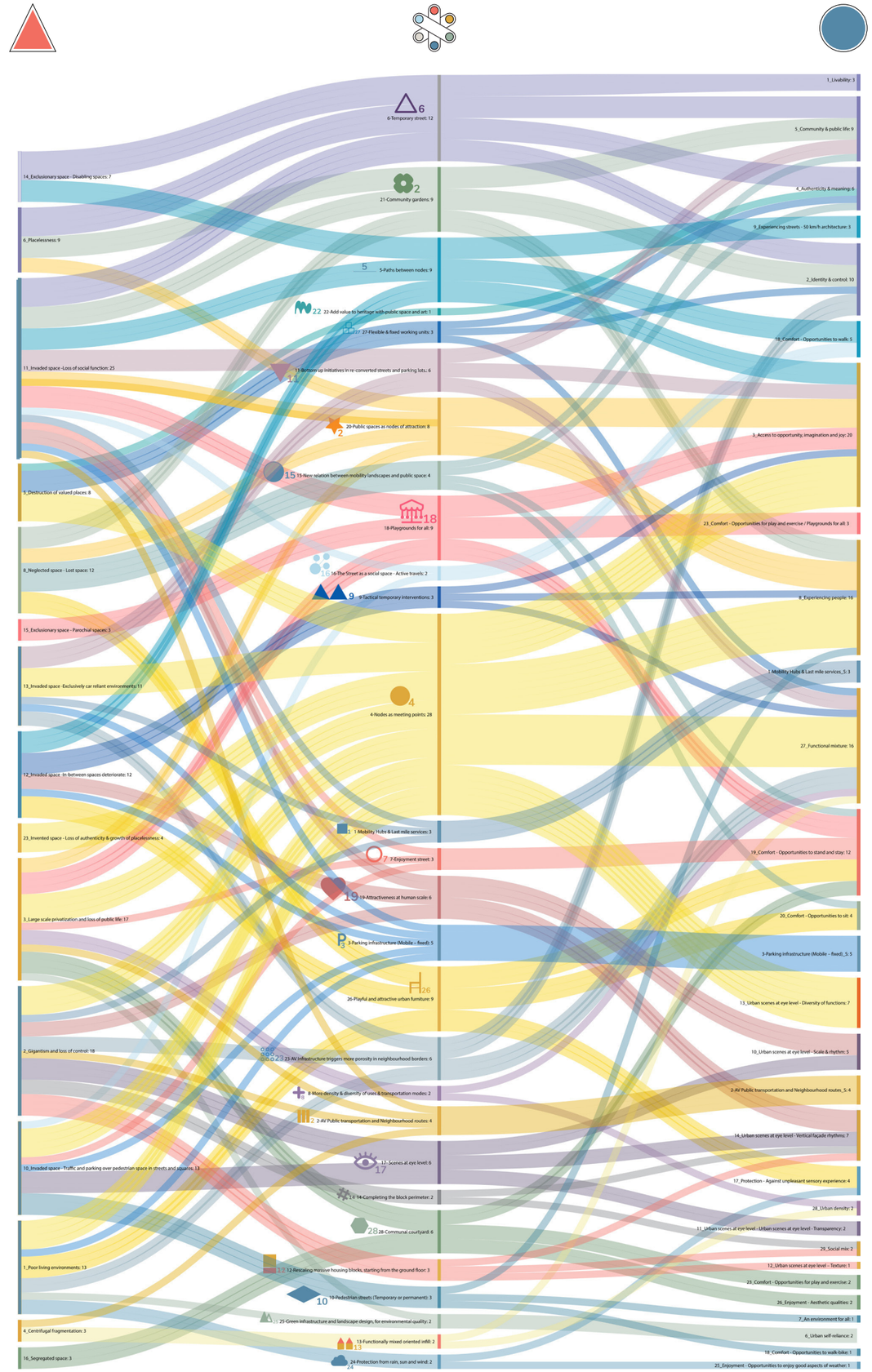
26-Playful and attractive urban furniture.

27-Flexible & fixed working units.

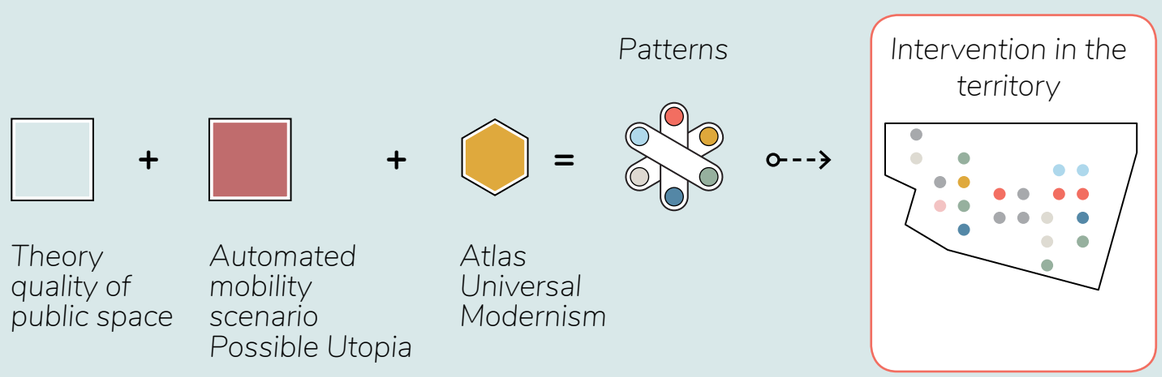
28-Communal courtyard.

TOOLBOX | *4 Patterns*

28 patterns graphic



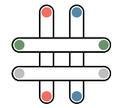
Pattern application



PATTERN APPLICATION | *Problem / maps database*

Problems-map database

Problems



Hashtag

Spatial

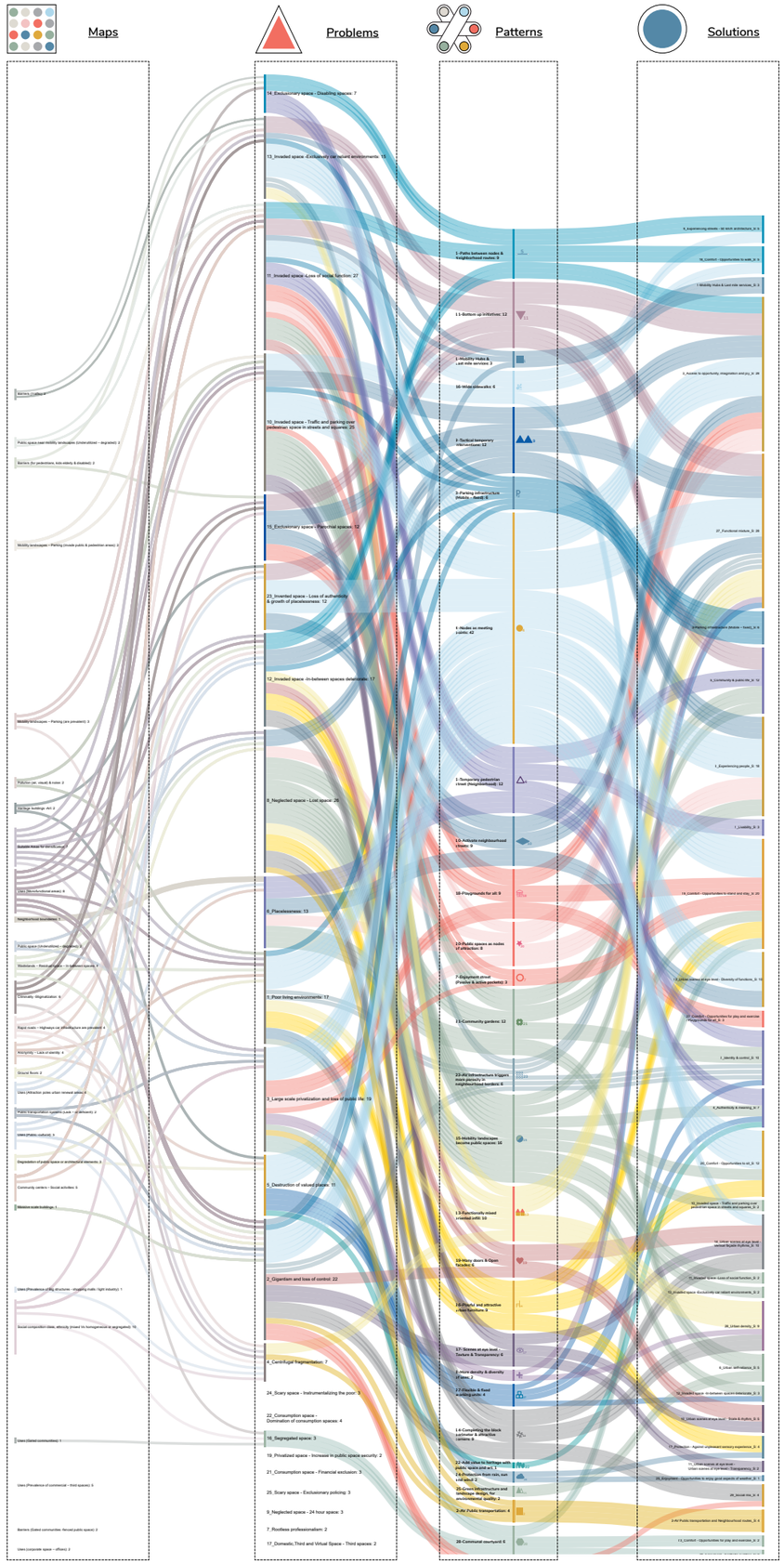
Autor	Reference text	Problem	Solution	Hashtag	Sub-cathegory	MAP	Family
Allan Jacobs & Donald Appleyard	Problems with modern urban design	1_Poor living environments		Physical space	Wastelands & Inbetween spaces	Wastelands – Residual space – In-between spaces	Spatial qualities
Allan Jacobs & Donald Appleyard	Problems with modern urban design	1_Poor living environments		Sustainability - Environment	Underutilized green areas - parks	Pollution (air, visual) & noise	Sustainability & Environment
Allan Jacobs & Donald Appleyard	Problems with modern urban design	1_Poor living environments		Physical space	Underutilized squares or other	Degradation of public space or architectural elemen	Spatial qualities
Allan Jacobs & Donald Appleyard	Problems with modern urban design	1_Poor living environments		Place identity	Anonymity – Lack of identity	Anonymity – Lack of identity	Identity
Allan Jacobs & Donald Appleyard	Problems with modern urban design	1_Poor living environments		Integration of activities	Anonymity – Lack of identity	Uses (Monofunctional areas)	Attractiveness & Livability
Allan Jacobs & Donald Appleyard	Problems with modern urban design	1_Poor living environments		Density	Wastelands & Inbetween spaces	Suitable Areas for densification	Spatial qualities
Allan Jacobs & Donald Appleyard	Problems with modern urban design	**2_Gigantism and loss of control**		Physical space	Wastelands & Inbetween spaces	Wastelands – Residual space – In-between spaces	Spatial qualities
Allan Jacobs & Donald Appleyard	Problems with modern urban design	**2_Gigantism and loss of control**		Physical space	Elements of city are at massive scale	Massive scale buildings	Spatial qualities
Allan Jacobs & Donald Appleyard	Problems with modern urban design	**2_Gigantism and loss of control**		Mobility	Segregated transportation systems -Single travel modes	Public transportation systems (Lack – or deficient)	Mobility - walkability
Allan Jacobs & Donald Appleyard	Problems with modern urban design	**2_Gigantism and loss of control**		Mobility	Segregated transportation systems -Single travel modes	Rapid roads – Highways car infrastructure are prova	Mobility - walkability
Allan Jacobs & Donald Appleyard	Problems with modern urban design	**2_Gigantism and loss of control**		Integration of activities	Elements of city are at massive scale	Uses (Monofunctional areas)	Attractiveness & Livability
Allan Jacobs & Donald Appleyard	Problems with modern urban design	**2_Gigantism and loss of control**		Attractiveness - Experience	Elements of city are at massive scale	Ground floors	Attractiveness & Livability
Allan Jacobs & Donald Appleyard	Problems with modern urban design	**2_Gigantism and loss of control**		Integration of activities	where people of different social groups can meet each other has dwindled	Uses (Monofunctional areas)	Attractiveness & Livability
Allan Jacobs & Donald Appleyard	Problems with modern urban design	**2_Gigantism and loss of control**		Integration of activities	where people of different social groups can meet each other has dwindled	Uses (Public -cultural)	Attractiveness & Livability
Allan Jacobs & Donald Appleyard	Problems with modern urban design	3_Large scale privatization and loss of public life		Socio - Economic	Segregation-Fragmentation, no space where people of different social groups	Social composition class, ethnicity (mixed Vs homog	Social - economic qualities
Allan Jacobs & Donald Appleyard	Problems with modern urban design	3_Large scale privatization and loss of public life		Physical space	Lack of public spaces	Public space (Underutilized – degraded)	Spatial qualities
Allan Jacobs & Donald Appleyard	Problems with modern urban design	3_Large scale privatization and loss of public life		Mobility	Public transit systems declined	Public transportation systems (Lack – or deficient)	Mobility - walkability
Allan Jacobs & Donald Appleyard	Problems with modern urban design	3_Large scale privatization and loss of public life		Density	Public transit systems declined	Suitable Areas for densification	Spatial qualities
Allan Jacobs & Donald Appleyard	Problems with modern urban design	**4_Centrifugal fragmentation**		Integration of activities	Work is out of the home and the neighborhood, commerce is out of local comm	Uses (Monofunctional areas)	Attractiveness & Livability
Allan Jacobs & Donald Appleyard	Problems with modern urban design	**4_Centrifugal fragmentation**		Integration of activities	Work is out of the home and the neighborhood, commerce is out of local comm	Uses (Public -cultural)	Attractiveness & Livability
Allan Jacobs & Donald Appleyard	Problems with modern urban design	**4_Centrifugal fragmentation**		Integration of activities	Work is out of the home and the neighborhood, commerce is out of local comm	Uses (Prevalence of Big structures - shopping malls,	Attractiveness & Livability
Allan Jacobs & Donald Appleyard	Problems with modern urban design	**4_Centrifugal fragmentation**		Mobility	The automobile leads to fragmentation in the city and separation of uses	Rapid roads – Highways car infrastructure are prova	Mobility - walkability
Allan Jacobs & Donald Appleyard	Problems with modern urban design	**4_Centrifugal fragmentation**		Mobility	The automobile leads to fragmentation in the city and separation of uses	Mobility landscapes – Parking (are prevalent)	Mobility - walkability
Allan Jacobs & Donald Appleyard	Problems with modern urban design	**4_Centrifugal fragmentation**		Socio - Economic	Fear had led to homogeneity and segregation	Social composition class, ethnicity (mixed Vs homog	Social - economic qualities
Allan Jacobs & Donald Appleyard	Problems with modern urban design	**4_Centrifugal fragmentation**		Density	Work is out of the home and the neighborhood, commerce is out of local comm	Suitable Areas for densification	Spatial qualities
Allan Jacobs & Donald Appleyard	Problems with modern urban design	5_Destruction of valued places		Heritage	Urban renewal and exploitation of places	Heritage buildings -Art	Identity
Allan Jacobs & Donald Appleyard	Problems with modern urban design	5_Destruction of valued places		Physical space	Exploitation of places, destruction of heritage and natural amenities	Degradation of public space or architectural elemen	Spatial qualities
Allan Jacobs & Donald Appleyard	Problems with modern urban design	5_Destruction of valued places		Place identity	Exploitation of places, destruction of heritage and natural amenities	Anonymity – Lack of identity	Identity
Allan Jacobs & Donald Appleyard	Problems with modern urban design	**6_Placelessness**		Place identity	Cities become mimingless places	Neighborhood boundaries	Identity
Allan Jacobs & Donald Appleyard	Problems with modern urban design	**6_Placelessness**		Community - Participation	Loss of community and participation	Community centers – Social activities	Social - economic qualities
Allan Jacobs & Donald Appleyard	Problems with modern urban design	**6_Placelessness**		Integration of activities	Loss of community and participation	Uses (Public -cultural)	Attractiveness & Livability
Allan Jacobs & Donald Appleyard	Problems with modern urban design	7_Rootless professionalism		Integration of activities	Universal professional culture Vs local cultures	Uses (Corporate space – offices)	Attractiveness & Livability
Allan Jacobs & Donald Appleyard	Problems with modern urban design	7_Rootless professionalism		Community - Participation	Universal professional culture Vs local cultures	Community centers – Social activities	Social - economic qualities
Matthew Carmona	Under-management of public spaces	**8_Neglected space - Lost space**		Physical space	Wastelands & Inbetween spaces are deteriorated	Wastelands – Residual space – In-between spaces	Spatial qualities
Matthew Carmona	Under-management of public spaces	**8_Neglected space - Lost space**		Physical space	Wastelands & Inbetween spaces are deteriorated	Public space (Underutilized – degraded)	Spatial qualities
Matthew Carmona	Under-management of public spaces	**8_Neglected space - Lost space**		Attractiveness - Experience	Wastelands & Inbetween spaces are deteriorated	Ground floors	Attractiveness & Livability
Matthew Carmona	Under-management of public spaces	**8_Neglected space - Lost space**		Density	Wastelands & Inbetween spaces are deteriorated	Suitable Areas for densification	Spatial qualities
Matthew Carmona	Under-management of public spaces	**9_Neglected space - 24 hour space**		Socio - Economic	Spaces are abandoned by market forces, perpetuates forms of exclusion	Social composition class, ethnicity (mixed Vs homog	Social - economic qualities
Matthew Carmona	Under-management of public spaces	**9_Neglected space - 24 hour space**		Integration of activities	Spaces are abandoned by market forces, perpetuates forms of exclusion	Uses (Prevalence of commercial – third spaces)	Attractiveness & Livability
Matthew Carmona	Under-management of public spaces	**9_Neglected space - 24 hour space**		Community - Participation	Spaces are abandoned by market forces, perpetuates forms of exclusion	Community centers – Social activities	Social - economic qualities
Matthew Carmona	Under-management of public spaces	10_Invaded space - Traffic and parking over pedestrian space in streets and squares		Mobility	Mobility landscapes over pedestrian space	Rapid roads – Highways car infrastructure are prova	Mobility - walkability
Matthew Carmona	Under-management of public spaces	10_Invaded space - Traffic and parking over pedestrian space in streets and squares		Sustainability - Environment	Traffic over pedestrian space, leads to dirt, noise and visual pollution that help	Pollution (air, visual) & noise	Sustainability & Environment
Matthew Carmona	Under-management of public spaces	10_Invaded space - Traffic and parking over pedestrian space in streets and squares		Walkability	Mobility landscapes inside or take over pedestrian space	Mobility landscapes – Parking (invade public & peds	Mobility - walkability
Matthew Carmona	Under-management of public spaces	10_Invaded space - Traffic and parking over pedestrian space in streets and squares		Integration of activities	Traffic over pedestrian space impoverish city life	Uses (Monofunctional areas)	Attractiveness & Livability
Matthew Carmona	Under-management of public spaces	10_Invaded space - Traffic and parking over pedestrian space in streets and squares		Density	Mobility landscapes over pedestrian space	Suitable Areas for densification	Spatial qualities
Matthew Carmona	Under-management of public spaces	11_Invaded space -Loss of social function		Walkability	More cars than people	Mobility landscapes – Parking (invade public & peds	Mobility - walkability
Matthew Carmona	Under-management of public spaces	11_Invaded space -Loss of social function		Integration of activities	Loss of social functions to only utilitarian functions	Uses (Monofunctional areas)	Attractiveness & Livability
Matthew Carmona	Under-management of public spaces	11_Invaded space -Loss of social function		Community - Participation	Loss of social functions to only utilitarian functions	Community centers – Social activities	Social - economic qualities
Matthew Carmona	Under-management of public spaces	11_Invaded space -Loss of social function		Physical space	Cars and roads create an impoverished space	Public space near mobility landscapes (Underutilized	Spatial qualities
Matthew Carmona	Under-management of public spaces	11_Invaded space -Loss of social function		Mobility	Cars and roads create an impoverished space	Mobility landscapes – Parking (are prevalent)	Mobility - walkability
Matthew Carmona	Under-management of public spaces	12_Invaded space -in-between spaces deteriorate		Physical space	Wastelands & Inbetween spaces deteriorate	Wastelands – Residual space – In-between spaces	Spatial qualities
Matthew Carmona	Under-management of public spaces	12_Invaded space -in-between spaces deteriorate		Mobility	Distant spaces connected by car roads create issues on inbetween spaces	Rapid roads – Highways car infrastructure are prova	Mobility - walkability
Matthew Carmona	Under-management of public spaces	12_Invaded space -in-between spaces deteriorate		Attractiveness - Experience	Absent of attractors	Uses (Attraction poles urban renewal areas	Attractiveness & Livability
Matthew Carmona	Under-management of public spaces	12_Invaded space -in-between spaces deteriorate		Integration of activities	Roads conecting far away attraction poles	Uses (Monofunctional areas)	Attractiveness & Livability
Matthew Carmona	Under-management of public spaces	12_Invaded space -in-between spaces deteriorate		Integration of activities	Roads conecting far away attraction poles	Uses (Public -cultural)	Attractiveness & Livability
Matthew Carmona	Under-management of public spaces	12_Invaded space -in-between spaces deteriorate		Density		Suitable Areas for densification	Spatial qualities
Matthew Carmona	Under-management of public spaces	13_Invaded space -Exclusively car reliant environments		Physical space	Mobility landscapes - Public does not exist - is replaced by disconected roads a	Public space near mobility landscapes (Underutilized	Spatial qualities
Matthew Carmona	Under-management of public spaces	13_Invaded space -Exclusively car reliant environments		Safety	Crime as a psycological barrier	Criminality -Stigmatization	Social - economic qualities
Matthew Carmona	Under-management of public spaces	13_Invaded space -Exclusively car reliant environments		Mobility	Mobility landscapes are predominant	Mobility landscapes – Parking (are prevalent)	Mobility - walkability
Matthew Carmona	Under-management of public spaces	13_Invaded space -Exclusively car reliant environments		Accessibility	Traffic movement as a safety barrier	Barriers (Traffic)	Attractiveness & Livability
Matthew Carmona	Under-management of public spaces	13_Invaded space -Exclusively car reliant environments		Density		Suitable Areas for densification	Spatial qualities
Matthew Carmona	Under-management of public spaces	**14_Exclusionary space - Disabling spaces**		Walkability	Barriers	Barriers (for pedestrians, kids elderly & disabled)	Mobility - walkability
Matthew Carmona	Under-management of public spaces	**14_Exclusionary space - Disabling spaces**		Safety	Safety issues for people with disabilities, children and elderly	Criminality -Stigmatization	Social - economic qualities
Matthew Carmona	Under-management of public spaces	**14_Exclusionary space - Disabling spaces**		Accessibility	Safety issues for people with disabilities, children and elderly	Barriers (Traffic)	Attractiveness & Livability
Matthew Carmona	Under-management of public spaces	**15_Exclusionary space - Parrochial spaces**		Walkability	Barriers & obstacles for the use of public space -	Barriers (for pedestrians, kids elderly & disabled)	Mobility - walkability
Matthew Carmona	Under-management of public spaces	**15_Exclusionary space - Parrochial spaces**		Integration of activities	Segregation-Fragmentation	Uses (Monofunctional areas)	Attractiveness & Livability
Matthew Carmona	Under-management of public spaces	**15_Exclusionary space - Parrochial spaces**		Socio - Economic	Conflict between social groups	Social composition class, ethnicity (mixed Vs homog	Social - economic qualities
Matthew Carmona	Under-management of public spaces	**15_Exclusionary space - Parrochial spaces**		Safety	Segregation-Fragmentation	Criminality -Stigmatization	Social - economic qualities
Matthew Carmona	Under-management of public spaces	16_Segregated space		Socio - Economic	Segregation, need of exclusiveness	Social composition class, ethnicity (mixed Vs homog	Social - economic qualities
Matthew Carmona	Under-management of public spaces	16_Segregated space		Safety	Fear of crime	Criminality -Stigmatization	Social - economic qualities
Matthew Carmona	Under-management of public spaces	16_Segregated space		Integration of activities	Rise of gated communities & decline of public spaces	Uses (Gated communities)	Attractiveness & Livability
Matthew Carmona	Under-management of public spaces	**17_DomesticThird and Virtual Space - Third spaces**		Integration of activities	Accesibility for all social groups	Uses (Prevalence of commercial – third spaces)	Attractiveness & Livability
Matthew Carmona	Under-management of public spaces	**17_DomesticThird and Virtual Space - Third spaces**		Socio - Economic	Third spaces, suspect and enable social interactions	Social composition class, ethnicity (mixed Vs homog	Social - economic qualities
Matthew Carmona	Under-management of public spaces	18_DomesticThird and Virtual Space - Virtual space		Virtual space	Technodeterminism Vs Reinforcement of the role of public spaces		Attractiveness & Livability
Matthew Carmona	Over-management of public spaces	19_Privatized space - Increase in public space security		Integration of activities	Third spaces, privatized public spaces and consumtion	Uses (Prevalence of commercial – third spaces)	Attractiveness & Livability
Matthew Carmona	Over-management of public spaces	19_Privatized space - Increase in public space security		Safety	Fear of crime and terrorism	Criminality -Stigmatization	Social - economic qualities
Matthew Carmona	Over-management of public spaces	20_Privatized space - Corporate privatization		Accesibility	Barriers and landscapes of fear, enclosed and protected space	Barriers (Gated communities -fenced public space)	Attractiveness & Livability
Matthew Carmona	Over-management of public spaces	20_Privatized space - Corporate privatization		Socio - Economic	Segregation of the poor	Social composition class, ethnicity (mixed Vs homog	Social - economic qualities
Matthew Carmona	Over-management of public spaces	20_Privatized space - Corporate privatization		Integration of activities		Uses (Corporate space – offices)	Attractiveness & Livability
Matthew Carmona	Over-management of public spaces	**21_Consumption space - Financial exclusion**		Socio - Economic	Financial exclusion, Consumption places & domination of middle class	Social composition class, ethnicity (mixed Vs homog	Social - economic qualities
Matthew Carmona	Over-management of public spaces	**21_Consumption space - Financial exclusion**		Physical space	Landscapes of fear, neglect, deterioration	Degradation of public space or architectural elemen	Spatial qualities
Matthew Carmona	Over-management of public spaces	**21_Consumption space - Financial exclusion**		Integration of activities	Financial exclusion, Consumption places & domination of middle class	Uses (Prevalence of commercial – third spaces)	Attractiveness & Livability
Matthew Carmona	Over-management of public spaces	**22_Consumption space - Domination of consumption spaces**		Integration of activities	Dominance of Consumption places	Uses (Prevalence of commercial – third spaces)	Attractiveness & Livability
Matthew Carmona	Over-management of public spaces	**22_Consumption space - Domination of consumption spaces**		Attractiveness - Experience	Dominance of Consumption places	Uses (Attraction poles urban renewal areas	Attractiveness & Livability
Matthew Carmona	Over-management of public spaces	**22_Consumption space - Domination of consumption spaces**		Community - Participation	Guarranty Mix of uses	Community centers – Social activities	Social - economic qualities
Matthew Carmona	Over-management of public spaces	**22_Consumption space - Domination of consumption spaces**		Integration of activities	Dominance of Consumption places	Uses (Public -cultural)	Attractiveness & Livability
Matthew Carmona	Over-management of public spaces	23_Invented space - Loss of authenticity & growth of placelessness		Place identity	Placelessness & Belonging	Anonymity – Lack of identity	Identity
Matthew Carmona	Over-management of public spaces	23_Invented space - Loss of authenticity & growth of placelessness		Heritage	Placelessness, repetition of urban formulaic responses	Heritage buildings -Art	Identity
Matthew Carmona	Over-management of public spaces	23_Invented space - Loss of authenticity & growth of placelessness		Attractiveness - Experience		Uses (Attraction poles urban renewal areas	Attractiveness & Livability
Matthew Carmona	Over-management of public spaces	**24_Scary space - Instrumentalizing the poor**		Socio - Economic	Loss of attachment to place	Social composition class, ethnicity (mixed Vs homog	Social - economic qualities
Matthew Carmona	Over-management of public spaces	**24_Scary space - Instrumentalizing the poor**		Place identity	Loss of attachment to place	Anonymity – Lack of identity	Identity
Matthew Carmona	Over-management of public spaces	**24_Scary space - Instrumentalizing the poor**		Safety	Loss of attachment to place	Criminality -Stigmatization	Social - economic qualities
Matthew Carmona	Over-management of public spaces	**25_Scary space - Exclusionary policing**		Accesibility	Hot spots of affluence lead to Cold spots of exclusion	Barriers (Gated communities -fenced public space)	Attractiveness & Livability
Matthew Carmona	Over-management of public spaces	**25_Scary space - Exclusionary policing**		Socio - Economic	Financial exclusion, Consumption places	Social composition class, ethnicity (mixed Vs homog	Social - economic qualities
Matthew Carmona	Over-management of public spaces	**25_Scary space - Exclusionary policing**		Attractiveness - Experience	Urban regeneration areas - Socially polarized urban spaces	Uses (Attraction poles urban renewal areas	Attractiveness & Livability
Allan Jacobs & Donald Appleyard	**Goals for urban life**		1_Livability	Safety	Space is devoided of danger and unwelcome intruvions		Social - economic qualities
Allan Jacobs & Donald Appleyard	**Goals for urban life**		1_Livability	Sustainability - Environment	Protection against climate, pollution, dirt and trash		Sustainability & Environment
Allan Jacobs & Donald Appleyard	**Goals for urban life**		1_Livability	Socio - Economic	Accesibility for all social groups to live in relative comfort		Social - economic qualities
Allan Jacobs & Donald Appleyard	**Goals for urban life**		**2_Identity & control**	Place identity	Sense of individual and collective belonging		Identity
Allan Jacobs & Donald Appleyard	**Goals for urban life**		**2_Identity & control**	Heritage	Conservation encourages identity, control, and better sense of community		Identity
Allan Jacobs & Donald Appleyard	**Goals for urban life**		**2_Identity & control**	Socio - Economic	Financial inclusion		Social - economic qualities
Allan Jacobs & Donald Appleyard	**Goals for urban life**		3_Access to opportunity, imagination and joy	Attractiveness - Experience	Break from traditional molds, meet new people, have fun		Attractiveness & Livability
Allan Jacobs & Donald Appleyard	**Goals for urban life**		3_Access to opportunity, imagination and joy	Integration of activities	Recreational, cultural & functional		Attractiveness & Livability
Allan Jacobs & Donald Appleyard	**Goals for urban life**		3_Access to opportunity, imagination and joy	Socio - Economic	Access to jobs, and alternative housing choices		Social - economic qualities
Allan Jacobs & Donald Appleyard	**Goals for urban life**		**4_Authenticity & meaning**	Physical space	Understad the city		Spatial qualities
Allan Jacobs & Donald Appleyard	**Goals for urban life**		**4_Authenticity & meaning**	Accesibility	Accesibility for all		Attractiveness & Livability
Allan Jacobs & Donald Appleyard	**Goals for urban life**		**4_Authenticity & meaning**	Place identity	The urban environment should reveal its significant meanings		Identity
Allan Jacobs & Donald Appleyard	**Goals for urban life**		5_Community & public life	Community - Participation	Encourage Participation, community & public life		Social - economic qualities
Allan Jacobs & Donald Appleyard	**Goals for urban life**		5_Community & public life	Physical space	Encourage Participation, community & public life		Spatial qualities
Allan Jacobs & Donald Appleyard	**Goals for urban life**		**6_Urban self-reliance**	Sustainability - Environment	Self sustaining in the use of scarce resources		Sustainability & Environment
Allan Jacobs & Donald Appleyard	**Goals for urban life**		**6_Urban self-reliance**	Physical space	Regional identity, avalenctivity and meaning		Spatial qualities
Allan Jacobs & Donald Appleyard	**Goals for urban life**		7_An environment for all	Socio - Economic	Financial and spatial inclusion		Social - economic qualities
Allan Jacobs & Donald Appleyard	**Goals for urban life**		7_An environment for all	Accesibility	Financial and spatial inclusion		Attractiveness & Livability
Allan Jacobs & Donald Appleyard	**Goals for urban life**		7_An environment for all	Community - Participation	***An environment for all would require activities for social cohesion and participation		Social - economic qualities
Jan Gehl	Close encounter with buildings		**8_Experiencing people**	Attractiveness - Experience	Activate sense of smell, touch and taste		Attractiveness & Livability
Jan Gehl	Close encounter with buildings		**8_Experiencing people**	Walkability	Short distances, and strong experiences		Mobility - walkability
Jan Gehl	Close encounter with buildings		**8_Experiencing people**	Community - Participation	***Meeting people increase the chance to build community		Social - economic qualities
Jan Gehl	Close encounter with buildings		9_Experiencing streets - 50 km/h architecture	Walkability	Pedestrians can get close to facades		Mobility - walkability
Jan Gehl	Close encounter with buildings		9_Experiencing streets - 50 km/h architecture	Physical space	Space for walking - Spaces are small, architecture rich in detail and signs		Spatial qualities
Jan Gehl	Close encounter with buildings		9_Experiencing streets - 50 km/h architecture	Integration of activities	Facades, small spaces,		Attractiveness & Livability
Jan Gehl	Close encounter with buildings		**10_Urban scenes at eye level - Scale & rythm**	Walkability	Pedestrians experience the urban scene at maximum 5km/h		Mobility - walkability
Jan Gehl	Close encounter with buildings		**10_Urban scenes at eye level - Scale & rythm**	Attractiveness - Experience	Small units provide wide range of experiences;		Attractiveness & Livability
Jan Gehl	Close encounter with buildings		**10_Urban scenes at eye level - Scale & rythm**	Physical space	Large number of doors provide points of exchange between outside and inside		Spatial qualities
Jan Gehl	Close encounter with buildings		**11_Urban scenes at eye level - Urban scenes at eye level - Transparency**	Physical space	Ground floor, materiality and urban elements		Spatial qualities
Jan Gehl	Close encounter with buildings		**11_Urban scenes at eye level - Urban scenes at eye level - Transparency**	Attractiveness - Experience	Looking inside & outside - Broadening range of experiences		Attractiveness & Livability
Jan Gehl	Close encounter with buildings		**12_Urban scenes at eye level - Texture**	Physical space	Ground floor, Textures, good materials, details		Spatial qualities
Jan Gehl	Close encounter with buildings		**13_Urban scenes at eye level - Diversity of functions**	Integration of activities	Wide functional variation		Attractiveness & Livability
Jan Gehl	Close encounter with buildings		**13_Urban scenes at eye level - Diversity of functions**	Attractiveness - Experience	In relation to the uses of the buildings, events & experiences		Attractiveness & Livability
Jan Gehl	Close encounter with buildings		**13_Urban scenes at eye level - Diversity of functions**	Density	Narrow units, many doors		Mobility - walkability / Spatial qua
Jan Gehl	Close encounter with buildings		**14_Urban scenes at eye level - Vertical façade rhythms**	Attractiveness - Experience	Intresting and eye-catching		Attractiveness & Livability
Jan Gehl	Close encounter with buildings		**14_Urban scenes at eye level - Vertical façade rhythms**	Walkability	Walking along groundfloor		Mobility - walkability
Jan Gehl	Close encounter with buildings		**14_Urban scenes at eye level - Vertical façade rhythms**	Physical space	Facades, with vertical rhythms		Spatial qualities
Jan Gehl	Close encounter with buildings		**14_Urban scenes at eye level - Vertical façade rhythms**	Attractiveness - Experience	Vertical rhythm makes walk eye cathching and intresting		Attractiveness & Livability
Jan Gehl	13 Quality criteria of public spaces		15_Protection - Against traffic and accidents	Safety	Against traffic & crime		Social - economic qualities
Jan Gehl	13 Quality criteria of public spaces		15_Protection - Against traffic and accidents	Mobility	Traffic safety		Mobility - walkability
Jan Gehl	14 Quality criteria of public spaces		15_Protection - Against traffic and accidents	Walkability	Pedestrian safety against traffic		Mobility - walkability
Jan Gehl	12 Quality criteria of public spaces		16_Protection - Against crime and violence, feeling secure	Integration of activities	Lively public realm, functional variation, day and night functions		Attractiveness & Livability
Jan Gehl	12 Quality criteria of public spaces		16_Protection - Against crime and violence, feeling secure	Attractiveness - Experience	Liveliness & Lightning		Attractiveness & Livability
Jan Gehl	13 Quality criteria of public spaces		16_Protection - Against crime and violence, feeling secure	Safety	Passive surveillance		Social - economic qualities
Jan Gehl	14 Quality criteria of public spaces		16_Protection - Against crime and violence, feeling secure	Physical space	Well-lit in human scale		Spatial qualities
Jan Gehl	12 Quality criteria of public spaces		17_Protection - Against unpleasant sensory experience	Sustainability - Environment	Protection against climate, pollution, dirt and trash, noise		Sustainability & Environment
Jan Gehl	12 Quality criteria of public spaces		17_Protection - Against unpleasant sensory experience	Physical space	Urban elements that provide protection against climate		Spatial qualities
Jan Gehl	12 Quality criteria of public spaces		**18_Comfort - Opportunities to walk**	Walkability	Accesibility for all		Mobility - walkability
Jan Gehl	13 Quality criteria of public spaces		**18_Comfort - Opportunities to walk**	Physical space	No obstacles, room for walking , good surfacess		Spatial qualities
Jan Gehl	12 Quality criteria of public spaces		**18_Comfort - Opportunities to walk**	Safety	Accesibility for all		Social - economic qualities
Jan Gehl	12 Quality criteria of public spaces		**18_Comfort - Opportunities to walk**	Attractiveness - Experience	Intresting facades		Attractiveness & Livability
Jan Gehl	12 Quality criteria of public spaces		**19_Comfort - Opportunities to stand and stay**	Attractiveness - Experience	Attractive and functional edges and facades		Attractiveness & Livability
Jan Gehl	12 Quality criteria of public spaces		**19_Comfort - Opportunities to stand and stay**	Integration of activities	Sportive, details, furniture		Attractiveness & Livability
Jan Gehl	12 Quality criteria of public spaces		**19_Comfort - Opportunities to stand and stay**	Physical space	Urban furniture, objects to lean, intresting facades, functional edges		Spatial qualities
Jan Gehl	12 Quality criteria of public spaces		**20_Comfort - Opportunities to sit**	Integration of activities	Good mix of public and coffee sitting		Attractiveness & Livability
Jan Gehl	12 Quality criteria of public spaces		**20_Comfort - Opportunities to sit**	Physical space	Urban elements , Sportive, details, sitting furniture		Spatial qualities
Jan Gehl	12 Quality criteria of public spaces		**21_Comfort - Opportunities to see**	Attractiveness - Experience	Pleasant views and people watching		Attractiveness & Livability
Jan Gehl	12 Quality criteria of public spaces		**21_Comfort - Opportunities to see**	Walkability	Room for walking, accessibility for all, no obstacles		Mobility - walkability
Jan Gehl	12 Quality criteria of public spaces		**21_Comfort - Opportunities to see**	Attractiveness - Experience	Intresting facades		Attractiveness & Livability
Jan Gehl	12 Quality criteria of public spaces		**22_Comfort - Talk and listen**	Sustainability - Environment	Low noise level		Sustainability & Environment
Jan Gehl	12 Quality criteria of public spaces		**22_Comfort - Talk and listen**	Physical space	Public seating arrangements that are conducing to communicating 'talkscapes'		Spatial qualities
Jan Gehl	12 Quality criteria of public spaces		**23_Comfort - Opportunities for play and exercise**	Integration of activities	Sports, play, culture, temporary activities		Attractiveness & Livability
Jan Gehl	13 Quality criteria of public spaces		**23_Comfort - Opportunities for play and exercise**	Community - Participation	***Sport activities could enhance the cohesion at small neighborhood scales		Social - economic qualities
Jan Gehl	12 Quality criteria of public spaces		24_Enjoyment - Dimensioned at human scale	Physical space	Dimensions of buildings according to human dimension in relation to senses, movements, size and behavior.		Spatial qualities
Jan Gehl	12 Quality criteria of public spaces		25_Enjoyment - Opportunities to enjoy good aspects of weather	Sustainability - Environment	Enjoy sun, shade, heat, coolness, shelter from wind & breeze		Sustainability & Environment
Jan Gehl	12 Quality criteria of public spaces		25_Enjoyment - Opportunities to enjoy good aspects of weather	Physical space	Urban elements, Details, furniture that allow for weather protection and enjoyment		Spatial qualities
Jan Gehl	12 Quality criteria of public spaces		26_Enjoyment - Aesthetic qualities	Attractiveness - Experience	Fine views and vistas;		Attractiveness & Livability
Jan Gehl	12 Quality criteria of public spaces		26_Enjoyment - Aesthetic qualities	Physical space	Good materials, design and detailing		Spatial qualities
Jan Gehl	12 Quality criteria of public spaces		26_Enjoyment - Aesthetic qualities	Sustainability - Environment	Rich sensory experiences: trees, plants, water.		Sustainability & Environment
Jan Gehl	12 Quality criteria of public spaces		26_Enjoyment - Aesthetic qualities	Place identity	***Visual cues, signs and details are in sync with history culture and meanig of the place		Identity
Jane Jacobs	Death and life of great American Cities		**27_Functional mixture**	Integration of activities	Adequate services and proximity synergies		Attractiveness & Livability
Jane Jacobs	Death and life of great American Cities		**27_Functional mixture**	Density	Proximity synergies		Mobility - walkability / Spatial qua
Jane Jacobs	Death and life of great American Cities		28_Urban density	Density	Concentration of people and institutions		Mobility - walkability / Spatial qua
Jane Jacobs	Death and life of great American Cities		28_Urban density	Integration of activities	Adequate services and proximity synergies		Attractiveness & Livability
Jane Jacobs	Death and life of great American Cities		**29_Social mix**	Socio - Economic	An essential component of attractive cities		Social - economic qualities
Jane Jacobs	Death and life of great American Cities		**29_Social mix**	Attractiveness - Experience	An essential component of attractive cities		Attractiveness & Livability
Jane Jacobs	Death and life of great American Cities		**29_Social mix**	Community - Participation	Social mixes will require activities for social cohesion and community building		Social - economic qualities
Jane Jacobs	Death and life of great American Cities		**29_Social mix**	Physical space	Short blocks, life on the ground floors, attractive corrners		Spatial qualities
Jane Jacobs	Death and life of great American Cities		**29_Social mix**	Accesibility	Short blocks, life on the ground floors, attractive corrners		Attractiveness & Livability
Jane Jacobs	Death and life of great American Cities		**29_Social mix**	Attractiveness - Experience	Short blocks, life on the ground floors, attractive corrners		Attractiveness & Livability

Solutions

PATTERN APPLICATION

Problem / maps database

Problem-solution-map - Scheme

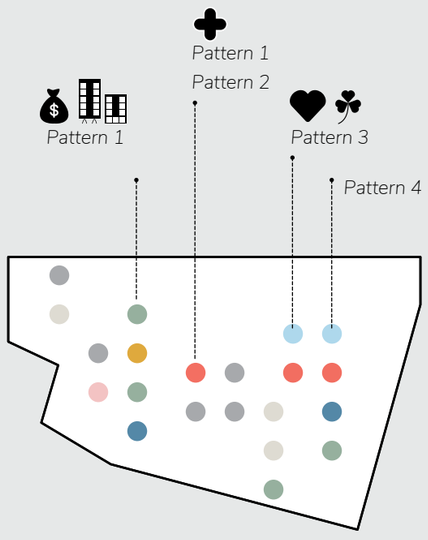


PATTERN APPLICATION | *Problem / maps database*

Problem-solution-map - Scheme

Spatial
Spatial code + Site analysis

Patterns
Literature review



Patterns

Spatial

Wastelands – Residual space – In-between spaces
Degradation of public space or architectural elements
Massive scale buildings
Degradation of public space or architectural elements
Public space (Underutilized – degraded)
Public space near mobility landscapes (Underutilized – degraded)
Pollution (air, visual) & noise
Anonymity – Lack of identity
Neighborhood boundaries
Uses (Prevalence of private uses)
Uses (Prevalence of commercial – third spaces)
Uses (Monofunctional areas)
Uses (Public -cultural)
Uses (Prevalence of Big structures - shopping malls / light industry)
Uses (Public -cultural)
Uses (corporate space – offices)
Uses (Gated communities)
Public transportation systems (Lack – or deficient)
Rapid roads – Highways car infrastructure are prevalent
Mobility landscapes – Parking (are prevalent)
Social composition class, ethnicity (mixed Vs homogeneous or segregated)
Heritage buildings -Art
Community centers – Social activities
Mobility landscapes – Parking (invade public & pedestrian areas)
Barriers (for pedestrians, kids elderly & disabled)
Criminality -Stigmatization
Uses (Attraction poles urban renewal areas
Ground floors
Barriers (Gated communities -fenced public space)
Barriers (Traffic)
Barriers (Gated communities -fenced public space)
Suitable Areas for densification

Problems

Poor living environments
Gigantism and loss of control
Large scale privatization and loss of public life
Centrifugal fragmentation
Destruction of valued places
Placelessness
Rootless professionalism
Neglected space - Lost space
Neglected space - 24 hour space
Invaded space - Traffic and parking over pedestrian space in streets and squares
Invaded space -Loss of social function
Invaded space Inbetween spaces deteriorate experience
Invaded space Exclusively car reliant environments
Exclusionary space - Disabling spaces
Exclusionary space - Parrochial spaces
Segregated space
Domestic,Third and Virtual Space - Third spaces
Privatized space - Increase in public space security
Privatized space - Corporate privatization
Consumption space - Financial exclusion
Consumption space Domination of consumption spaces
Invented space - Loss of authenticity & growth of placelessness
Scary space - Instrumentalizing the poor
Scary space - Exclusionary policing

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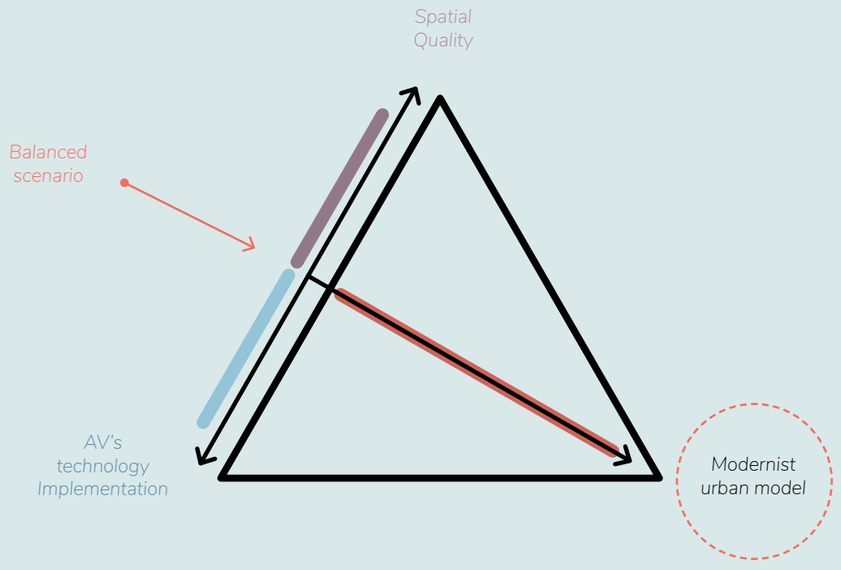
Solutions

Livability
Identity & control
Access to opportunity, imagination and joy
Authenticity & meaning
Community & public life
Urban self-reliance
An environment for all
Experiencing people
Experiencing streets - 50 km/h architecture
Urban scenes at eye level - Scale & rythm
Urban scenes at eye level - Urban scenes at eye level - Transparency
Urban scenes at eye level - Texture
Urban scenes at eye level - Diversity of functions
Urban scenes at eye level - Vertical façade rhythms
Protection - Against traffic and accidents
Protection - Against crime and violence, feeling secure
Comfort - Opportunities to walk
Comfort - Opportunities to stand and stay
Comfort - Opportunities to sit
Comfort - Opportunities to see
Comfort - Talk and listen
Comfort - Opportunities for play and exercise
Enjoyment - Dimensioned at human scale
Enjoyment - Opportunities to enjoy good aspects of weather
Enjoyment - Aesthetic qualities
Functional mixture
Density
Social mix
Physical space

Pattern application

Amsterdam testing site



PATTERN APPLICATION

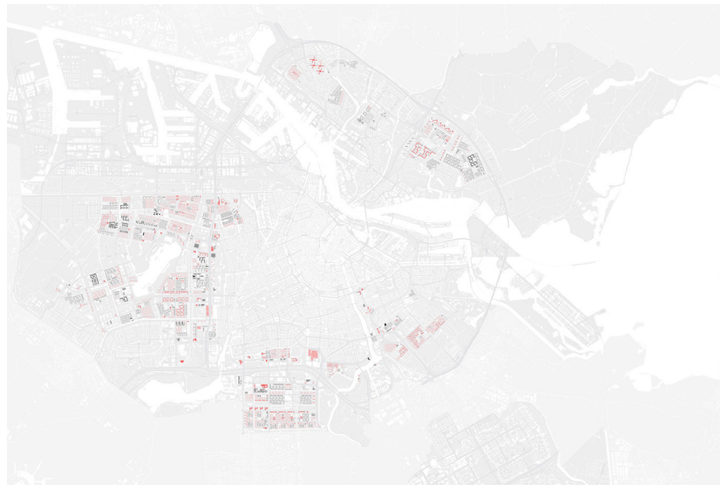
Amsterdam testing site

Critical aspects - Present & future

High architectonic / landscape value

Building quality

Amsterdam
Building quality AUP area



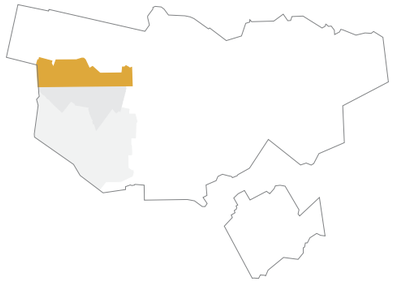
Potential growth / housing plans

Amsterdam
Housing plans

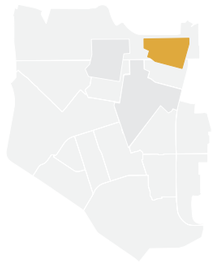
Havenstadt 2040
Proximity to future urban centers

PATTERN APPLICATION | *Slotermeer testing site*

Critical aspects



Nieuw West & Sloterdijk



Slotermeer Noordoost

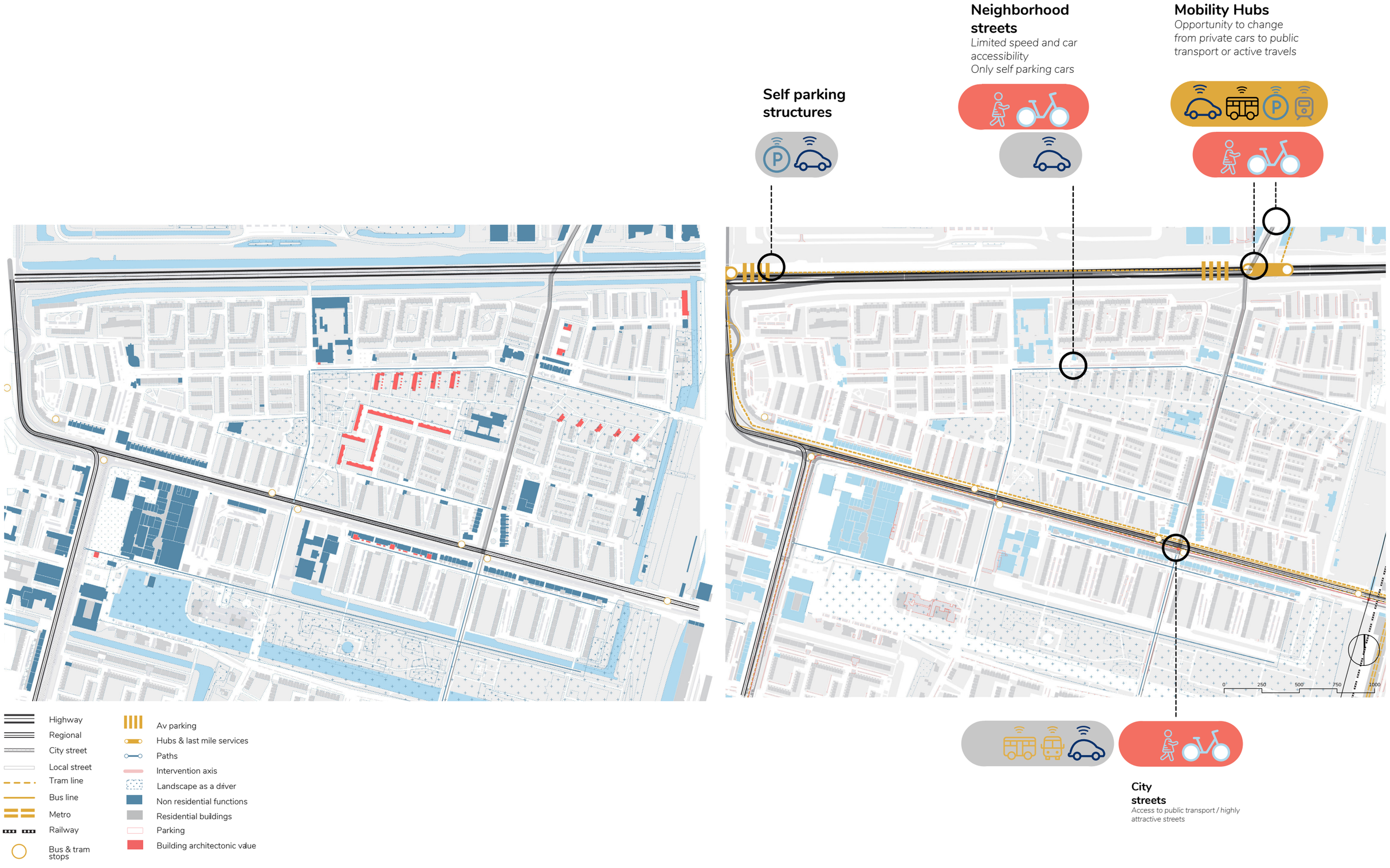
Modernist areas in Amsterdam Slotermeer can be related to issues of quality of life & spatial quality

+ *Open block structure,*
+ *Scattered street profile & unattractive and streets*
+ *Large & underused green spaces*
+ *Degraded public spaces*
+ *Homogeneity & mono-functionality*

Slotermeer Noordoost - Burgemeester de Vlugtlaan -street panorama-
Source: Own elaboration

PATTERN APPLICATION | *Slotermeer testing site*

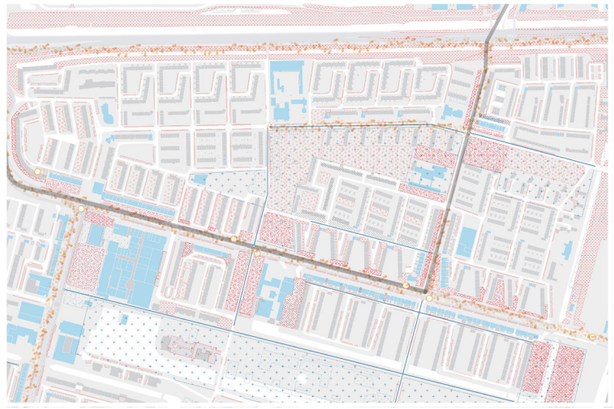
Drivers & AV scenario



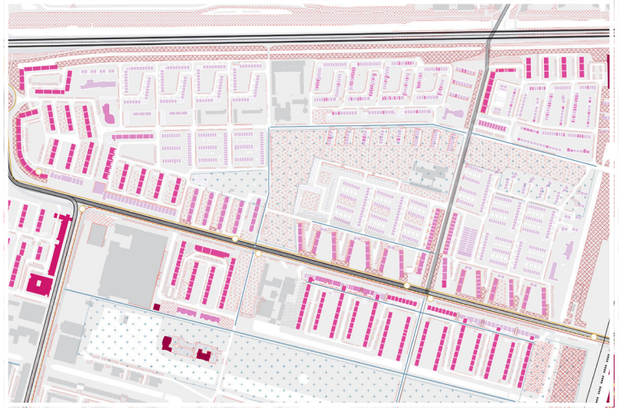
PATTERN APPLICATION | *Mapping problems*

12 Problems

1- Poor Living environments

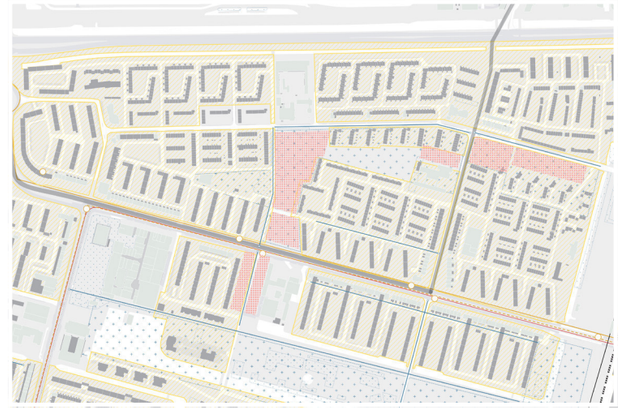


2 - Gigantism & Loss of control



3-Large scale privatization - loss of public life

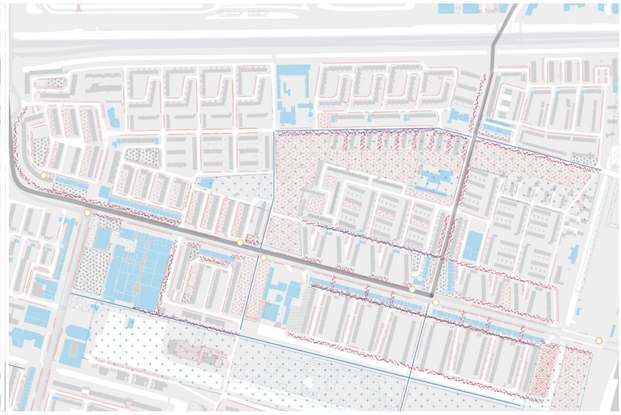
4-Centrifugal fragmentation



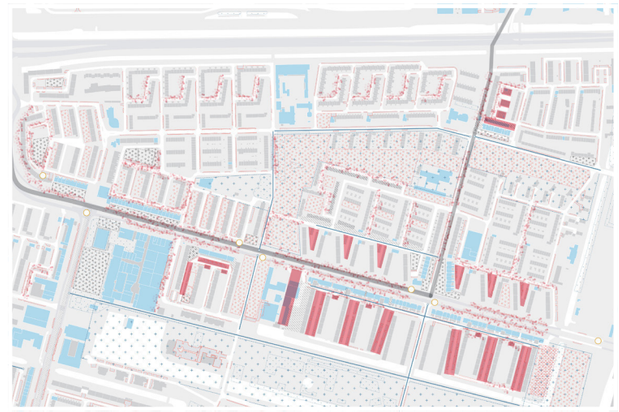
5-Destruction of valuable places

6-Placelessness

8-Neglected space-lost space



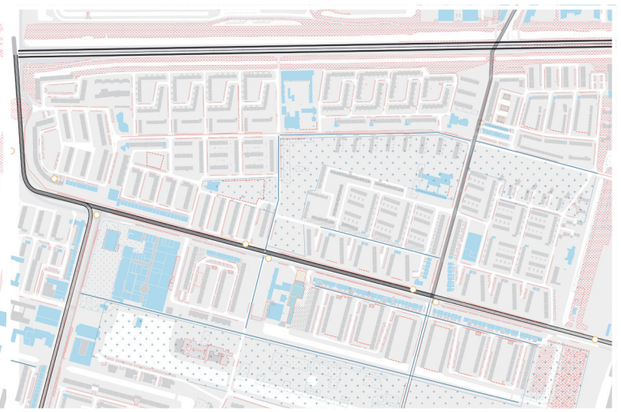
10-Invaded space-Traffic over pedestrians



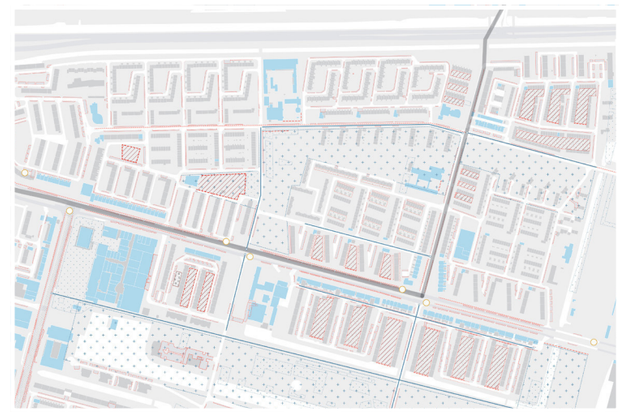
11-Invaded space_loss of social function

12-In-between spaces deteriorate

13-Exclusively car reliant environments



15_Parochial space

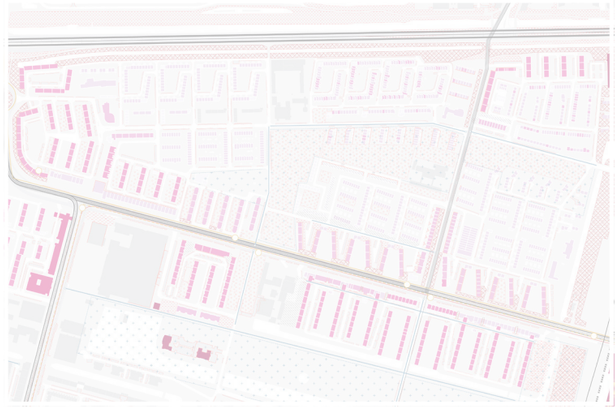


PATTERN APPLICATION | *Mapping problems*

12 Problems

1- Poor Living environments

2 - Gigantism & Loss of control



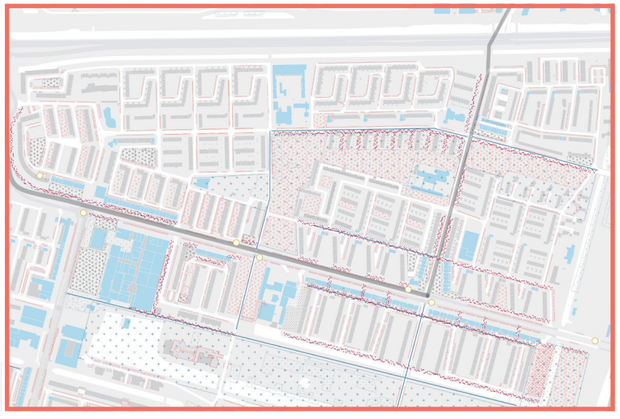
3-Large scale privatization - loss of public life

4-Centrifugal fragmentation

5-Destruction of valuable places

6-Placelessness

8-Neglected space-lost space



10-Invaded space-Traffic over pedestrians

11-Invaded space_loss of social function

12-In-between spaces deteriorate

13-Exclusively car reliant environments

15_Parochial space

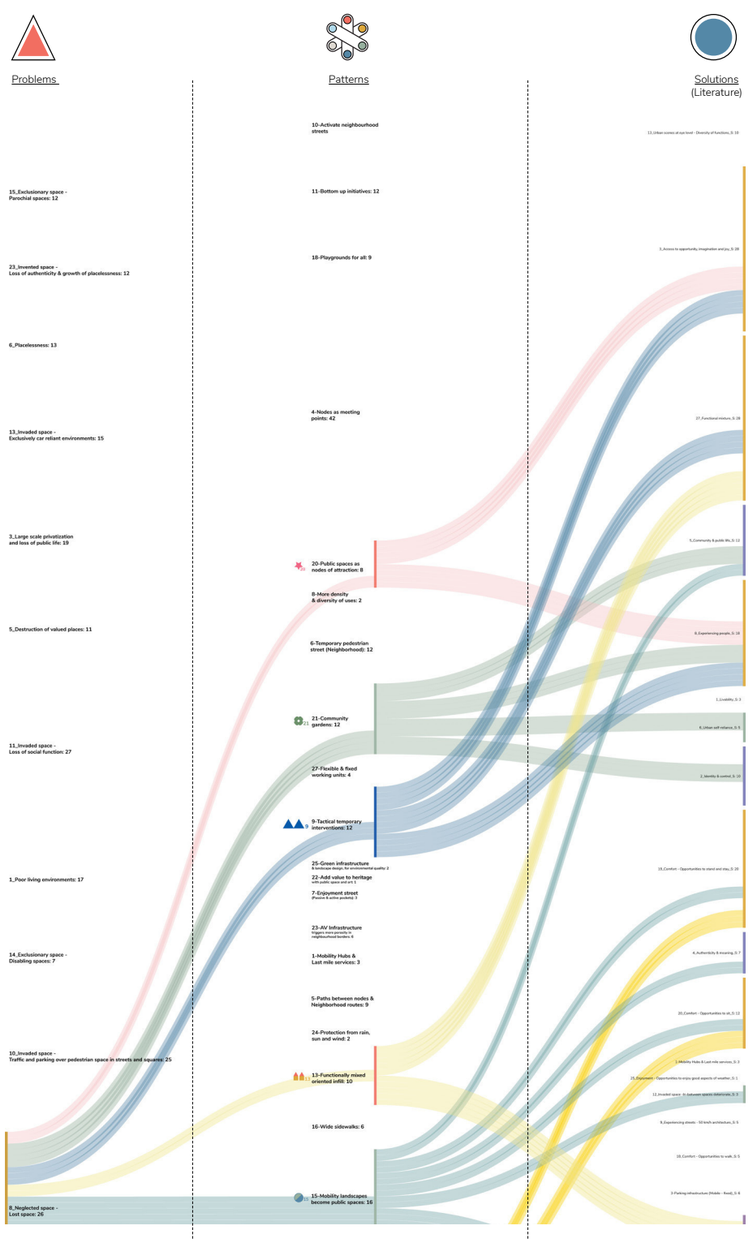
8_Neglected space - Lost space
(Carmona, 2010)

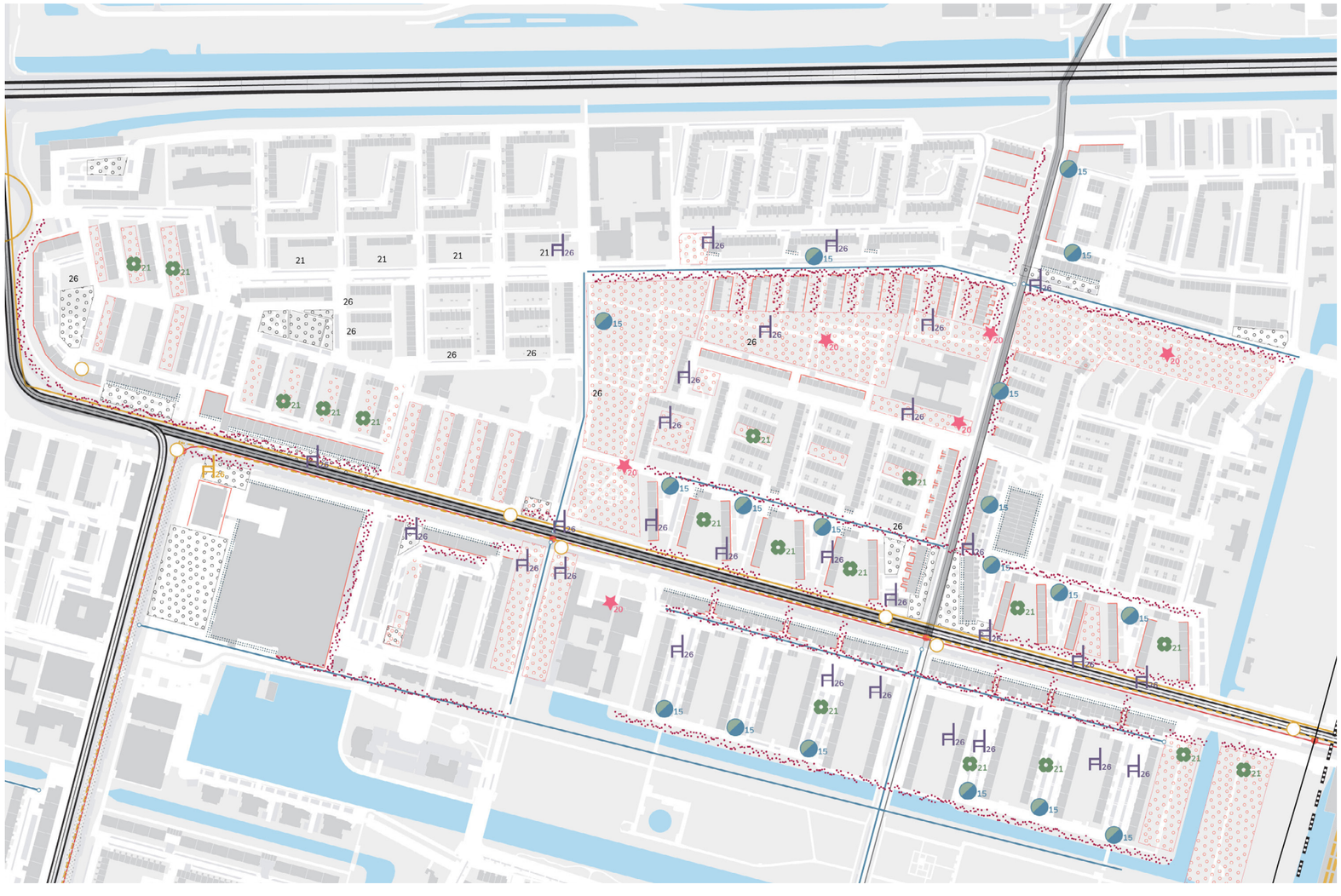
Carmona refers to authors Loukaitou – Sideris (1996), that focus on the 'in-between spaces, residual, underutilized and deteriorating spaces'. Trancik (1986) 'Lost spaces' are spaces in need of redesign, make no positive contribution to the surroundings or users', e.g.

- The base of high rise towers
- Unused sunken plazas
- Abandoned waterfronts
- Train yards
- Deteriorated parks and public space

Amsterdam Nieuw-West
Green areas in-between buildings

8-Neglected space - Lost space - Patterns scheme



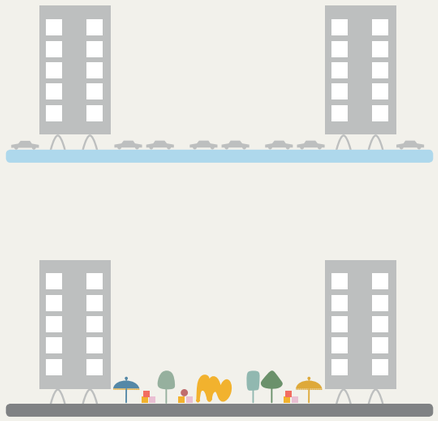


8- Neglected space - Lost space

- Neglected space - Lost space
- Wastelands
- Degradation
- Public spaces
- Public green
- Closed groundfloors
- Permeable groundfloors
- Paths
- Intervention axis
- Landscape as a driver

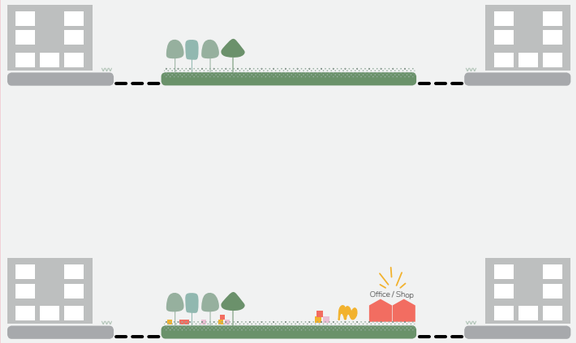
15

15-Mobility landscapes become public spaces



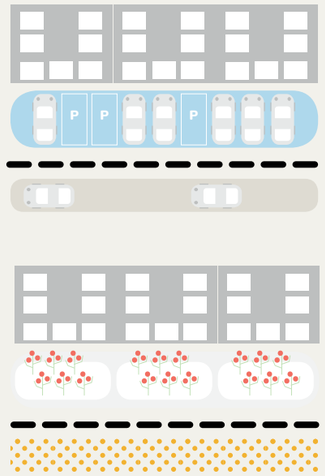
20

20-Public spaces as nodes of attraction.



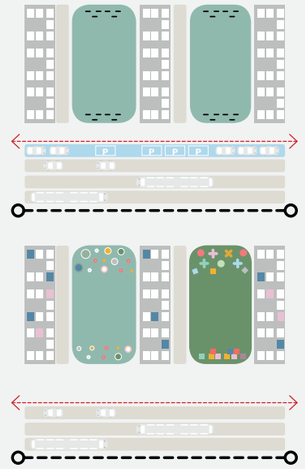
21

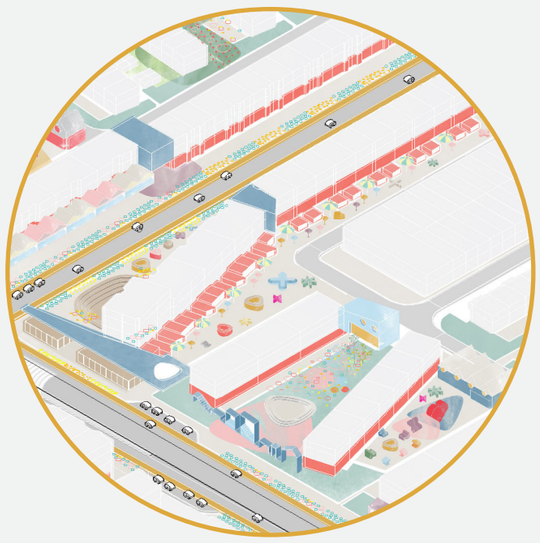
21-Community gardens.

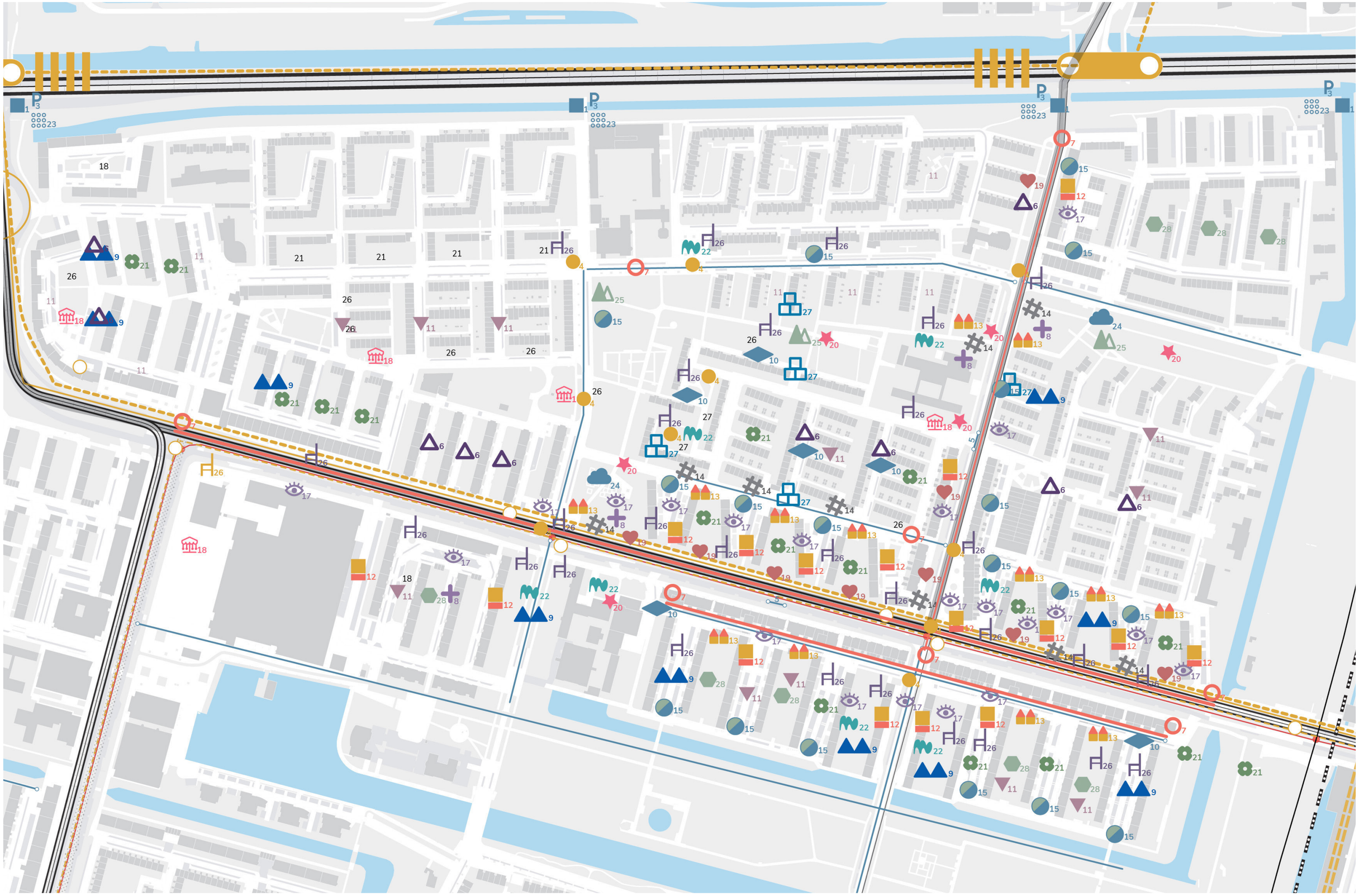


26

26-Playful and attractive urban furniture.







Undefined street borders

Oversized and unattractive green areas

Building front areas are dedicated to parking

Residual small green areas around parking

Undefined street borders & corner

Closed ground-floors

Unattractive urban furniture and street border

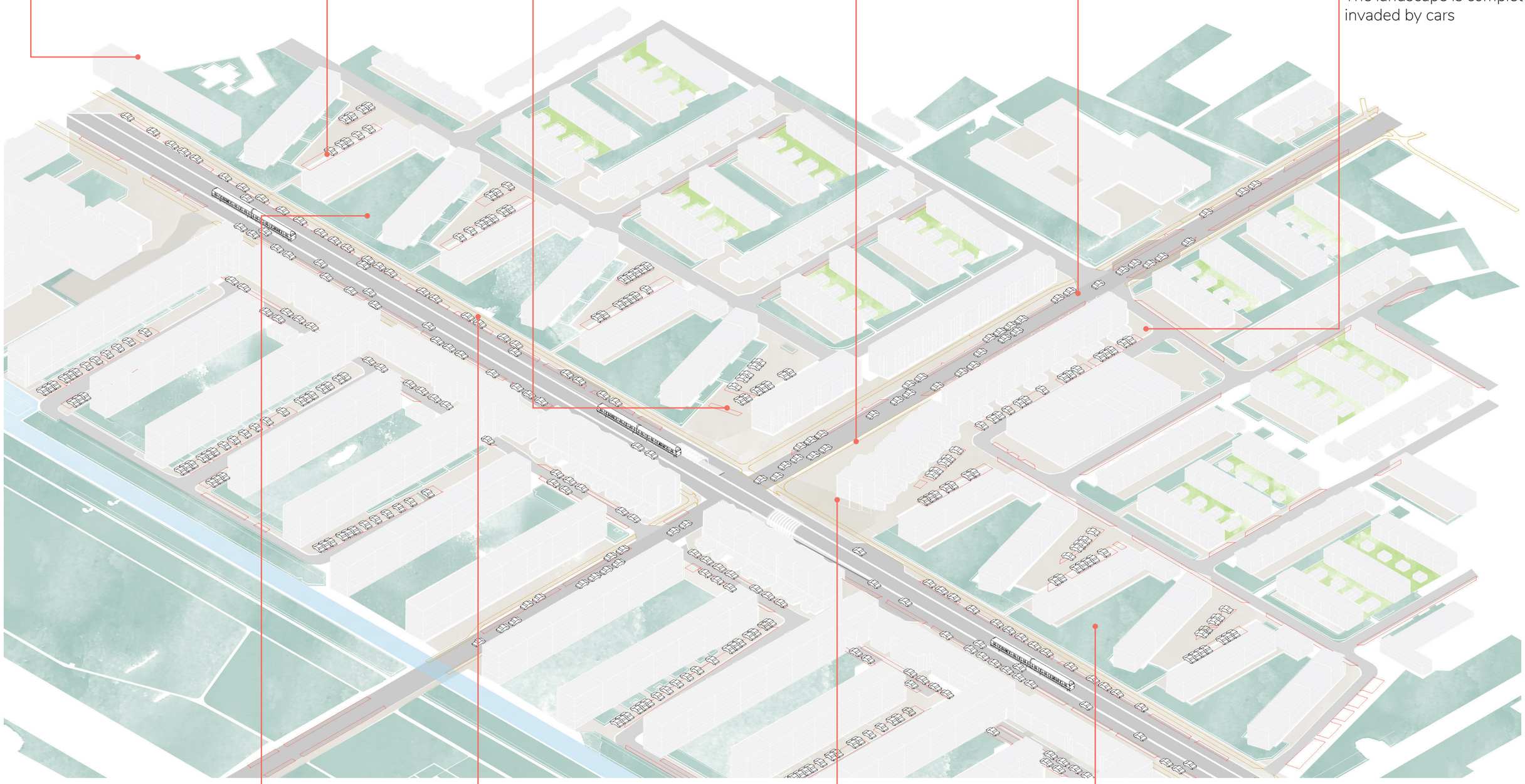
Noncontinuous commercial street

Unattractive street border and side parking

Small and big residual green areas

Commercial street towards the front side but very unattractive and closed towards the back side of the street

The landscape is completely invaded by cars



Green areas are attractive but closed to general public & underused

Unattractive sidewalks

Undefined street borders

Undefined and unattractive corners

Unattractive furniture

Closed ground-floor in the corner

Green areas are attractive but close to general public & underused

Unattractive sidewalks

Undefined street borders

8- More density & diversity of uses

12-*Life on the ground floors*

14-Completing the block perimeter & attractive corners

15-Mobility landscapes become public spaces

26-Playful and attractive urban furniture

8- More density & diversity of uses

12-Life on the ground floors

14-Completing the block perimeter & attractive corners

4-Nodes as meeting points

26-Playful and attractive urban furniture

26-Playful and attractive urban furniture

14-Completing the block perimeter & attractive corners

5-Paths between nodes & Neighborhood routes

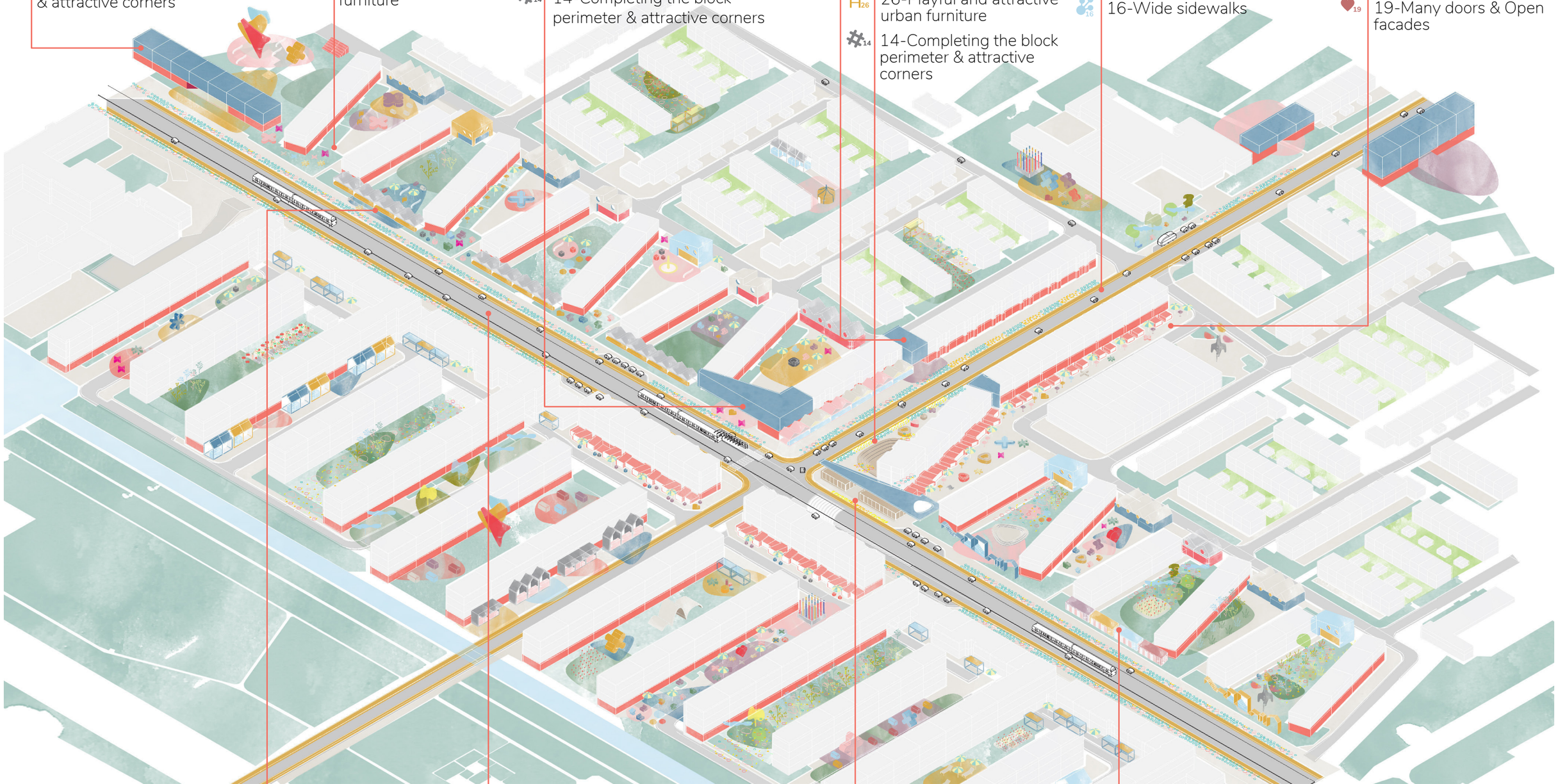
7-Enjoyment street (Passive & active pockets)

16-Wide sidewalks

12-Life on the ground floors

17-Scenes at eye level - Texture & Transparency

19-Many doors & Open facades



13-Functionally mixed oriented infill

16-Wide sidewalks

9-Tactical temporary interventions

5-Paths between nodes & Neighborhood routes

7-Enjoyment street (Passive & active pockets)

16-The Street as a social space - wide sidewalks

8-More density & diversity of uses

12-Life on the ground floors

14-Coxmpleting the block perimeter & attractive corners

13-Functionally mixed orient-ed infill

14-Completing the block perimeter & attractive corners

Unattractive sidewalks

Side parking

Unattractive & underuti-lized public space

Commerce attractive towards the street but highly unattractive towards back streets

Parking in-between buildings surrounded by neglected & residual green space

Green areas in between buildings are fenced and underutilized.

15 15-Mobility landscapes become public spaces

26 26-Playful and attractive urban furniture instead of parking

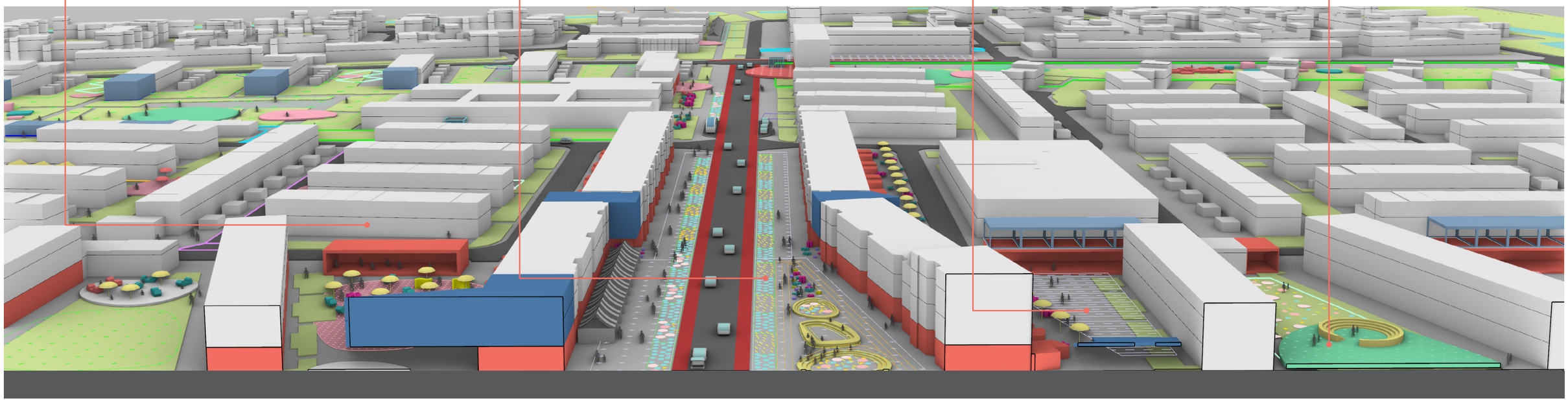
20 20-Public space acts as node of attraction with a variety of furniture for different uses and users.

26 26-Playful and attractive urban furniture on the edges of the street

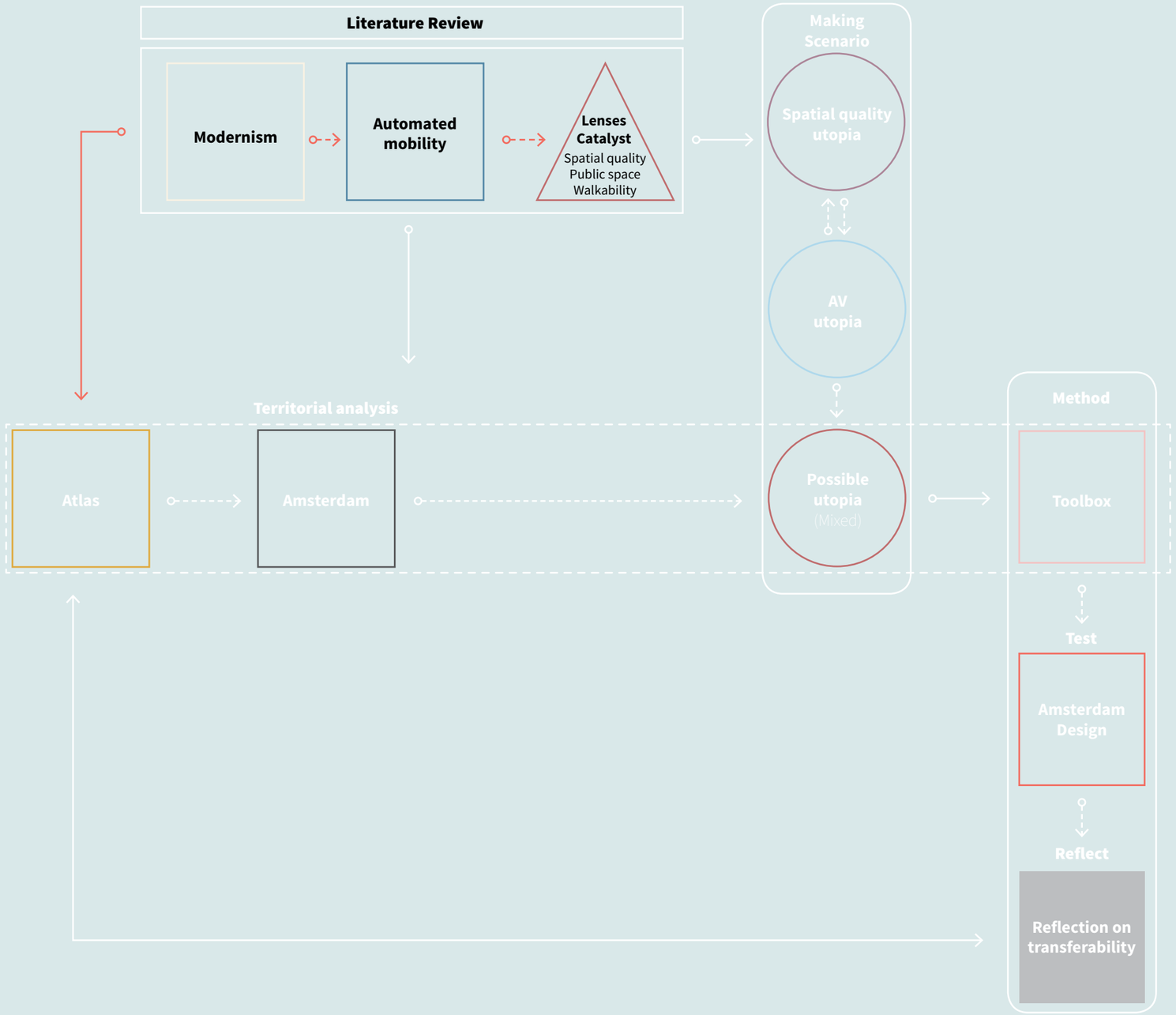
15 15-New relation between mobility landscapes and public space - commerce can open back streets towards reconverted parking spaces.

21 21-Community gardens, flower gardens and furniture to activate appropriation of the private gardens.

26 26-Playful and attractive urban furniture.



Reflection / Applicability Transferability



1.
Level of knowledge operability
The tool informs the design process.

2.
Level of knowledge creation & collaboration
More literature & more patterns.

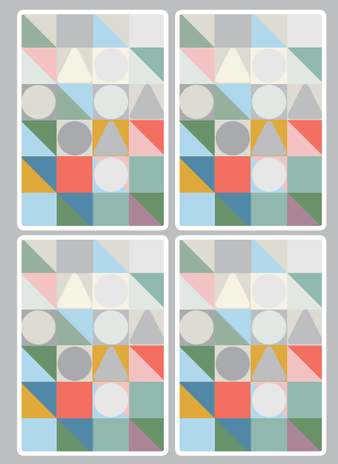
3.
Level of communication & participation
Participative processes with stakeholders & communities.

4.
Level of transferability
Inform intervention of modernist urban projects in different contexts.

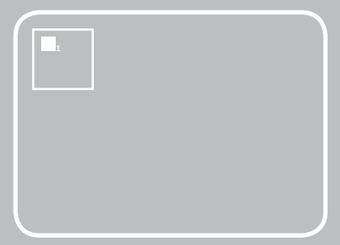
1.
Use the Online platform and select the material of your interest classified by problems or wishes related to territory you want to intervene.

2.
Print and cut the material related to the problems or wishes you are interested in

3.
Use graphics to connect problems and wishes with the possible patterns of intervention



4.
Use the pattern cards to have a better understanding on the meaning of each pattern



5.
Share and Integrate local knowledge to your proposal

Thank you!