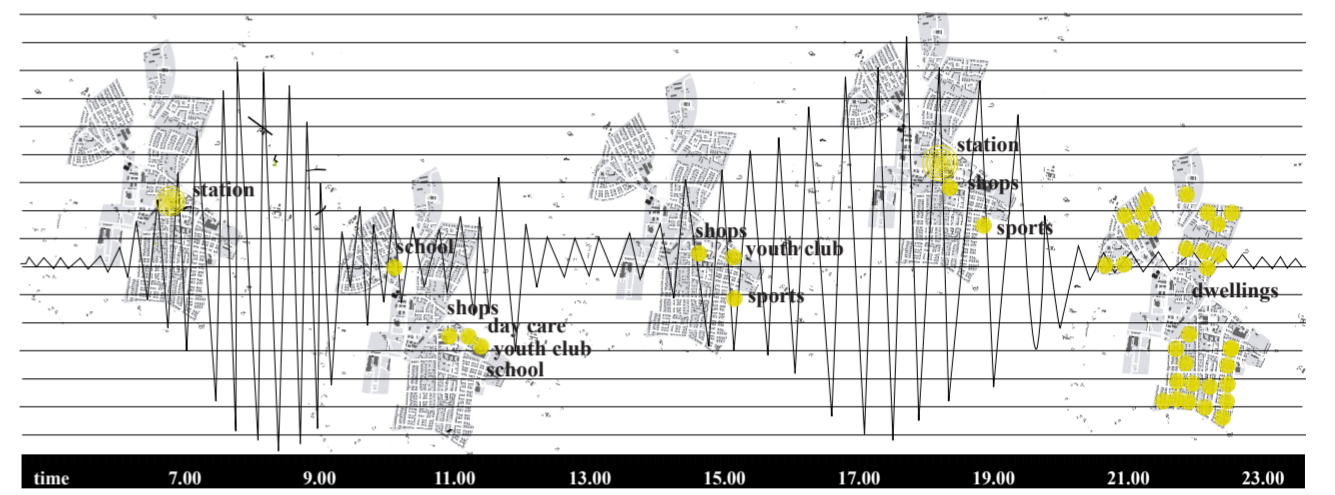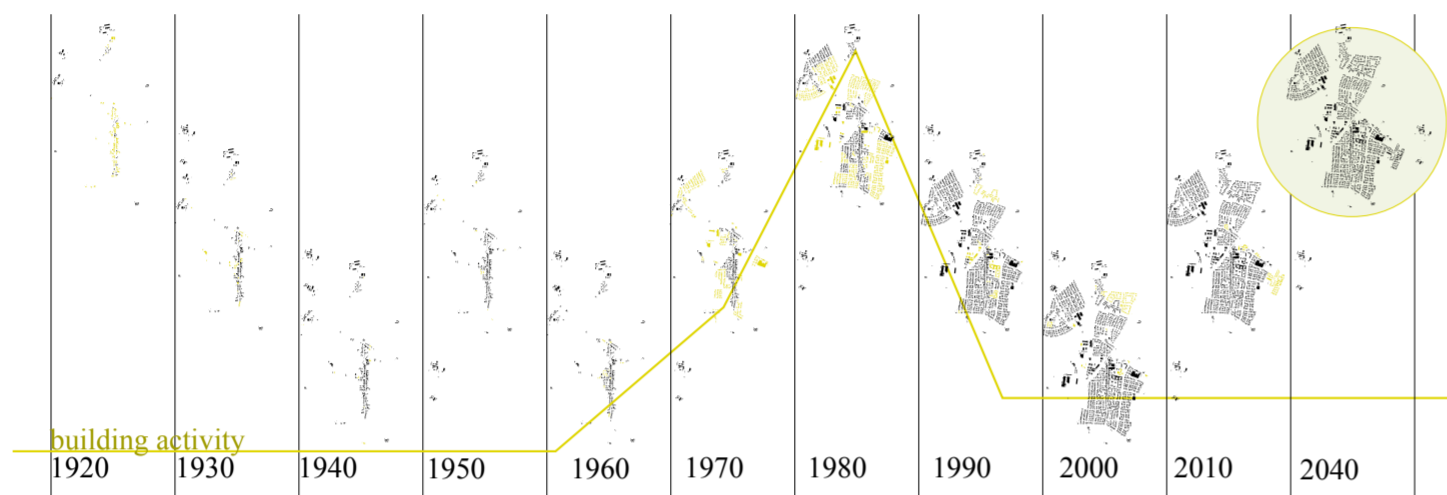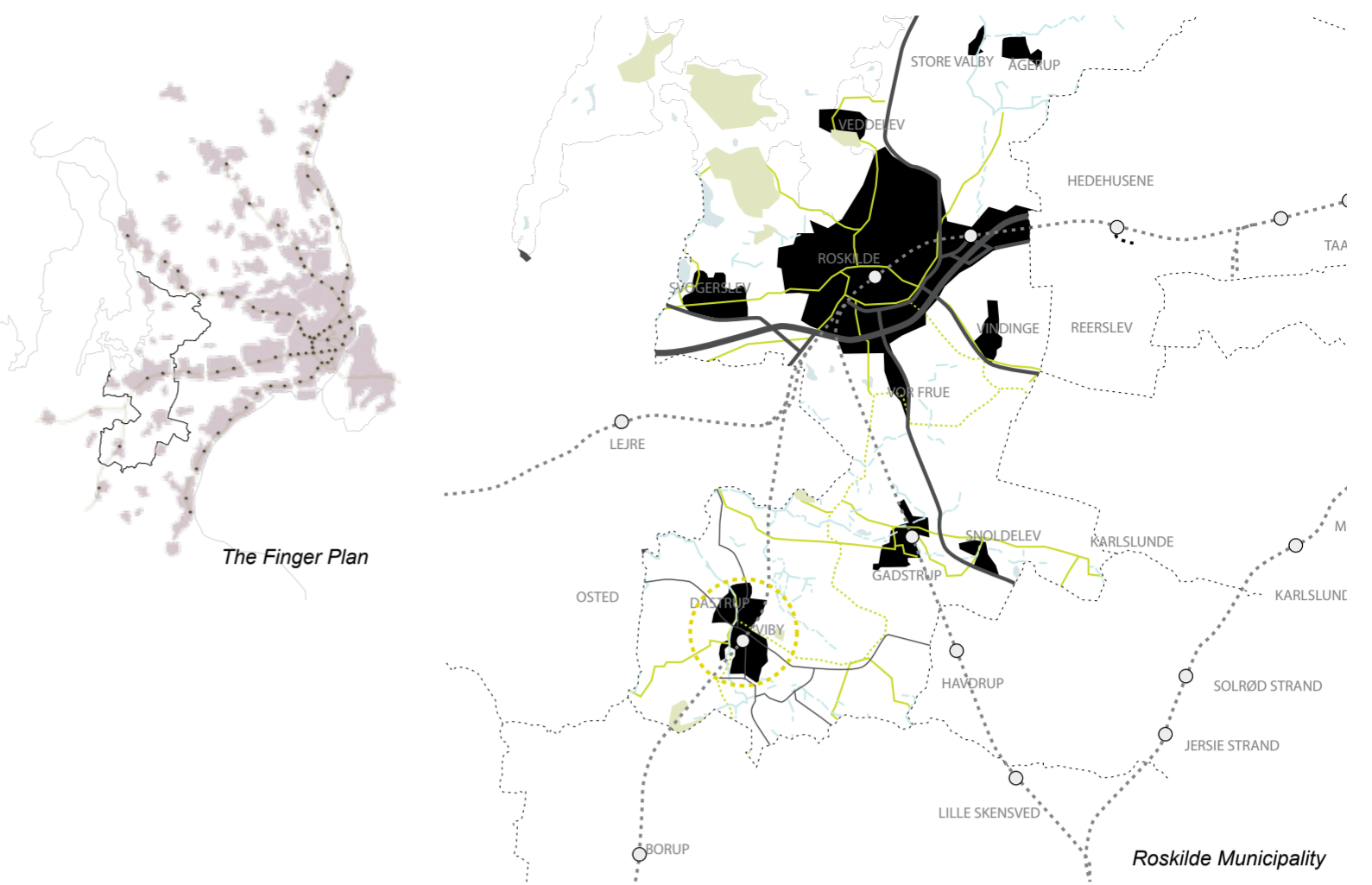# VIBY EXPANDING

Viby, located in the southern part of the Municipality of Roskilde, is a small suburban station-town with its 4360 inhabitants, acting as a commuter-town to Roskilde as well as the Danish capital, Copenhagen. Nonetheless, it is a town in the midst of a growth spur where the Municipality foresees a growth that will double its size with regard to population and physical expansion. This puts Viby in a transitional position as it awaits an exploding future as the suburban carpet of single-family houses unrolls itself, and also poses a challenge of how to ensure a socially, economically and ecologically sustainable development of this expansion.

At a regional scale, the expansion also places Viby in a pioneering position regarding the future role of small residential commuter-towns facilitating Copenhagen in its structural Finger Plan development. If these small-town communities all face major expansions as they relieve the pressure on Copenhagen's 'fingers', perhaps the development of such communities should to a greater extent draw on their local qualities of landscape and low densities than the Finger Plan outlines.

The Finger Plan

Roskilde Municipality

building activity
1920 1930 1940 1950 1960 1970 1980 1990 2000 2010 2040

station — station — shops — sports — school — shops — youth club — sports — shops — day care — youth club — school — dwellings

time 7.00 9.00 11.00 13.00 15.00 17.00 19.00 21.00 23.00

HISTORY REPEATING ITSELF

The dwelling typologies of Viby bear witness to the historical development of the town. The contemporary Viby has thus emerged from a history which reflects the general development of Danish society, and its current expansion and appeal to commuters has been an on-going tendency throughout semi-urban settlements in Denmark from the mid 20th century. Viby's future has by the municipality been delineated by a geometric circle around the town marking the maximum distance, 1500 m, commuters will travel to the station.

EVERYDAY INSTITUTIONAL LIFE

The commuter culture has great impact on the daily rhythm of Viby. The highest intensity peak of Viby is generated around the railway station in the mornings and afternoons, where the commuters leave and enter the town, hereby emptying out the dwelling enclaves during daytimes. Simultaneously, it is mainly the elder inhabitants and the young inhabitants of Viby who potentially can create life in the town during the hours of the day. However, the young children of Viby either spend their daytime in day care, nursery and schools, which are relatively introvert structures, encapsulating the rhythm of the young children.

LANDMARKS & AXES

Three main axes constitute the mental 'image' of Viby today: the railway line as a link and a barrier, the span of the two schools that includes several smaller institutions and the north-south recreational axis of parks and nature areas.
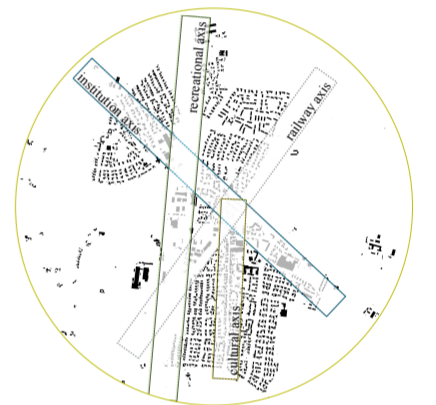
A RESIDENTIAL SLEEPY TOWN

- Residential (mostly detached houses)
- Industry
- Centre
- Institution

The single-family housing structure currently makes up around 90% of the building structure in Viby, and creates a low dense suburban grid structure, making it one of the main features of the town.

A LIFENERVE AND A BARRIER

The infrastructures of Viby can be defined as having three different layers. The internal infrastructure, the external infrastructure and the railway line with the station as Viby's primary transit hub. The railway station is thus a life nerve to the town, but also a barrier that cuts the town in two.

CONCEALED MAINTENANCE PROCESSES

The everyday spaces of Viby also evolve around the urban maintenance processes of the town, these being the spine of the town, securing consistence functioning of the town while constantly adapting to changing premises and demands. In spite of the importance of the processes they are almost hidden from the inhabitants of Viby.

SUBURBIA IS A BIOTOPE

- Gardens
- Farming
- Recreation
- Forest
- Water
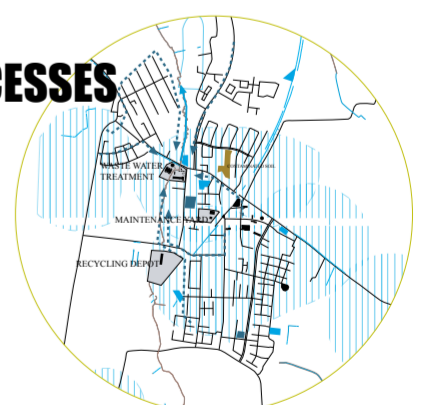
Viby's landscape consists green recreational spaces, but the square shaped gardens of the suburban dwelling typologies, not conventionally accepted as nature, constitute the primary green holes within the urban structure.

Vibygård
Ramsødalen
GL VIBY
Assendløsevej
DÅSTRUP
Dåstrup School
SKS Kraner (industrial landmark)
Torvet
VIBY STATIONSBY
Peder Syv School
Kildemosen
Viby Idrætsforening
Viby A
Ørstedsvej
Skousbo Forest
Syvbækken

Viby 1:15 000

1. welcome to viby sj.

VIBY AN INTERSPACE

LANDSCAPE URBANISM

Viby An Interspace finds its philosophical foundation in the theories of James Corner's landscape urbanism. Landscape urbanism can be boiled down to a single statement: it builds on the concept of landscape as the medium through which urbanism is generated.

The genesis of the method is a response to the fact that the contemporary city now is perceived through the lens of landscape. Consequently, landscape is displacing architecture's historical role as the basic building block of city making. Landscape has become the lens through which the contemporary city is represented, and the medium through which it in part is constructed. The use of landscape is argued by the fact that landscape is capable of reproducing urban effects by the organisation of the horizontal surface. This is in the contemporary condition of decentralization and decreasing density an appropriate tool for urban designers as the traditional static figure-ground planning is inflexible in relation to the transformation pace of the contemporary city. (Waldheim 2001, Landscape Urbanism: A Genealogy, p. 10)

LANDSCAPE

The notion of landscape is a key concept in landscape urbanism. James Corner relates the term 'landscape' in landscape urbanism to the meaning of the old German word *landschaft*, which does not refer to the idea of scenery, but to the environment of the working community comprising dwellings, pastures, meadows and fields - an intimate mode of relationships among the different actors on the field. Here Corner relates landschaft to the German *gemeinschaft*, which refers to those forms and ideas that structure society in general, meaning that landscape is to be understood as an occupied milieu with the effect of this occupation and its engagement over time. The term landscape thus no longer refers to a mere picturesque interpretation, but rather to a connecting surface that organizes objects, spaces and the dynamic mechanisms and events which act upon it. (Corner 1999, pp. 154)

Corner contrasts the landschaft understanding to the term *landskip*, which implies a picturesque perception of landscape, but also entails a denial of the deeper modes of existence, interrelationships, and creativity – a denial which conceals the agendas of those who commission and construct it, hereby limiting the design and planning of the field in shaping alternative interrelationships to improve human conditions. (Corner 1999, pp. 156-157) However, landskip is still an important parameter in the creation of images which are crucial to the urban designer as representation is the traditional groundwork of our discipline. The act of representation is therefore not neglected, but the concept of landscape is in landschaft elaborated to entail more meaning than just a picturesque representation.

Corner's definition of landschaft puts focus on the performativity of architecture rather than on exact aesthetic appearance. He thus seeks to understand the landscape as a living and performative surface with a constantly evolving character as result of both natural and cultural processes. However, by withholding the interpretation of landskip, Corner puts focus not only on the performativity of design, but also on the representational act as the tool of urban designers for the creation of images, a concept which merges the two terms.

a living system
A LIVING SYSTEM

Corner calls for a renewed ecological perception that, instead of promoting human domination over the non-human (Corner 1997, p. 87) or placing nature on a pedestal not to be touched by humans, works on the premises that the natural and cultural worlds cannot be seen as contradistinctions, but as interdependent constructions. Natural and cultural processes should be seen as part of the same ecology where cities are just as ecological as forests and rivers, as they are all part of the same ecosystem and together create mechanisms and interrelationships that spark a process of evolving into something else. Corner describes this ecology as integrative living systems, such as fluid, pliant, adaptive fields being responsive and evolving. The living system has the ability to absorb, transform, interact and exchange information with other agents working in its surroundings, it thus obtains the ability to handle and process movement. This interpretation of ecology calls for the constant need for cities and landscapes to be flexible, so they are capable of responding to changing needs, demands and potentials. (Corner 2003, pp. 58-63)

In this view ecology must find a new role when operationalised in architectural language, no longer just enabling a scientific study or prescription, but able to "*inform and embrace those poetic activities that create meaningful relationships between people, place and earth*" (Corner 1997, p. 88).

If we as designers and architects engage an ecological view where nature and culture are part of the same living system, this ecological view will manifest itself in the spatial and social worlds we attempt to create. The key here is the creative process by which we design these worlds. It is the interface that can create the meaningful relationships of which Corner speaks – the relationships which spawned the field of ecology to begin with. Design and architecture thus become the media through which nature and culture are articulated and signified as images – and this articulation is essential for the relationship we as humans have to nature, the environment and our own culture. If we wish to help bring forth a world where a meaningful relationship is established between humans and between humans and nature, the design must be a conscious attempt to do away with this externalisation of nature. Only then can we talk of solving the ecological crises and environmental strains of the world, as the problem begins with ourselves and our relations.

interspace [ĭn'tər-spās'] *noun, verb*
1. a space between things; to occupy or fill the space between; 2. an intensity of public space that is open for (a living system) and articulated as (image) programmatic evolution, surplus processes and biotopic flows (mechanisms).

images
IMAGES

A binding notion in Corner's comprehension of landscape and ecology is the concept of images. Images are here the media which deal with the establishment of new interrelationships between human and nature, and through this it stimulates a new perception of culture and nature as part of the same living system. Corner elaborates on images in his article Eidetic Operations and New Landscapes, by casting light on the forces of images. "*To restate an important point, no matter how objective and descriptive the claims for it might be, imaging always exercises agency, actively unfolding, generating, and actualizing emergent realities.*" (Corner, 1999, pp. 160) By this he states that images produce an appearance of what is otherwise invisible, such as when reading a book or listening to music where the images appear mentally. (Corner, 1999, pp. 159) Corner defines the act of imaging as eidetic operations, which he denotes as "*Specific ideational techniques for construing (imaging) and constructing (projecting) new landscapes.*" The eidetic operation is therefore to be understood as ideas constructing an image and the ability to project the image in space. The role of the architect is thus less to picture activities than to facilitate and instigate images in the creation of space. (Corner 1999, pp 161)

In other words, the concept of images is to be understood as a way of designing performatively with space, utilizing temporal changes in the creation of space to establish meaningful relationships. In this way, images become the interface in which human-to-human and human-to-nature relationships are established. Working with images thus becomes a performative act in it self as it exposes meaning in space and thereby mentally establishes the space. Additionally, by actively engaging the different processes on site through images it is possible to reveal a deeper layering than is otherwise visible to the eye.

mechanisms
MAPPING MECHANISMS

The concept of images sheds light on the task of the urban designer, bringing focus to the actual activities of creativity in the creation of images. A concern here is according to Corner not so much the kinds of images the designer brings forth, but rather the kind of imaging activity which is activated in the process of generating images. Here he suggests mapping as a method of creating images, as mapping incorporates and "plays" with different processes on the site.

Corner emphasizes the capacity to reformulate what already exists as an important step in the art of mapping – a reformulation of not just physical attributes such as topography, rivers, roads and buildings, but also the various hidden forces that shape the system of a given place such as natural processes, history, economic and legislative conditions; political interests, regulatory mechanisms and programmatic structures. By visualising such connections and interactions, mapping actively participates in unfolding future potentials and unfolding a design process. (Corner 1999, pp. 149 - 151)

The act of mapping is therefore capable of proposing and dealing with new interrelationships and processes with the potential of generating new form and images. It hence becomes a new design method which addresses and works positively with the mechanisms of the contemporary city.

'Fields', 'extracts' and 'plottings' comprise the operational structure of mapping. The field is the framework in which the extracts are organized, a graphic system consisting of orientation, scale, coordinates, units of measure and the graphic projection. Extracts are the things observed and drawn into the framework, being selected, isolated and pulled out from their original context. Lastly, plotting draws out the latent relationships between the extracts of the field. It is here that potentials are uncovered as plotting entails a creative interpretation process of the map. (Corner 1999, pp. 164 - 165)

This operational structure can also be applied to a design process where "fields" becomes the framework of the plan, the living system, and "extracts" the information at work at the site, the mechanisms. Through an operation of "plotting" new interrelationships are instigated which can unfold various new shapes and forms within the framework, an act of imaging. In this view the mapping in itself becomes the open plan that works with the complex layers of the contemporary city, not programmed or predetermined, but with space for transformation and unpredictability. It becomes a plane that images the real world as constantly producing new unpredictable opportunities.
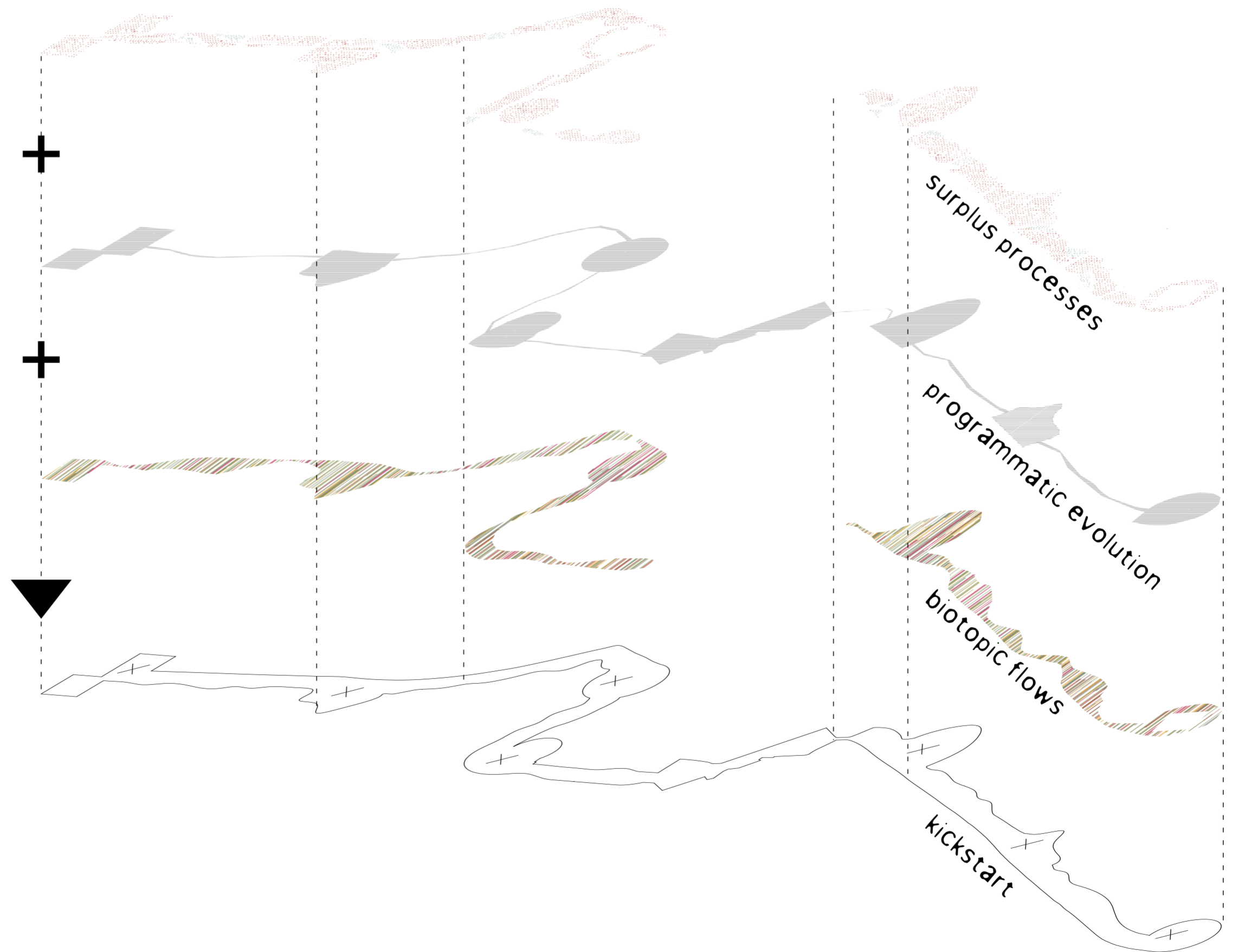
2. theoretical foundation
VIBY AN INTERSPACE

FOUR ECOLOGICAL SYSTEMS

Viby an Interspace intervenes on Viby's current direction of expansion by proposing a public space, the *Trace*, as the overall structural principle for the town - a public space that consolidates over time concurrently with the construction of suburbia's detached houses. This is a way of grasping the mechanisms of suburbia's market forces and reversing their typical self-interested logic to support societal needs of dialogue, tolerance and sustainability. The project thus pursues a vision where urban development becomes a question of balancing the power of the market forces with the vision of a general public good - not in the sense that the two should be equal, but rather that they contribute to the well-being of each other instead of engaging in a constant battle.

Four ecological systems will shape four landscapes that consolidate the Trace over time in a living system. Firstly, a kickstart process will initiate the transformation process of Viby through a landscape of temporary constructions and programmes. Secondly, a programmatic evolution of public activities is initiated by establishing a landscape (an open school system) which can absorb future programmes and events. Thirdly, building activity constantly produces surplus soil and water entailing a constantly expanding landscape of topography that can ensure demarcation, variation and recreation. Lastly, biodiversity is encouraged through a landscape of biotopic flows and corridors.

strawberries

soil

SAMFUND

DRAMA

dandelions

MUSIK

daisies

BEVÆGELSE

water

KØKKEN

SPROG

rhubarb

MEDIATEK

water

roses

AUDITORIUM

rhododendron

SCIENCE

redcurrant

soil

fruit trees

KUNST

strawberries

soil

SAMFUND

DRAMA

dandelions

MUSIK

daisies

BEVÆGELSE

water

KØKKEN

SPROG

rhubarb

MEDIATEK

water

roses

AUDITORIUM

rhododendron

SCIENCE

redcurrant

soil

fruit trees

KUNST

surplus processes

programmatic evolution

biotopic flows

kickstart

3. a living system

VIBY AN INTERSPACE

REVERSING THE MECHANISMS OF SUBURBIA

Viby An Interspace reverses the image of suburbia and marks a shift away from the perception of a district that is dull and conformist to that of a landscape that is rich, lively and educational. Public spaces are vital in shaping a common consciousness of the world in which we live, why the the Trace will function as the future arena of a more optimistic attitude towards suburban areas, revealing their potentials and relations.

With the erection of new suburban homes follows a range of accompanying mechanisms, these being the mechanisms of *programmatic evolution*, *surplus processes* and *biotopic flows*. These are often seen as standard mechanisms taken for granted in the ever-expanding suburbia, but here they are perceived as potentials for an innovative design for suburbia that draws on and acknowledges, rather than ignores, the mechanisms that it is made of.

A manner of imaging brings to life the mechanisms of Viby's suburban market forces. This process of imaging is a way of articulating the mechanisms of Viby to the public and is achieved through the three imaging acts of UN-BLACKBOXING, PRE-LINKING and RE-CONTEXTUALISING. These three acts thus convert the mechanisms into tangible design principles that determine the shape, direction and content of the physical proposal.

CONSOLIDATION OF THE TRACE

Programmatically, the Trace is consolidated by the need for a continuous expansion of institutional programme in Viby. The Trace is thus an intersecting 'institutions belt' - here manifested as a course dotted with institutional programmes, the interspaces, and connected by the remaining belt of public activities and infrastructure for the whole town. The Trace culminates at Viby's infrastructural hub, the station, where all the flows and pulses of the town are accentuated.

Physically, the Trace is consolidated by the increasing levels of soil and stormwater management that are organised to shape a spatially distinctive landscape stretching across Viby. This landscape is strengthened and given an extra layer by using conventional 'landscape' and suburban elements as vegetation.

The Trace intensifies around a number of points, so-called Interspaces, where programmatic and spatial experiences are intensified. These Interspaces act as beacons in the Trace, ensuring both variation as well as coherency.

images

re-contextualising

Suburban public spaces become a common ground, a collective arena, for relations to play out and for new discourses to take shape. RE-CONTEXTUALISING establishes such new relations as a way of tipping the scales and thereby re-considering the definitions of authentic and artificial and of urban and sub-urban.

un-blackboxing

Suburban public spaces are spaces of the everyday and should be designed as such. UN-BLACKBOXING proposes that everyday processes and life should constitute public space and in this way be rendered visible as to expose the process for the public eye and public mind.

pre-linking

Suburban public spaces can act as a mediating space for a sustainable integration of new into old, of site into context. PRE-LINKING suggests an act of shaping this integration in the form of physical infrastructures across the townscape as well as mental links in the form of feelings of ownership and responsibility.

mechanisms

programmatic evolution

One of the most noticeable processes in Viby are the daily rhythms and pulses of the commuting residents. This pulse involves the station area peaking during rush hours, large institutional areas buzzing with life during the hours of the day and an active participation in local associations in the evenings and weekends – pulses which only will increase in intensity with the expansion of Viby.

stretch

The pulses of Viby are extended throughout town by stretching the institutional programme that generate them and integrating the everyday life into the public spaces of the Trace. As the need for new institutions increases, these institutions will be the foundation for the Trace and institutional life becomes public life. Institutions thus become the bearing programmatic structure for the Trace and the definition of urban life is expanded upon to also include the daily activities of children in school and the elderly of nursing homes.

display
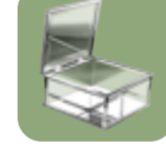
With institutions as the main programme of the Trace, its processes are turned inside out as to reflect the everyday activities in public. The intensities of the institutions are thus no longer hidden away but instead put 'on display' as an active part of Viby's suburban life.

circulate

The rhythms of Viby are linked by designing for the flows of the town. With the idea of a stretched institutions system follows the circulation within, securing flow and movement throughout the Trace. Here the station plays a vital role as an interchange hub not only between different transport types but also as an interchange between the different types of urban life in Viby: the commuting, the institutions and the spare-time associations. Thus diverse user groups meet and share spaces throughout the Trace, culminating at the station

surplus processes

As Viby slowly expands with new suburban houses follows residue soil from the dug-up foundation as well as stormwater runoff from the now impermeable areas of rooftops and driveways. These surplus processes are conventionally perceived as setbacks of building activity in need of a practical solution often hidden away from the public eye.

drape
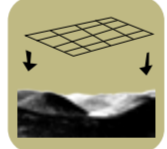
The surplus processes of soil and water management hold great potential as strong landscape elements which are clear to the human eye. Soil and water are thus used to symbolise the idea of landscape to the public. When 'draped' with various programmatic and material surfaces it is hoped that new images and perceptions of landscape can emerge in minds of the people of Viby.

inform

The recreational and aesthetic value of the surplus processes make them well-suited for shaping the Trace, and by rendering these processes visible in public space as informative features, the inhabitants will begin to acknowledge the underlying processes that drive our cities.

demarcate

The strong visual and spatial effects of the surplus processes points to their demarcating qualities, and they are here used to clearly territorialise the Trace as a public space.

biotopic flows

In spite of suburbia being the dominant landscape typology in Denmark regarding population density, 'authentic wild nature' is seemingly still the strongest landscape typology in the minds of most Danes. As suburbia with its visual elements of hedges, driveways and gardens continuously replaces sections of the traditional Danish landscape, perhaps it is time for a common reflection upon the meaning of such a replacement.

juxtapose

A shift away from the sentimental view upon the Danish landscape is proposed, where suburbia is appreciated as a landscape typology and where nature is recognised as being man-made and thus as artificial as the rest of the country through a juxtaposition of suburbia and nature. The suburban replacement is thus viewed as a shift from one stage of landscape to another, rather than an erasure of true nature, and these shifting landscape typologies should be articulated in the Trace.

invite

Suburbia is drawn into the Trace through the use of strong visual identities such as the hedge and the driveway. The public sphere is thus invited into the world of suburbia and its usually private activities, visualising potential and beauty in suburban spaces. The aesthetics of suburbia are thus given a twist for a more optimistic and appreciative attitude towards suburbia.

drag

Drawing on suburban elements in public space is an infrastructural and visual connection to the neighbouring context from which they spring.
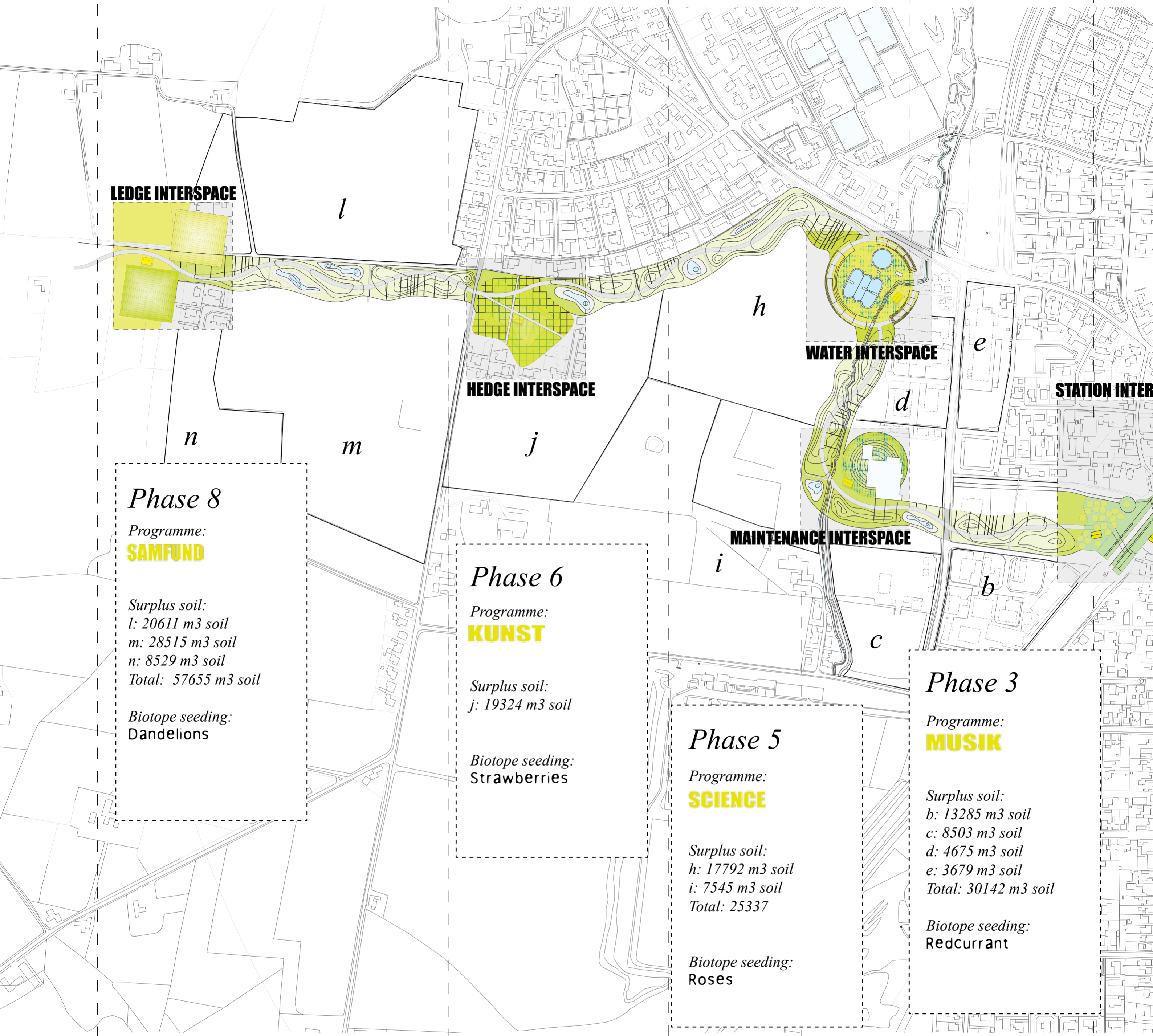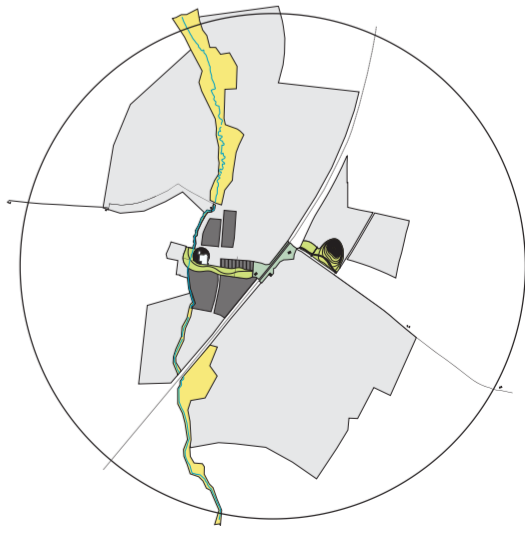
4. mechanisms at play as images

VIBY AN INTERSPACE

LEDGE INTERSPACE

l

HEDGE INTERSPACE

WATER INTERSPACE

h

e

d

STATION INTER

n   *m*   *j*

MAINTENANCE INTERSPACE

i

b

c

Phase 8

Programme:
SAMFUND

Surplus soil:
l: 20611 m3 soil
m: 28515 m3 soil
n: 8529 m3 soil
Total: 57655 m3 soil

Biotope seeding:
Dandelions

Phase 6

Programme:
KUNST

Surplus soil:
j: 19324 m3 soil

Biotope seeding:
Strawberries

Phase 5

Programme:
SCIENCE

Surplus soil:
h: 17792 m3 soil
i: 7545 m3 soil
Total: 25337

Biotope seeding:
Roses

Phase 3

Programme:
MUSIK

Surplus soil:
b: 13285 m3 soil
c: 8503 m3 soil
d: 4675 m3 soil
e: 3679 m3 soil
Total: 30142 m3 soil

Biotope seeding:
Redcurrant

322 NEW HOUSES   *107 NEW HOUSES*   *140 NEW HOUSES*   *168 NEW HOUSES*

5. the trace
VIBY AN INTERSPACE

Phase 2

Programme:
BEVÆGELSE

Surplus soil:
a: 53974 m3 soil

Biotope seeding:
Rhubarbs

Phase 4

Programme:
SPROG

Surplus soil:
f: 32473 m3 soil
g: 12203 m3 soil
Total: 44676 m3 soil

Biotope seeding:
Daisies

Phase 7

Programme:
DRAMA

Surplus soil:
k: 17792 m3 soil

Biotope seeding:
Rhododendron

...SPACE

a

SOIL INTERSPACE

f

DRIVEWAY INTERSPACE

Phase 1

Programme:
MEDIATEK
KØKKEN
AUDITORIUM

Surplus soil:
none

Biotope seeding:
Fruit Trees

k

EDGE INTERSPACE

g

300 NEW HOUSES   *248 NEW HOUSES*   *100 NEW HOUSES*

6. the trace
VIBY AN INTERSPACE

A PUBLIC BELT
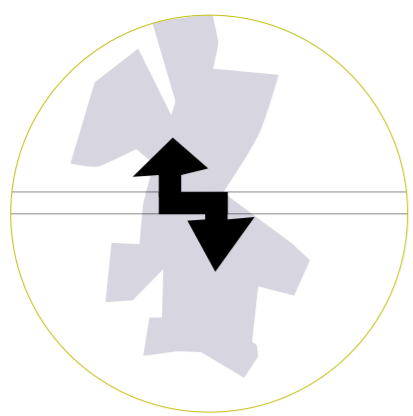
The Trace intervenes on Viby's existing urban fabric by crossing the town's central area.
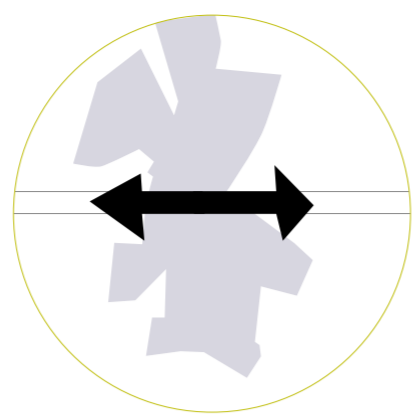
The Trace reaches into the new expansion areas, thus becoming an intervention not only for the existing town, but also for the future.
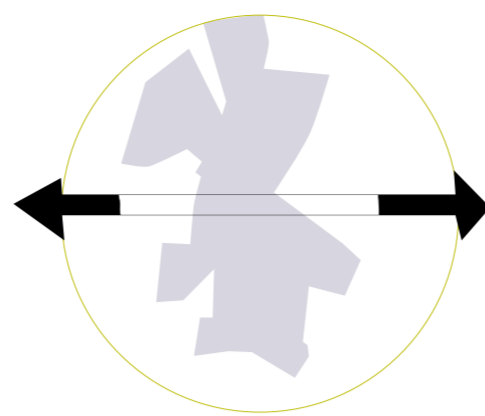
The Trace connects to the regional pathway system of Roskilde Municipality, linking extensive landscapes to more local spaces of Viby.
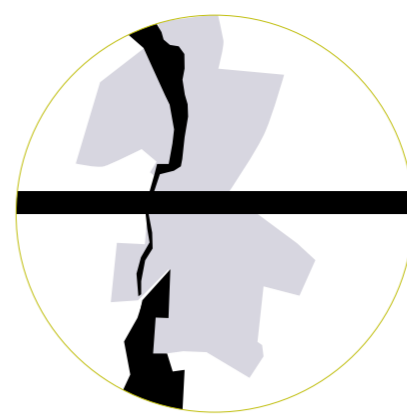
The Trace extends Viby's network of public spaces to shape a public 'cross' together with the existing north-south series of parks.
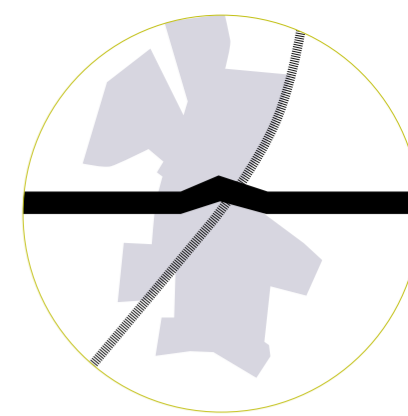
The Trace bridges the barrier that is the railway, thus connecting the two halves of Viby.

THE TRACE

The total area of the Trace.

EXTERNAL FORCES
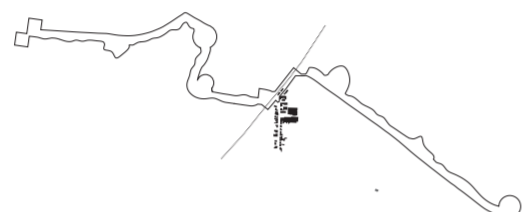
As it passes through the station area, the Trace offers a proposal for the rejuvenation of the centre.

The Trace becomes a structuring space for Viby's industrial district - a major urban regeneration area in the town.
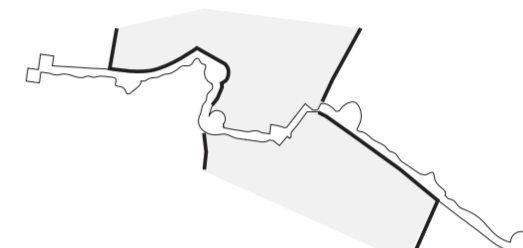
The Trace reaches into the surrounding farmlands of Viby where future expansion will take place, thus commenting on the suburban edge.

PROGRAMMATIC EVOLUTION
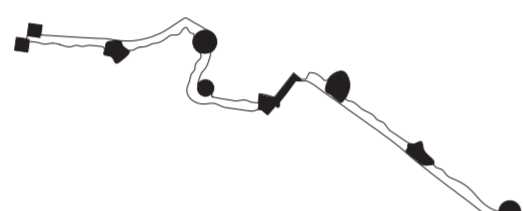
The Trace intensifies around eight Interspaces.
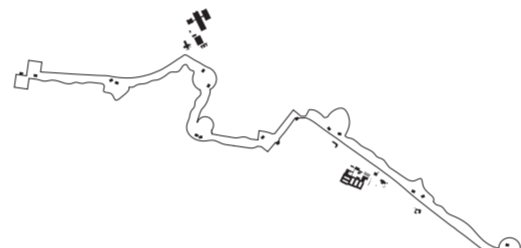
The two existing schools, Dåstrup School and Peder Syv School, unite as an interconnected school system with the pavilions.
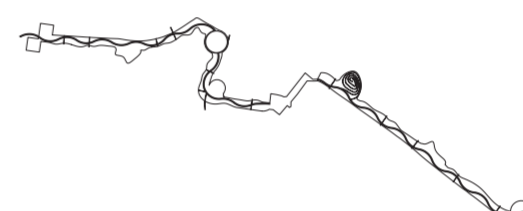
The institutional programmes of the Trace interconnect and circulate through the path system of the Trace.

SURPLUS PROCESSES
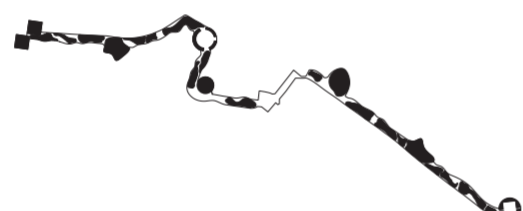
The topography of the soil is a strong landscape elements that territorialises the area of the Trace.
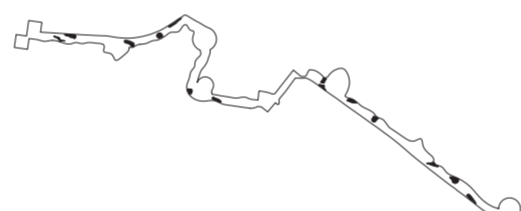
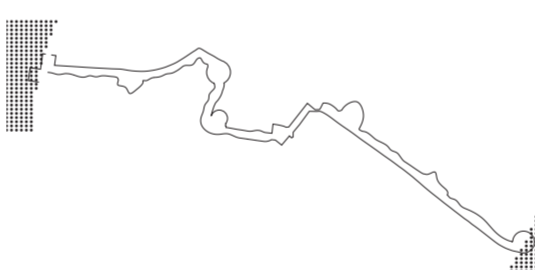*Water retention basins treat rainwater while marking minor intensities of human activity in the Trace.*
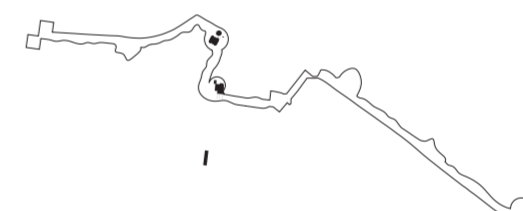
The Trace connects to the existing water treatment plant and proposes a newly established maintenance yard in the SKS-building.
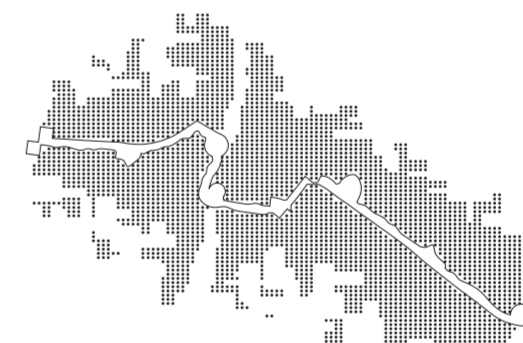
BIOTOPIC FLOWS

The suburban landscape of the Trace intersects the 'restorative' landscape of the north-south belt.
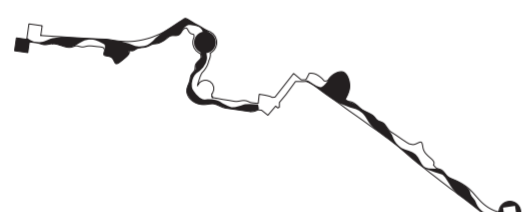

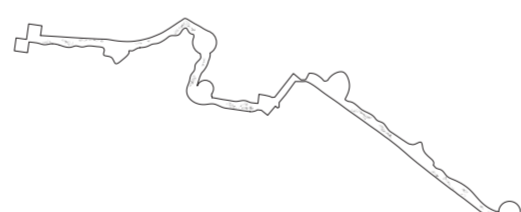*The 'resourcist' landscape of the surrounding aricultural fields is met by the Trace.*

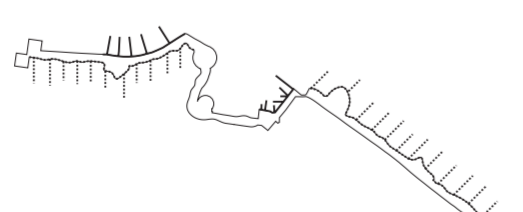*The Trace is open for the suburban wildlife of its context to occupy its landscapes.*

As an ecological corridor, the Trace allows for the dispersal of suburban flora and fauna.

Seeding zones within the Trace are planted with typical suburban plant species to support the local biodiversity.
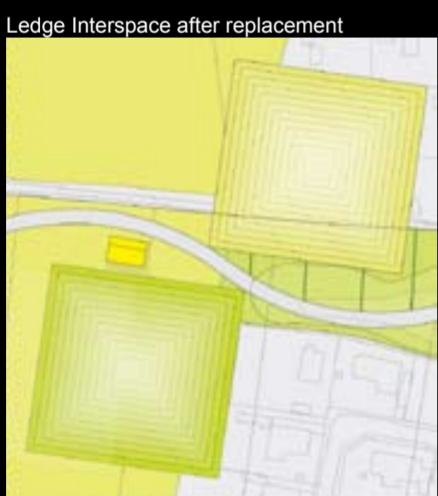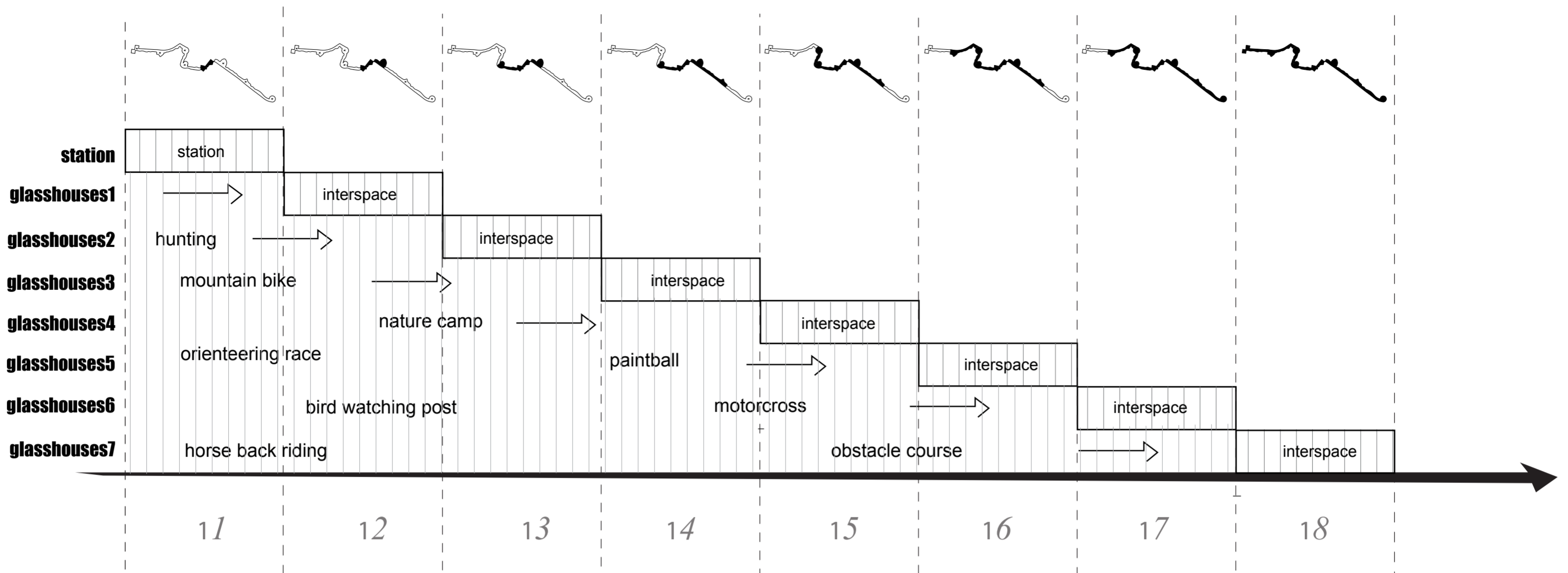
IMMEDIATE CONTEXT

Major parts of the Trace's edge is that of the hedge, thus allowing the private sphere of the garden direct access to public space.

The Trace runs parallel to several roads during its course, securing access zones and public exposure.

7. tracing details

VIBY AN INTERSPACE

	11	12	13	14	15	16	17	18
station	station							
glasshouses1		interspace						
glasshouses2	hunting		interspace					
glasshouses3	mountain bike			interspace				
glasshouses4	nature camp				interspace			
glasshouses5	orienteering race			paintball		interspace		
glasshouses6	bird watching post				motorcross		interspace	
glasshouses7	horse back riding				obstacle course			interspace

TRANSPARENT SHELLS

Marking the territory of public, glasshouses are placed throughout the Trace. Transparent shells in an open landscape, these glasshouses are open for temporary use by the people Viby until a more permanent construction is built with the establishment of the Interspaces. In the meantime, the glasshouses employ an unhurried process of mentally incorporating the surrounding farmlands into the domain that is Viby.

Maintenance Interspace after replacement

Ledge Interspace after replacement

FAR AWAY HORIZONS

The Trace stretches far and wide, and before new housing areas have been erected, several of the glasshouses will seem as if unintentionally placed in the midst of the still active farmland - especially around the outermost areas such as the future Ledge Interspace. This includes the far away horizons of the Danish landscape as an active element within the Trace and as an image of Viby.
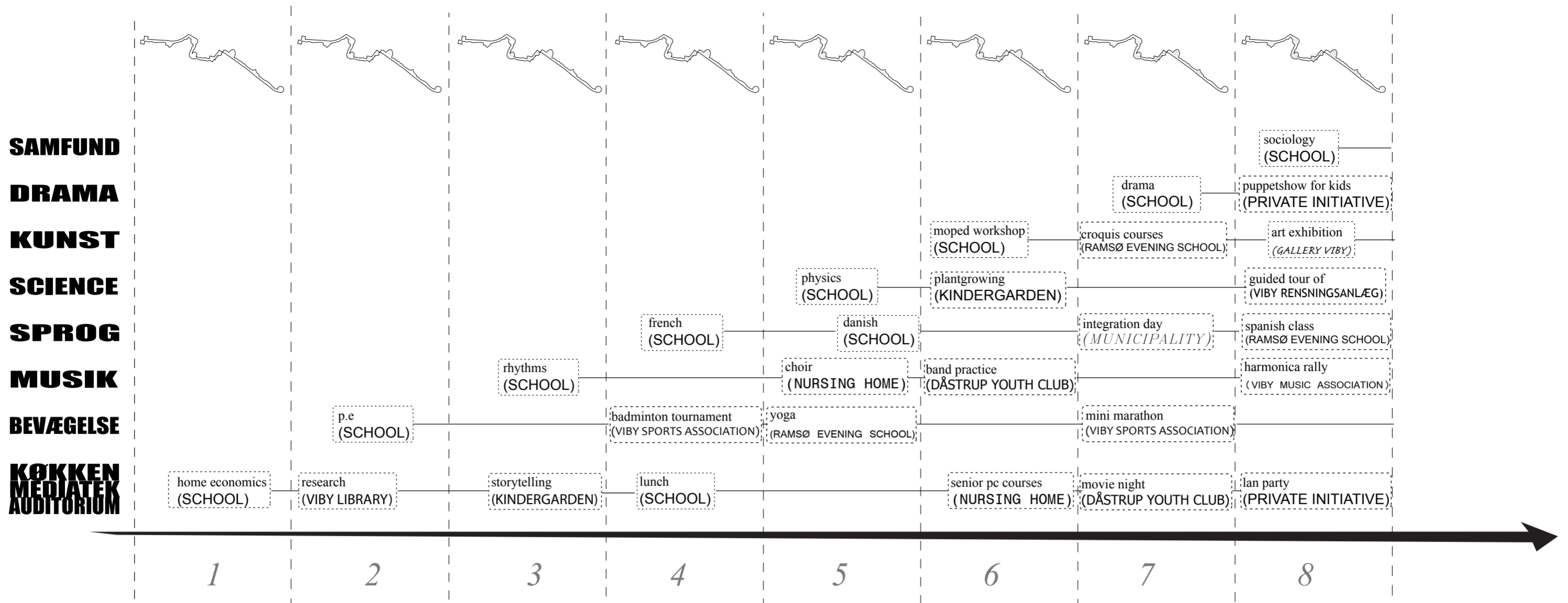
The urban development of Viby takes off with a kickstart process.
Here the area of the Trace is purchased by the municipality and reserved as a public space which will consolidate over time.
Simultaneously, seven temporary constructions in the form of glasshouses are placed throughout the Trace to mark the position of each of the future Interspaces and institutions programme. The glasshouses are open constructions receptive for occupation by the population and visually strong as they highlight the act of juristically reserving the area of the Trace as a public area.
Finally, the beginning of the phased development of Viby's expansion is marked through a rejuvenation of the centre of the town – the station area. This is a way of consolidating the Trace at Viby's vital infrastructural hub and notifying the local population as well as the whole region that a transformation process is to come.

Financially, the station rejuvenation is seen as part of the Municipality's already planned investment in the centre area, and here it is proposed that this investment be used to create a new brand for Viby in harmony with the concept of the Trace and its notions of re-versing, un-blackboxing and de-contextualising. The rest of the Trace will be an exceptionally low-budget intervention consisting only of the inexpensive standard glasshouses well-known from suburban gardens, and making use of existing roads and paths to ensure access and flow throughout the belt.

The timeframe of the kickstart process intensifies around the first couple of years of Viby's development, as this is when the abovementioned actions will take place. The glasshouse constructions will stand until the arrival of future development and each glasshouse is gradually replaced by the design for an Interspace. The effect of the glasshouses will thus slowly retreat over time as development catches up.

8. kickstart
VIBY AN INTERSPACE

	1	2	3	4	5	6	7	8
SAMFUND								sociology (SCHOOL)
DRAMA							drama (SCHOOL)	puppetshow for kids (PRIVATE INITIATIVE)
KUNST						moped workshop (SCHOOL)	croquis courses (RAMSØ EVENING SCHOOL)	art exhibition (GALLERY VIBY)
SCIENCE					physics (SCHOOL)	plantgrowing (KINDERGARDEN)		guided tour of (VIBY RENSNINGSANLÆG)
SPROG				french (SCHOOL)	danish (SCHOOL)		integration day (MUNICIPALITY)	spanish class (RAMSØ EVENING SCHOOL)
MUSIK			rhythms (SCHOOL)		choir (NURSING HOME)	band practice (DÅSTRUP YOUTH CLUB)		harmonica rally (VIBY MUSIC ASSOCIATION)
BEVÆGELSE		p.e (SCHOOL)		badminton tournament (VIBY SPORTS ASSOCIATION)	yoga (RAMSØ EVENING SCHOOL)		mini marathon (VIBY SPORTS ASSOCIATION)	
KØKKEN MEDIATEK AUDITORIUM	home economics (SCHOOL)	research (VIBY LIBRARY)	storytelling (KINDERGARDEN)	lunch (SCHOOL)		senior pc courses (NURSING HOME)	movie night (DÅSTRUP YOUTH CLUB)	lan party (PRIVATE INITIATIVE)

INTERSPACES

The programmatic evolution of the Trace is supported by the Interspaces. The Interspaces are public spaces which the Trace intensifies around, and each of these spaces is programmed as having a school function. This is a response to the fact that the institutional system of schools, kindergartens, elderly homes and spare-time activities is one of the most vital programmes that must be able to keep up with Viby's expansion – services that enable Viby as a commuter-town to function. These institutions take up quite some space compared to other programmes in the town (with the exception of housing). They are therefore especially visible in the urban landscape, and these places are filled with people and life, children and elderly, when the rest of the town is emptied out by the commuters during the working hours of the day.

This project attempts to grasp this dynamic and sees a potential in the extension of the school as a basis for creating new public spaces that build on the everyday life of the town and with a stakeholder, the municipality, with an interest in doing so. It is therefore proposed that the existing two schools in Viby, Dåstrup School and Peder Syv School are extended as a united school system with shared facilities.
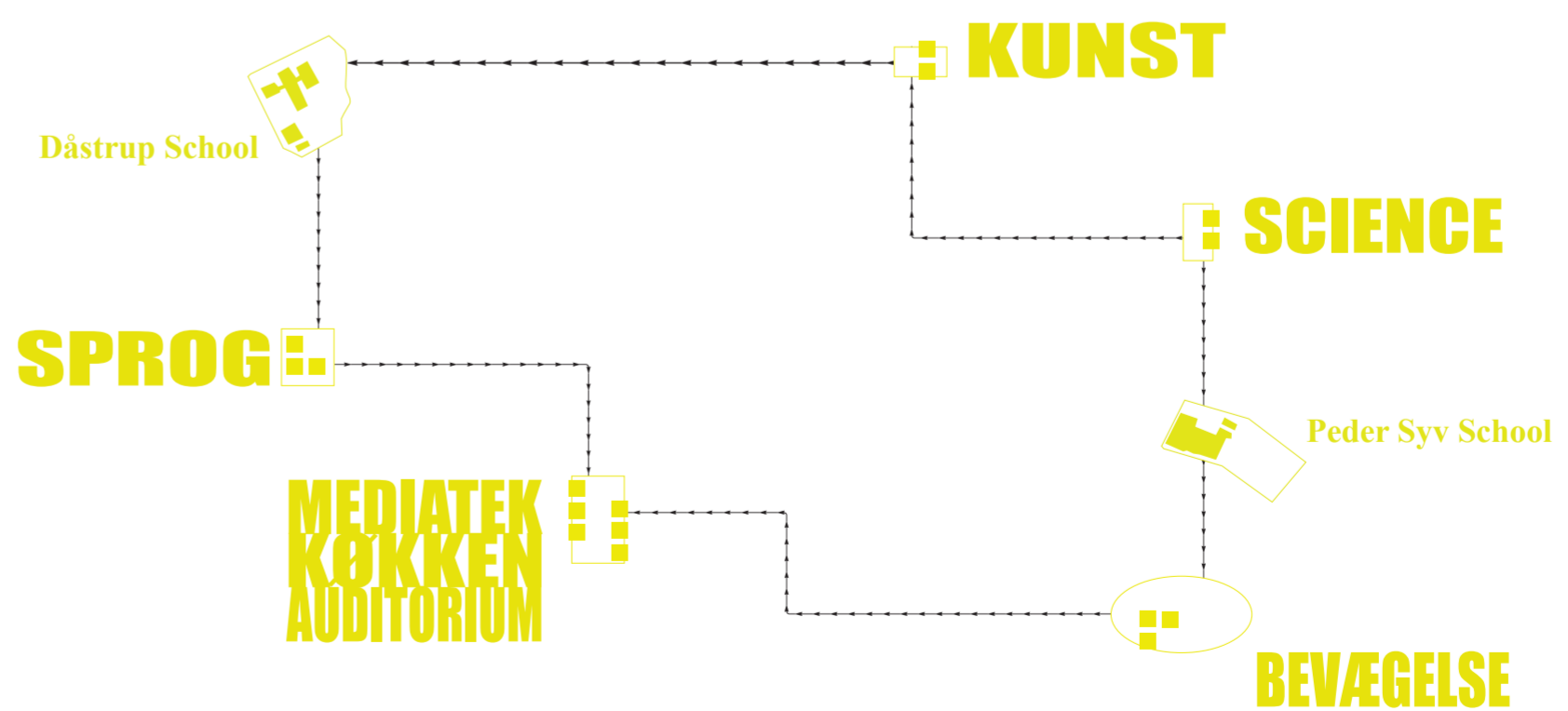
PROGRAMMATIC EVOLUTION

The Interspaces of the school become the programmatic framework for the Trace. Expanding the school system in this way creates a flexible system where the school is in fact never finished, but always open to additional elements and spaces as education requirements evolve over time. And more importantly, the Interspaces will over time also provide Viby with more and more space that the general population can occupy through spare-time activities, evening courses, associations and local clubs. The Interspaces of the school thus spark a programmatic evolution by providing open and flexible spaces where the everyday life of Viby can flourish. The Trace is thus not just a physical trace of visual and spatial elements, but a programmatic trace of which the population are the designers.

A STRETCHED SCHOOL

Generally, a shift in pedagogic perception has occurred over the last years. From focusing on pouring knowledge on the students, the students are now seen as much more active players in the knowledge acquirement process where they gain more responsibility for their own learning process. Learning has moved from a one-way to a two-way process. Thus the concept of academic versus practical subjects is fading out, as contemporary opinions point to the fact that all subjects are based upon an academic as well as a practical teaching method. Therefore, all subjects must make use of physical spaces that support both of these methods. (Steinø, pp. 10-11)

These ideas are here taken a step further by using these subjects and not only integrating them in the school, but integrating them in the whole town of Viby. The school can thereby be seen as a stretched programme throughout the town, where the school's different elements are dispersed and integrated within the Trace. In this way the users of the school, teachers and students of different ages, will use the public spaces and infrastructures of the Trace as their 'hallways' to get from class to class, thus avoiding separate isolated schools in different neighbourhoods.


Dåstrup School • KUNST • SCIENCE • SPROG • MEDIATEK KØKKEN AUDITORIUM • Peder Syv School • BEVÆGELSE

9. programmatic evolution
VIBY AN INTERSPACE

COMPOSITION

reference to single-family house

transparency

core

facades

mutation

centre of rotation

The Interspaces are supported by building units, pavilions, which accommodate the indoor programmes of the school. They carry the same architectural appearance in size, materials and colour, and together they therefore ensure recognisability throughout the Trace and act as beacons that can mark the location of each Interspace.

One pavilion is constructed in each Interspace, but as Viby continues its expanion after a total consolidation of the Trace, more pavilions may be added.

CORE DISPLACEMENT (INNER SPACES)

large assembly

conventional classroom

meeting, workspaces, groupwork
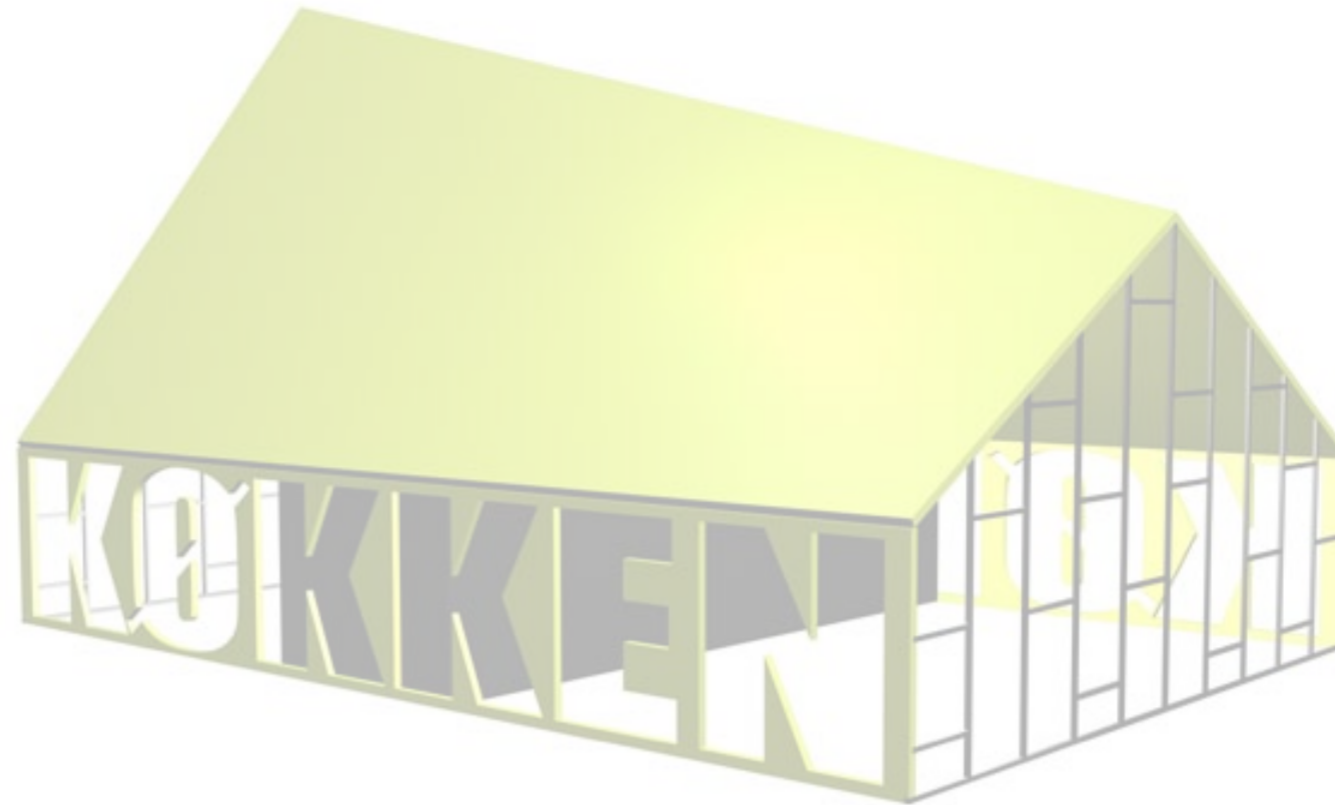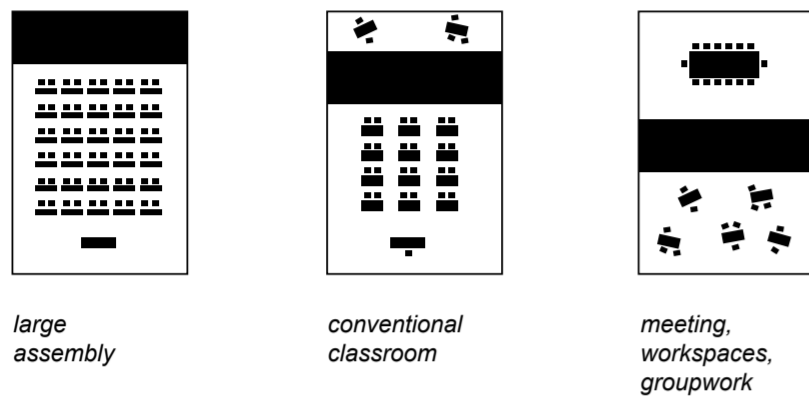
EVERYDAY LIFE ON DISPLAY

The pavilions are flexible indoor spaces that support the subjects of the school as well as other public activates in Viby. The pavilions are highly transparent with large window facades, reminiscent of the glasshouses they once replaced. This renders the public life of Viby visible, putting the everyday life on display.

A GRAPHICAL SETTING FOR HANGOUTS AND PARTIES

The Interspaces support a wide range of activities for the population of Viby. Especially the youth age group lack spaces where they can hangout and activities suited for their age group. The Driveway Interspace supports this through its landscape os asphalt and graphics that act as a playground for the languages pavilion and encourages activities such as skating, roller-skating and bike-riding, while also providing a graphical setting for hangouts and parties.

ROOF MUTATION (VISUAL EFFECT)

middle push

shift

pull

twist
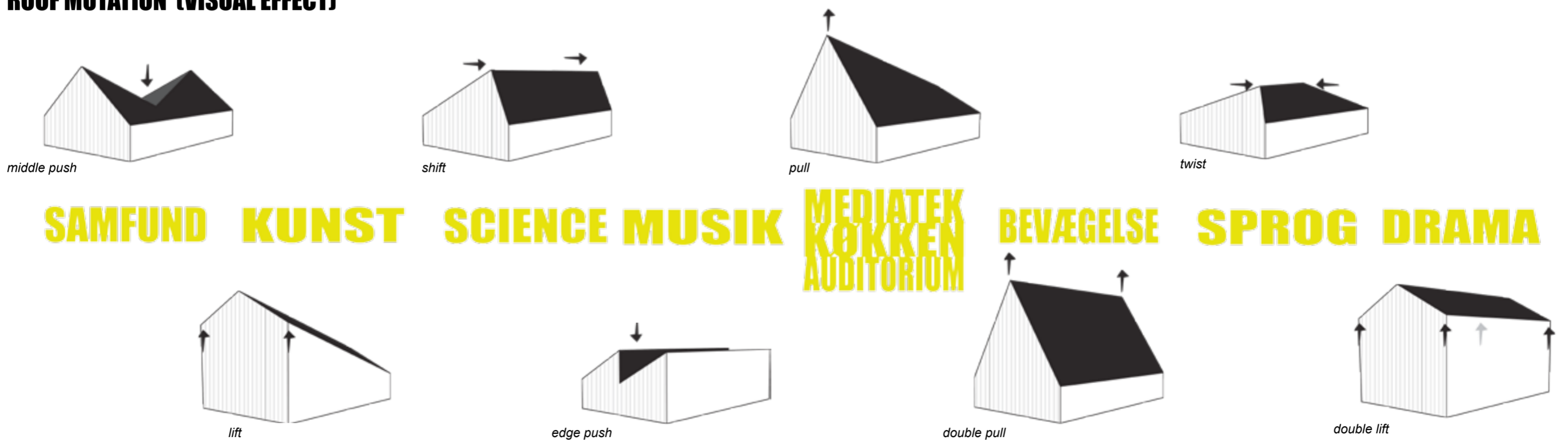
SAMFUND   KUNST   SCIENCE   MUSIK   MEDIATEK   KØKKEN   AUDITORIUM   BEVÆGELSE   SPROG   DRAMA

lift

edge push

double pull

double lift

10. pavilions

VIBY AN INTERSPACE

total amount of recreational space

57655m3 new soil

17792m3 new soil

19324m3 new soil

25337m3 new soil

44676m3 new soil

30142m3 new soil

53974m3 new soil

phased development

| 300 new homes | 168 new homes | 248 new homes | 140 new homes | 107 new homes | 100 new homes | 322 new homes |

1   2   3   4   5   6   7   8
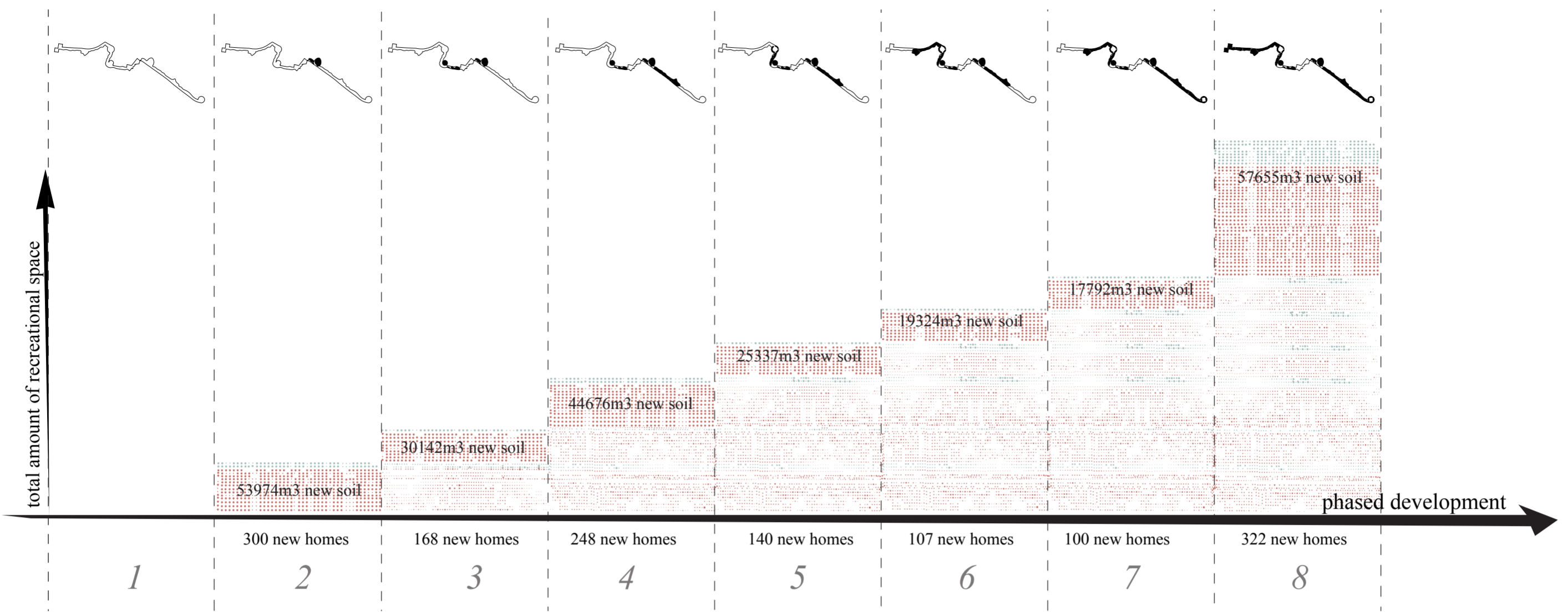
WASTE PRODUCTS OF HUMANITY REUNITED WITH THE NATURAL WORLD

The water processes of Viby are un-blackboxed in the Water Interspace. While the storm water management has been visualised through the Trace in the form of retention basins, the process of treating wastewater is rendered visible at the water treatment plant. The plant is usually met with disgust and disregard, and although this may be a natural reaction, it also distances humans from certain processes of their environment. In an attempt to bring the population face to face with the treatment of their own waste, half of the water treatment plant is opened for the public (the section that manages the final treatments of the plant, i.e. the water is relatively clean here). This is where the treated water is led into Viby Å, where the waste products of humanity is reunited with the natural world.
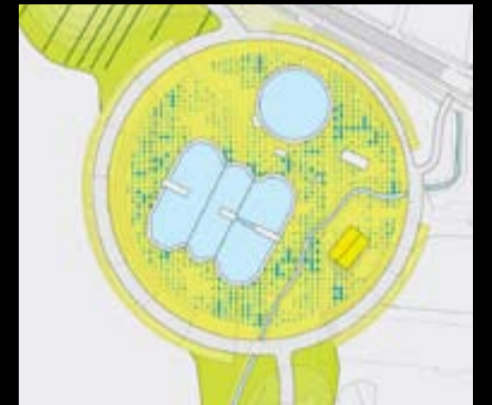
A STRING OF ROLLING HILLS

Surplus soil shapes the topography of the Trace – a topography with strong spatial effects and visual character. The surplus soil is thus utilised as a major benefit for the Trace when shaped as a string of rolling hills that provides the setting for a great variation of recreational activities that can vary according to the seasons of the year. The fact that increased building activity generates increasing amounts of soil and thereby recreational topography is a process visualised to the public in the Soil Interspace.

The employment of residue soil and storm water in the Trace grasps a mechanism of the building activity of the market forces and deals with these in an ecologically correct way.

When digging up foundations, building activity generates approximately 0.9 m residue soil per area. This residue soil holds major potential as a topographical element that can create spatial quality and recreational activities, and this topography is therefore implemented as the strongest landscape element of the Trace. The Interspaces take in the majority of the soil and thereby intensify topographically in these points, while the rest of the Trace will have a more low-key character with less soil.

Managing the surface runoff water from precipitation is vital to urban areas because such development consists of large impervious surfaces– parking lots, housing, compacted soil, roads – that hinder the otherwise natural infiltration of rainwater into the ground. This water contains potential contaminants from roads, lawns, roofs and farm fields and should therefore be treated before being lead into the 'natural' system again. Storm water management is often dealt with by channelling the water into the local sewage system and thereby through the local water treatment plant. It is here suggested that the flow of rainwater and that of wastewater, currently combined, be separated and treated according to their respective needs, thus relieving the water treatment plant of overload. The Trace provides a sustainable rainwater treatment system through retention basins that also function as recreational spaces for human activity. These basins are shaped as large asphalted surfaces which change in character in accordance with the rainwater levels, thus reflecting the natural cycles of the rain.

11. surplus processes
VIBY AN INTERSPACE

biodiversity

fruit trees
seeding

rhubarbs
seeding

redcurrants
seeding

daisies
seeding

roses
seeding

strawberries
seeding

rhododendrons
seeding

dandelions
seeding

dispersal of plantation

1   2   3   4   5   6   7   8
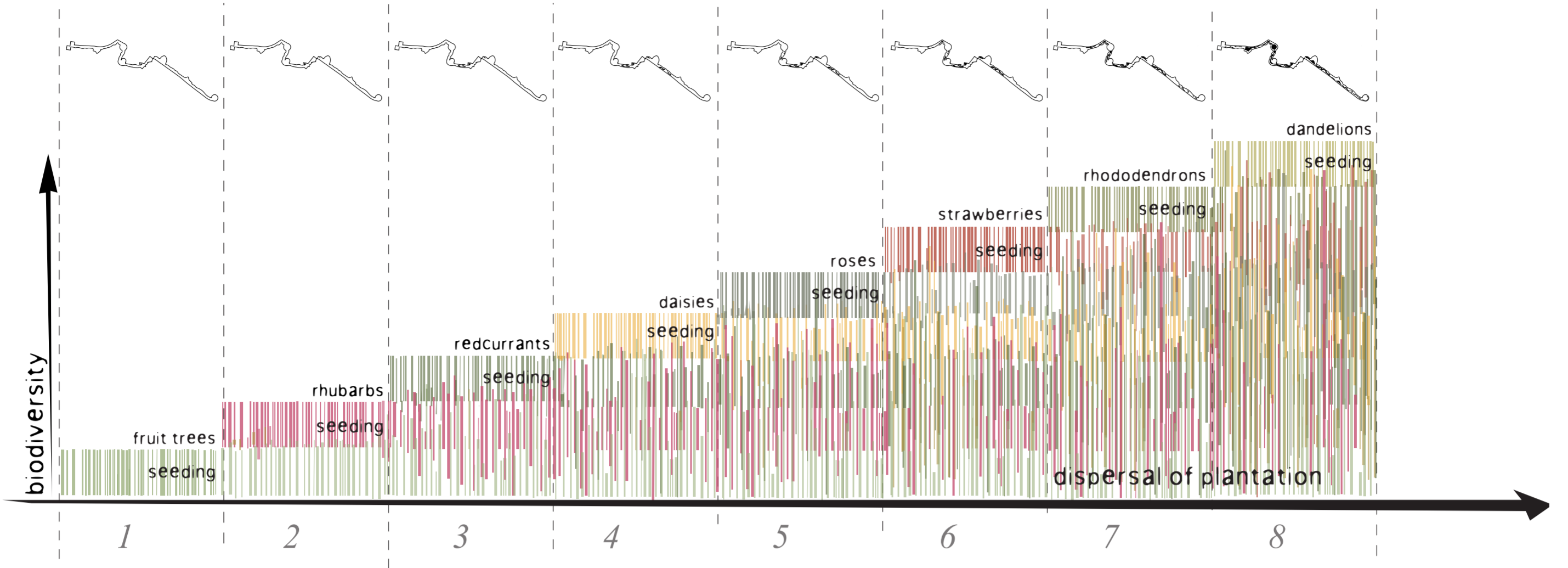
SEEDING ZONES AND FEEDING ZONES

Suburban areas support a rich biodiversity which is supported in The Trace by an ecological corridor. Seeding zones are sowed with suburban plant life that is then allowed to disperse or retreat according to the laws of nature. Likewise, suburban animal life is supported by providing feeding zones (e.g. birdhouses) that can drag in the animal life from the context.

REAL-LIFE VERSUS PLAY-ACTING

The discussion of authentic versus man-made nature, of real-life versus play-acting, is literally brought to an edge at the Edge Interspace. Shaped in the form of an amphitheatrical arena, farmland is staged at the centre of this arena, while the suburban biotope surrounds the stage. Here Drama plays itself out.

The biodiversity of suburbia is employed as an eco-system in its own right that is allowed to flourish, spread and propagate in the Trace as an open landscape and supported by establishing an ecological corridor with flora and fauna that complement each other. The vegetation in the Trace is thereby a self-sustaining ecological system of dandelions, rhubarb and roses supporting the animal life of birds, insects and small mammals.

The creation of an ecological corridor that uses suburban elements to support animal and plant life also becomes a statement of the fact that suburbia is a dominant landscape typology in Denmark and should be visualised as such.

12. biotopic flows
VIBY AN INTERSPACE
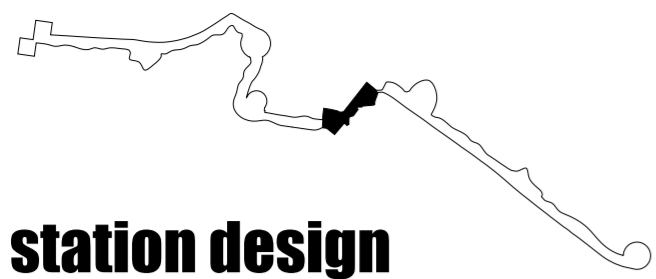
station design

The rejuvenation of the station is a proposal for how station areas in suburbia should be defined – as an effective landscape of circulation and flows that provides continuous access to the line of the train. The concept for the station design has thus been notion of the station as a line, the entry spaces that give access to this line and an accentuation of the line as a landscape.


section A-A 1:1000

section B-B 1:1000

STRETCH

The station is stretched to accommodate the length of the train.

CIRCULATE

Entryways are articulated as three differentiated spaces as well as three underpasses.

INFORM

The previous station building gets a new role as the 'expansion office' of Viby, informing and notifying the popoulation of the town's growth.

JUXTAPOSE

The station is articulated as a landscape of mobility by paving the area with green rubber and planting fruit trees .

circulation

spatialities

urban floor

grass

seating

lighting

Existing Context

1:1000

13. zoom: station

VIBY AN INTERSPACE

interspace: hedge

The Hedge Interspace shows how a central theme of the Trace is isolated and intensified in each Interspace. Here the suburban garden is given a twist through an act opening and welcoming the public behind the hedge. The hedge landscape is highlighted as such by 'draping' a grid of hedges over a hilltop. The result is a labyrinth of hedges will smaller intimate spaces that occasionally open to large common spaces. Door and window frames in a multitude of colours ensure views and access, and the hilltop provides orientation. The hedge garden is programmed with the typical garden activities of suburbia – barbeques, trampolines,...
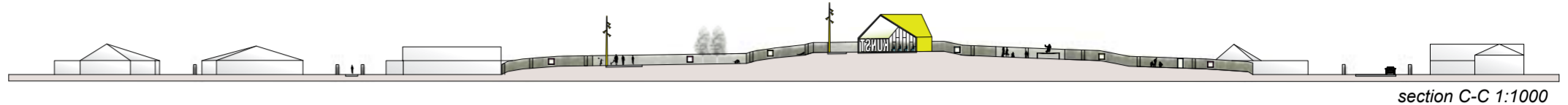
section C-C 1:1000
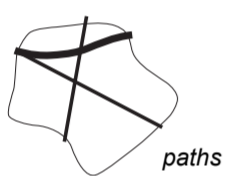
paths
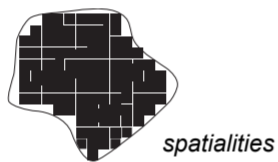
spatialities

topography

pavilions
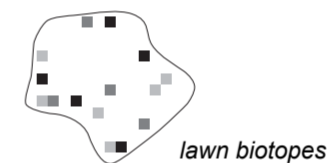
lawn biotopes
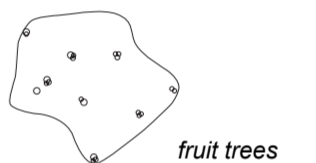
fruit trees
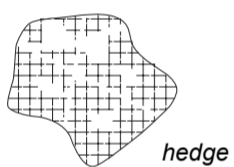
hedge
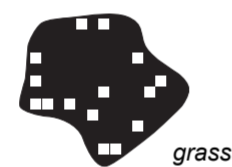
grass

accessibility
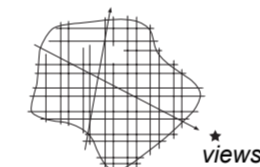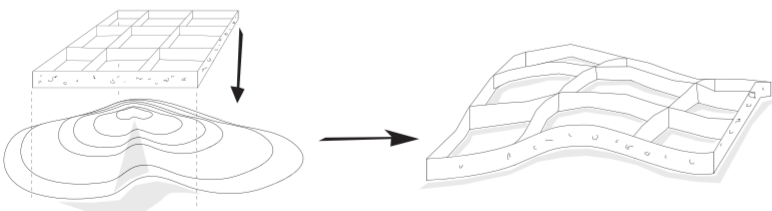
views

equipment
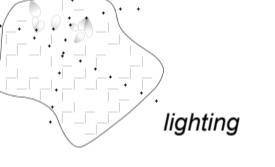
lighting
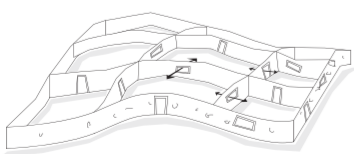
DRAG
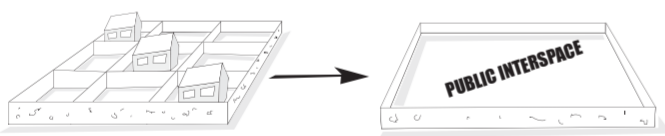
PUBLIC INTERSPACE

The suburban grid structure of hedges is dragged into the Trace to frame the public Interspace.

DRAPE

The hedge grid is draped on to the landscape of surplus soil to shape a renewed image of the neglected suburban landscape.

DISPLAY   **INVITE**

The suburban grid structure of hedges is dragged into the Trace to frame the public Interspace.
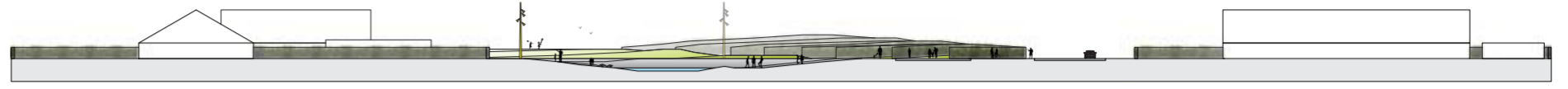
1:1000

14. zoom: hedge interspace

VIBY AN INTERSPACE

zoom: Trace

The design of the area of the Trace that connects the Interspaces (the in-between spaces) has a low-key character. The main intention is here to secure a dispersal corridor for "suburban wildlife" while also ensuring zones that support human recreation. The topographical landscape generated by soil-dumps visually and spatially connects the Trace. The retention ponds of storm water together with stripes of hedge have a light programming through movable furniture (picnic tables and barbeque equipment) so users shape the programming of their park.

section D-D 1:1000

topography

ecological corridor
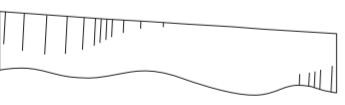
seeding and feeding zones

human activity

paths

water
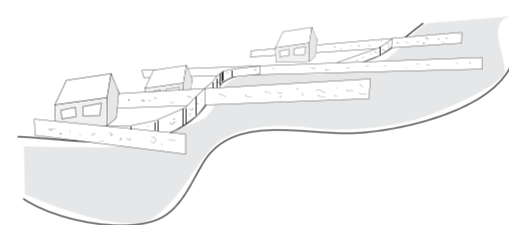
seating

hedge

lighting

inviting flags

DEMARCATE

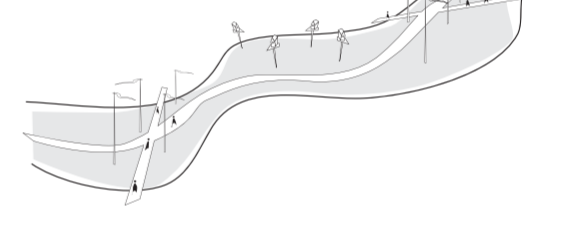**1.**

Demarcating the Trace with soil and water.

DRAG

2.

Dragging the suburban context into the Trace

INVITE

3.

Inviting people and wildlife into the Trace and encourage interaction.

1:1000

15. zoom: trace
VIBY AN INTERSPACE